# PERAQUA®

## PREMIUM POOL- AND FITTINGS TECHNOLOGY

### PRICE LIST 2025/26

PRIVATE POOLS | PUBLIC POOLS | NATURAL POOLS |











EN ISO 9001:2000

# PERAQUA®

### YOUR POOL -OUR TECHNOLOGY



#### COMPLETE SOLUTIONS WITH PREMIUM QUALITY

We want to support you in realizing your pool projects in a way that will delight your customers. We aim to help you develop solutions that impress with maximum ease of use, safety, cleanliness, and sustainability. We want to show you how you can profitably utilize Peraqua technology, know-how, and services for your projects.

We are therefore very pleased to present the "iQ BASE Pool Technology Complete Sets" in this edition of the price list. Our experienced technicians assemble and pipe iQnnect and iQmfort components onto a robust and transportable tech box - the BASE. This eliminates many assembly steps, saving you time and costs on-site. You can find more details in the "Filters & Filter Media" section.

The growing demand for products for public swimming pool construction is also noticeable for us. Therefore, we have dedicated a separate chapter in the Peraqua Price List 2025 to this topic. In this chapter, you will find a compact selection of products particularly suitable for public pools and large hotel pools.

On the blue introductory pages, you will find an overview of our services. For example, did you know that you can book our modern iQool Stage to give your customers an insight into the world of intelligent pool control? Or that the many 2D and 3D product data in our CAD database can make planning your projects easier? Whether you need marketing support, have questions about commissioning, repair processes, or training – we are here to assist you with advice and support.

We are confident that with the many new features, optimizations of existing products, and price reductions on many key products, we have created an important foundation for your continued business success.

We look forward to a continued successful, collaborative partnership.



WOLFGANG IRNDORFER, MSc MBA Procurist/Managing Director

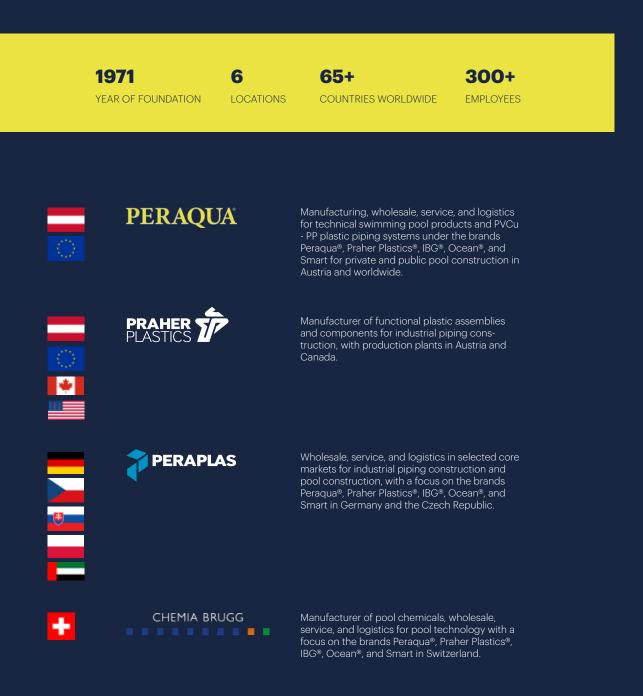
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#### A GROUP -STRONG THROUGH SYNERGIES

In 1971, Ludwig Praher set a special goal – he wanted to become the leading specialist in the manufacture of the best plastic fittings. And to do so worldwide. What started as a one-man operation with this dream has now become a thriving corporate family. Today, three exceptional companies are united under the roof of the Praher Group: Praher Plastics, Peraqua®, and Peraplas.

Peraqua® has been part of the Praher Group from the very beginning. Praher plastic fittings, functional plastic parts and assemblies, as well as electronic solutions, are used worldwide in the chemical industry, water treatment and filtration, mechanical engineering, mining, container construction, laboratory and medical technology, semiconductor industry, paper and textile industries, food industry, and pool and swimming pool construction.



#### PERAQUA





We are always impressed by the beautiful systems our installers create in gardens or wellness areas. We are happy to showcase these in the form of social media posts or feature articles in renowned industry magazines.



Do you have a suitable system with our pool technology? Then write to us at marketing@ peraqua.com.



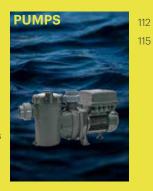




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Smart Stainless Steel Reels for Pool Covers
Under water lights LED/RGB and accessories
Smart Jet streams

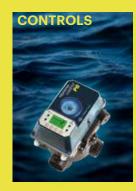


Ocean® pumps

Smart pumps



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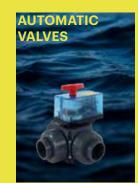


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### CONTACT

### PERAQUA

### PROFESSIONAL WATER PRODUCTS GMBH

Handelsstraße 8 4300 St. Valentin

info@peraqua.com +43 7435 / 58 488-0 shop.peraqua.com

#### **SERVICE & CUSTOMER SUPPORT**

Inquiries about products, offers, orders, delivery dates, marketing material, training dates

idpool@peraqua.com +43 7435 / 58 488-0

#### **OPENING HOURS**

MO - TH 08:00 AM - 12:00 PM 12:30 PM - 17:00 PM FR 08:00 AM - 13:00 PM



#### **TECHNICAL SUPPORT**

Professional technical advice, repairs and complaints

technik@peraqua.com +43 7435 / 58 488-0

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### **GENERAL INFORMATION**

#### **ORDER INFORMATION**

When placing orders, we kindly ask you to consider our packaging units. Only environmentally friendly materials are used for packaging. For orders via email, please always include the article number.

#### **DELIVERY INFORMATION**

We are always committed to maintaining minimum stock levels of all common pool products in our logistics center, so that we can ship them to you as quickly as possible. Our customer service will send you an order confirmation with the shipping date immediately after receiving your written order.

#### **PRICE INFORMATION**

Prices are non-binding sales prices excluding VAT. Unless otherwise stated, prices are per m/m²/lm/unit, ex works 4300 St. Valentin (Austria). Items without a listed price are available upon request! We are always committed to maintaining minimum stock levels of all common pool products in our logistics center, which results in specific packaging units. If packaging units deviate, we will charge an additional fee.



MORE INFORMATION IN OUR GTC

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**Reinforced Plastic** 

ge Drive EO510, C/DC pe Thread <u>(Nylo</u>n)

#### **ABBREVIATIONS**

ABS	Acrylonitrile-Butadiene-Styrene	FOB	Free On Boa
AS	Aquastar	FPM	Fluor Rubbe
ASK	Shut-off Valve	FV	Foot Valve
ASTM	American Standard	GFK	Glass Fiber I
BEV	Bleed and Vent Valve	HN	Hand Opera
BS	British Standard	HP	Horse Powe
CFR	Cost and Freight	JIS	Japanese St
CIF	Cost, Insurance, and Freight	KH	Ball Valve
CPT	Carriage Paid To	MP	Multi-positic
d	Outer Diameter	MVO	Multi Voltag
DDU	Delivered Duty Unpaid		12-230 V AC
DN	Nominal Diameter	NPT	National Pip
ECO	Electric Drive EO510 230 V AC	PA	Polyamide (
EPDM	Ethylene Propylene Rubber	PE	Polyethylen
EXW	Ex Works	PN	Pressure

P	Polypropylene
PS	Horsepower
PTFE	Polytetrafluoroethylene (Teflon®)
PVC	Polyvinyl Chloride
PVDF	Polyvinylidene Fluoride
RC	Discount Code
RSK	Check Valve
RV	Non-return Valve
SM	Side Mount
ГМ	Top Mount
ГРE	Thermoplastic Elastomer
	(specially for dirty water)
/E	Packaging Unit
NST	Steel Number 1.4401
Zoll	Inch

THIS IS FRED

He will provide you with important infor-

mation, details and advice on the entire product range and usage. He will guide you through the entire price list.

#### SYMBOLE



Products for economical & sustainable pool operation

Control option for the intelligent use of excess PV energy

Products with WLAN capability for smart control

Peraqua guarantees warranties of 2 - 15 years

Products with innovative, speed-controlled inverter technology

Products with extra quiet operation

Products that are part of our iQnnect system

Products that are part of our iQmfort system



This brochure does not contain any warranty commitments, but is merely intended to provide initial information. The range is constantly being expanded, so the designs, product information, types and prices are correct at the time of going to press. Minor deviations from the technical specifications are possible depending on the system and we reserve the right to make technical changes.

### PRODUCTION



RESEARCH, DEVELOPMENT & PRODUCTION IN AUSTRIA





Peraqua® leverages the core competencies of Praher Plastics® for the production of professional and technically advanced valves and accessories for the global pool and water treatment industry.

Continuous investments in the latest production technologies and the high level of automation in all production processes enable Praher Plastics® to continue developing high-quality products in Austria in the future.

IN-HOUSE TOOLMAKING FOR INJECTION MOLDING MACHINES STATE-OF-THE-ART INJECTION MOLDING MACHINES LATEST 3D MEASURING SYSTEMS STRICT GUIDELINES OF EN ISO 9001 ROBOT DEVICES DEVELOPED IN-HOUSE FOR FINISHING FULLY AUTOMATED FULLY AUTOMATIC HIGH-BAY WAREHOUSE





### BRANDS



Pool accessories with manual or automatic functions for the optimal maintenance of various pool types, a complete range of high-quality ABS and V4A pool components in different colors and system variations, leave nothing to be desired for pool specialists.





Since 1971, we at Praher Plastics have been developing and manufacturing high-quality PVC valves, ABS backwash valves, pool controllers, electric and pneumatic ball valves and shutoff dampers, solar controllers, and level controllers with aboveaverage service life in Austria.





Pipes and fittings made of PVCu (unplasticized polyvinyl chloride) and FlexFit® hoses and fittings made of PVC are manufactured according to the applicable DIN standards and KIWA regulations, offering long service life and meeting international product and installation requirements. Our IBG fittings are also characterized by perfectly matched tolerances.





Smart by Peraqua stands for intelligent pool technology solutions, designed and developed by Peraqua Austria, with the production process being carried out and monitored according to strict ISO9001 standards.



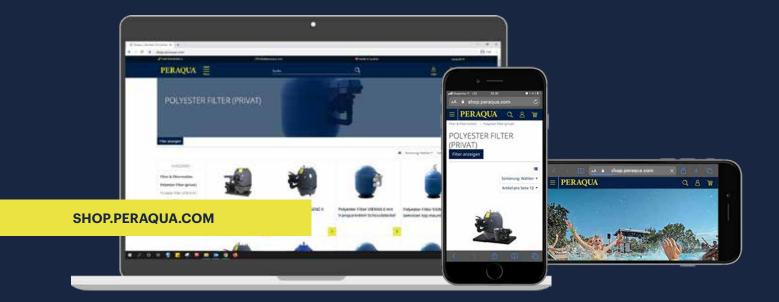


#### **DECIDE FOR THE FUTURE**

As a future-oriented company, we are convinced that we can contribute to the transition to a climate-neutral economy. One step in this direction is to label articles with an "ECO" label as long as they meet certain criteria:

- Reduce power consumption
- Avoidance of water wastage
- Environmentally friendly
- Intelligent control of pool technology = resource-saving pool operation

### **PERAQUA ONLINE**





#### B2B WEBSHOP

#### **REGISTER, CONFIRM, ORDER CONVENIENTLY ONLINE**

Always the most up-to-date data and faster order processing speak for themselves. But shopping in the Peraqua B2B webshop has many more advantages:

- Order all current products online
- Automatic display of your agreed net price and delivery conditions
- Display of product availability
- Order portal with clear display of the shipping status
- Technical details and downloads available directly from the products
- Simple search function by product name, product description or article number
- Alternative products, related products as well as spare parts and accessories can be found with the article
- Compare products and add them to the watch list



### POOLTIMES

#### THE PERAQUA NEWSLETTER

In the Pooltimes we inform you about Promotions, events, price information and much more. Don't want to miss out on this important information?

Then write to marketing@peraqua.com !



#### SOCIAL MEDIA CHANNELS PRODUCT NEWS, PERAQUA INSIDE, EVENTS AND MUCH MORE

## **TRAINING & EVENTS**

#### PERAQUA ACADEMY

#### DO YOU WANT TO LEARN MORE ABOUT OUR PRODUCTS?

All partners and interested parties have the opportunity to take advantage of training courses to find out about the existing and latest innovations in the Peraqua product lines. Our pool liner welding training is particularly popular. The training courses are completed with a certificate.

Make an appointment today for the next training course at info@peraqua.com.

#### EXPERIENCE IQOOL STAGE

#### STATE-OF-THE-ART SHOWROOM FOR #SMART POOL

With the iQool STAGE, Peraqua® has the most modern pool technology exhibition in the DACH region. Visit us (also with your customers) in St. Valentin or learn more about smart and intelligent pool controls in live webinars. You will also have the opportunity to get to know the smart home app, control the iQnnect pool system - all in real time and hands-on.



#### TRADE SHOWS

#### **INNOVATIONS & NOVELTIES OF THE COMING SEASON**

Peraqua is represented at major international pool trade shows. The trade shows are an important platform for Peraqua to inform all partners, customers and interested parties about the latest innovations in the Peraqua product lines.

We provide a contingent of visitor tickets for each trade show. You will receive timely information about the trade fair by newsletter, social media or from your responsible key account or sales manager.







### SUPPORT

#### WARRANTIES

#### YOU CAN GUARANTEE THE QUALITY OF OUR PRODUCTS

In addition to our high-quality products, we offer our customers the best possible service. This also includes extended warranties on many product groups. The scope of the warranty usually includes the repair or replacement of defective parts. In the event of a warranty claim, please complete the service form and send it to technik@peraqua.com.



#### **ON FRAME & HOUSING BREAKAGE**

Ocean<sup>®</sup> cleaning accessories



#### **ON HOUSING BREAKAGE**

Ocean® white goods ABS | Ocean® backwash valves IBG® PVC fittings | Praher®Plastics PVC fittings



#### FOR HOUSING TIGHTNESS

Filter Bregenz II | Filter Bregenz III



#### **ON HEAT PUMPS**

Smart heat pump iQ Inver Silence Smart heat pump Full Inverter Plus



#### **ON HEAT EXCHANGER & COMPRESSOR**

Smart heat pumps

#### **ON DENSITY**

Stoneflex swimming pool liner range

#### WE HAVE BEEN LIVING IN A "THROWAWAY SOCIETY" FOR FAR TOO LONG.

As a first step, we rely on the high production standards of our Ocean®, Praher Plastics® and IBG® brands. These are subject to the high Austrian production standards and offer you product longevity. However, every product has its life cycle and will one day require repair, spare parts or replacement. Peraqua maintains an extensive range of repair and spare parts. Our highly trained technical team is on hand to provide you with help and advice.



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#### REPAIRS

- Fill out the service form.
- Send the product to be inspected to the Peragua Head Office, including the completed service form with the shipment.
- After the inspection, you will receive further information from our technical team.





#### **ERSATZTEIL**

A wide range of spare parts can be found in our B2B webshop. Timely replacement of wear parts can significantly extend the product's lifespan.

- Open our B2B webshop at shop.peraqua.com
- Search for the product for which the spare part is needed.
- Scroll down on the product detail page and find the corresponding spare part.

#### 3 D A T A B A S E

#### **ARE YOU ALREADY PLANNING IN 3D?**

In our CAD online catalog, we provide CAD data of our intelligent pool technology from our product range in the most common 2D and 3D formats.

With the functional 3D viewer, you can view the items from any perspective and explore the smallest details.



#### MARKETING

#### SALES-PROMOTING DOCUMENTS FOR YOUR BUSINESS

We support our customers at cost price and iQ partners with marketing service packages to present our high-quality swimming pool technology in a sales-promoting manner in the showroom, at trade fairs or in discussions with customers.

Our qualified key account team will be happy to talk to you personally about the benefits of an iQ partnership and offer support in putting together a marketing and financing package tailored to your showroom.

Flyers, posters, folders and roll-ups can also be personalized with your logo and contact details on request. Talk to your responsible key account manager about your individual wishes and options. REQUEST OUR ADVERTISING MEDIA LIST NOW.





## WHITE GOODS ABS & V4A

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28	I	Smart ABS Plastic White Goods
33	I	Ocean® V4A Stainless Steel White Goods
35	I	Smart V4A Stainless Steel White Goods
36	I	Smart Stainless Steel Reels for Pool Covers
38	I	Smart Stainless Steel Ladders
39	I	Under water lights LED/RGB and accessories
53	I	Smart Jet streams



### INSTALLATION PARTS MADE OF ABS & V4A

THE DIVERSE WORLD OF OCEAN® INSTALLATION PARTS



#### **MIX AND MATCH - FOR PERSONALIZED POOL DESIGN**

With the help of the unique modular system, you can tailor the design and color of the pool components precisely to your customers' wishes. We offer skimmer covers, extensions, widenings, inlet nozzles, frame covers for floor drains, and more as ABS (in black, gray, and white) and as V4A stainless steel. The individual components are ideally suited for installation in Ocean® Brick polystyrene blocks (installation depth ~25cm) and can be perfectly combined with our pool liners.

All ABS products in our installation part range are resistant to chlorine, UV, saltwater, and ozone, and meet the strictest standards and criteria. When used in saltwater pools, corrosion may occur on stainless steel parts.





#### M5 VS. PT THE SMALL, SUBTLE DIFFERENCE

The housing of the M5 variant contains high-quality A4 stainless steel inserts. This allows a frame to be attached using high-quality M5/A4 screws. In the PT variant, specially developed A2 screws are directly acround into the plastic

directly screwed into the plastic.



**NOTE** Maximum torque for all PT items = 2 Nm.





All dimensions and installation instructions can be found at shop.peraqua.com

Use our CAD parts database and conveniently add our components to your CAD designs with a simple click. Save time and rely on the data quality of the Peraqua® original data.

>> peraqua.cadclick.com



#### **OCEAN® SKIMMER DELUXE**

The Ocean® Skimmer deluxe includes a mount for a float switch (optional). As part of a level control system, such a switch can ensure that the pool is automatically refilled when the water level is too low. This prevents the pump from running dry. This automation of regular refilling is simple and saves time.

### **Ocean® ABS Plastic White Goods**



#### Ocean<sup>®</sup> skimmer M5 De Luxe

for liner, build-up and concrete/tile pools, with basket, flange set, skim vac plate d32/38, flange, M5 thread inserts A4 (SS316), screw set, sealing, reductions 2''/1/2'' and overflow connection d50. Incl. notch for niveau sensor. Recommended flow rate 8 m<sup>3</sup>/h. One skimmer for 25 m<sup>2</sup> water surface recommended.

Niveau sensor and protective grating not included in delivery.

Product	G-kg	VE	Prod.No.	Price €
Skimmer Ocean® De Luxe M5 stainless steel inserts A4 ABS white, double lip sealing, Ocean single packing	2.33	1.00	170560A	207.93



Representative image



#### Ocean<sup>®</sup> skimmer M5 De Luxe (square collar)

for liner, build-up and concrete/tile pools, with square collar, basket, flange set, skim vac plate d32/38,flange, M5 thread inserts A4 (SS316), screw set, double lip sealings, reductions, 2"/1½" and overflow connection d50. Incl. notch for niveau sensor. Recommended flow rate 8 m³/h. One skimmer for 25 m2 water surface recommended

Product	G-kg	VE	Prod.No.	Price €
Skimmer Ocean® De Luxe M5, stainless steel inserts A4 ABS white, with solvent sealing, with square cover	2.60	1.00	7300206	279.96

#### Ocean<sup>®</sup> skimmer PT De Luxe

for liner, build-up and concrete/tile pools, with basket, flange set, skim vac plate d32/38, flange, self-drilling PT screw set, sealings, reductions 2''/1/z'' and overflow connection d50. Incl. notch for niveau sensor. Recommended flow rate 8 m<sup>3</sup>/h. One skimmer for 25 m<sup>2</sup> water surface recommended

Product	G-kg	VE	Prod.No.	Price €
Skimmer Ocean® De Luxe PT ABS white, double lip sealing, Ocean single packing	2.33	1.00	170542A	154.47
Skimmer Ocean® De Luxe PT ABS grey, double lip sealing, Ocean single packing	2.45	1.00	170967	210.00
Skimmer Ocean® De Luxe PT ABS black, double lip sealing, Ocean single packing	2.41	1.00	170598A	210.00



Further level controls can be found in the Controls section.



**NOTE** All dimensions and installation instructions can be found at shop.peraqua.com

#### Niveau control NC01

Ready to plug in, with time delay switch (from 2–135 sec), incl. magnetic float switch for easy installation in the height-adjustable holder for the float switch in the Ocean® skimmer De Luxe M5 and PT.

Product	G-kg	VE	Prod.No.	Price €
Niveau Control NC01				
Niveau-set NC01 with solenoid valve, 230VAC	1.30	1.00	130293	986.94
Spare parts				
Mini floater switch 5m connection cable	0.01	1.00	31150	256.52
Mini floater switch 15m connection cable	0.40	1.00	31152	335.08
2/2 way solenoid valve 24VDC NBR, G 1/2", IP65, normally closed	0.44	1.00	50631	436.85





#### Ocean® protective grating

ABS protective grating for (subsequent) installation in the Ocean® skimmer De Luxe M5/PT to protect the float switch of the NC01 level control from leaves and coarse impurities in the water, easy tool-free installation.

Product	G-kg	VE	Prod.No.	Price €
Protective grating for Ocean® skimmer De Luxe ABS white	0.02	1.00	150430	11.48

#### Ocean® skimmer extension M5 De Luxe

for optimal front skimmer extension for skimmer Ocean® De Luxe M5 (prod. code 170560A, 7300206), 25 cm mounting depth, M5 thread inserts A4 (SS316), sealings, flange, screw set

Product	G-kg	VE	Prod.No.	Price €
Extension for Ocean® skimmer De Luxe M5 stainless steel thread inserts A4 ABS white (170560A, 7300206)	1.10	1.00	170613A	135.28

#### Ocean® skimmer extension PT De Luxe

for optimal skimmer front extension for the skimmer Ocean® De Luxe PT (prod. code 170542A, 170598A), 25 cm mounting depth, PT self-drilling screw set, sealings, flange

Product	G-kg	VE	Prod.No.	Price €
Extension for skimmer Ocean® De Luxe PT ABS white (170542A)	1.38	1.00	170612A	70.81
Extension for skimmer Ocean® De Luxe PT ABS black (170598A)	1.31	1.00	170920A	127.98



#### Ocean<sup>®</sup> wide mouth extension M5 De Luxe

for optimal front extension and enlargement for skimmer Ocean® De Luxe M5 (prod. code 170560A), 25 cm mounting depth, M5 thread inserts A4 (SS316), screw set, sealings, flange

Product	G-kg	VE	Prod.No.	Price €
Enlargement for skimmer Ocean® De Luxe M5 stainless steel thread inserts A4 ABS white	2.30	1.00	170615A	206.56



#### Ocean® skimmer wide mouth extension PT De Luxe

for optimal front extension and enlargement for skimmer Ocean® De Luxe PT (prod. code 170542A, 170967, 170598A), 25 cm mounting depth, self-drilling PT screw set, sealings, flange

Product	G-kg	VE	Prod.No.	Price €
Enlargement for Ocean® skimmer De Luxe PT ABS white (prod. code 170542A)	1.98	1.00	170614A	132.09
Enlargement for Ocean® skimmer De Luxe PT ABS grey (prod. code 170967)	1.98	1.00	170968	254.06
Enlargement for Ocean® skimmer De Luxe PT ABS black (prod. code 170598A)	1.88	1.00	170925A	147.63







#### Ocean<sup>®</sup> skimmer wide mouth/slanted flange (6°) M5 De Luxe

for installation of Ocean® skimmer De Luxe M5 (prod. code 170560A) for polyester pools, ceramic. This means that the Ocean® skimmer De Luxe PT can be mounted "straight" on the sloping pool flange, which ensures that the skimmer functions optimally. 25 cm mounting depth, integrated M5 A4 stainless steel thread inserts.

Product	G-kg	VE	Prod.No.	Price €
Enlargement for skimmer Ocean® De Luxe M5 ABS white, stainless steel inserts A4 6° for polyester pools	1.90	1.00	170915A	247.86

#### Ocean® skimmer wide mouth/slanted flange (6°) PT De Luxe

for installation of Ocean® skimmer De Luxe PT (prod. code 170542A, 170598A) for polyester pools, ceramic. This means that the Ocean® skimmer De Luxe PT can be mounted "straight"on the sloping pool flange, which ensures that the skimmer functions optimally. 25 cm mounting depth

Product	G-kg	VE	Prod.No.	Price €
Enlargement/slanted flange 6° for skimmer Ocean® De Luxe PT ABS grey (prod. code 170967)	2.18	1.00	170969	301.96





#### Ocean<sup>®</sup> height extension De Luxe

2 pcs extension rings (telescopic system) incl. collar, to extend the height of the skimmer lid square, mounting directly on the Ocean® Skimmer or on Ocean® extension rings, width: 250 mm, d215 mm

Product	G-kg	VE	Prod.No.	Price €
Height extension for Ocean® skimmer De Luxe ABS white	0.34	1.00	170607	39.81



#### Collar for Ocean<sup>®</sup> skimmer De Luxe

square, mounting directly on the Ocean® Skimmer or on Ocean® extension rings, width: 250 mm, d215 mm

Product	G-kg	VE	Prod.No.	Price €
Collar for Ocean® skimmer De Luxe ABS grey	0.22	1.00	150495	47.86
Collar for Ocean® skimmer De Luxe ABS black	0.20	1.00	150402	45.47



**NOTE** All dimensions and installation instructions can be found at shop.peraqua.com



#### Ocean® skimmer lid stainless steel De Luxe

AISI316/V4A, incl. collar, heigth: 4,5 cm, 250x250 mm, for Ocean® skimmer De Luxe

Product	G-kg	VE	Prod.No.	Price €
Lid for skimmer Ocean® De Luxe square V4A 250 x 250 mm AISI 316 round lid incl. collar, 4,5 cm height	0.85	1.00	77587	392.58

#### Collar for Ocean® skimmer De Luxe

Product	G-kg	VE	Prod.No.	Price €
Collar for Ocean® skimmer ABS white	0.07	1.00	150379	24.26





#### Ocean<sup>®</sup> skimmer frame De Luxe

In ABS (various colours) or V4A, indicators for min. and max. water level, plug-in installation

Product	G-kg	VE	Prod.No.	Price €
Ocean® skimmer frame De Luxe white	0.10	1.00	150385	19.60
Ocean® skimmer frame De Luxe grey	0.10	1.00	150498	49.00
Ocean® skimmer frame De Luxe black	0.10	1.00	150405	29.28
Ocean® skimmer frame De Luxe stainless steel V4A AISI-316	0.52	1.00	77589	236.74



#### Ocean® wide mouth skimmer frame De Luxe

Suitable for Ocean® wide mouth extensions M5/PT, in ABS (various colours) or V4A, plug-in assembly

Product	G-kg	VE	Prod.No.	Price €
Ocean® wide mouth skimmer frame white	0.26	1.00	150410A	43.83
Ocean® wide mouth skimmer frame grey	0.26	1.00	150500	73.47
Ocean® wide mouth skimmer frame black	0.26	1.00	150480A	71.58
Ocean® Skimmer deluxe wide mouth skimmer frame stainless steel V4A AISI-316	1.20	1.00	77588	284.99



#### Solvent sealing for Ocean® skimmer De Luxe

alternative for the included double lip sealing for Ocean® skimmer De Luxe

Product	G-kg	VE	Prod.No.	Price €
Solvent sealing for Ocean® skimmer deluxe	0.03	100.00	51317	28.37



#### Ocean® wall conduit M5 De Luxe

for liner and build-up pools/tile pools, integrated M5 A4 (SS316) thread inserts, 2" female thread/male thread/solvent d50 mm, for optimal installation incl. 2 fixing brackets, holes for reinforcing iron bars and counter nut for the wall formwork

Product	G-kg	VE	Prod.No.	Price €
Ocean® wall conduit M5 stainless steel inserts A4 with clamping nut, set	0.35	10.00	170629	49.66

#### Ocean® inlet nozzle De Luxe M5 DIN liner pools

with ball acc. DIN EN16582, sealings, screw set, in combination with wall conduit M5 De Luxe (prod. code 170629)

Product	G-kg	VE	Prod.No.	Price €
inlet nozzle with ball DIN for Ocean® wall conduit M5 De Luxe white	0.18	10.00	170625A	20.24
Inlet nozzle with ball acc. DIN for Ocean® wall conduit M5 De Luxe grey	0.25	1.00	7300595	54.50
Inlet nozzle with ball acc. DIN for Ocean® wall conduit M5 De Luxe black	0.18	1.00	170914A	27.27



#### Ocean<sup>®</sup> wall conduit PT De Luxe

for liner and build-up pools/tile pools, for self-drilling PT screw set, 2" female thread/male thread/solvent d50 mm, for optimal installation incl. 2 fixing brackets, holes for reinforcing iron bars and counter nut for the wall formwork

Product	G-	-kg \	/E	Prod.No.	Price €
Ocean® Wall conduit PT De Luxe for self clamp nut, set for liner, build-up and co		34 1	0.00	170879	22.59



#### Ocean® inlet nozzle PT De Luxe DIN liner pools

with ball acc DIN EN16582, sealings, self-drilling PT screw set, in combination with wall conduit PT De Luxe (prod. code 170879)

Product	G-kg	VE	Prod.No.	Price €
Inlet nozzle with ball acc DIN for $Ocean^{\circledast}$ wall conduit PT De Luxe white	0.15	10.00	170883A	25.24
Inlet nozzle with ball acc DIN for Ocean® wall conduit PT De Luxe grey	0.17	1.00	7300598	61.17



#### Ocean<sup>®</sup> inlet nozzle De Luxe

for concrete/tile pools, 2" male thread/d50, with ball DIN EN16582, application for direct screw-in in combination with Ocean® wall conduit PT De Luxe (prod. code 170879), white

Product	G-kg	VE	Prod.No.	Price €
Inlet nozzle with ball DIN EN16582 for Ocean® wall conduit PT De Luxe white	0.13	10.00	170626A	21.37







#### Ocean® inlet nozzle M5 De Luxe, short version

with ball acc DIN EN16582, suitable for liner and stainles steel pools, screw set, 2 sealings, M5 stainless steel thread inserts, solvent connection d50/63, set

Product	G-kg	VE	Prod.No.	Price €
Inlet nozzle Ocean® M5 De Luxe, short version, stainless steel thread inserts for liner and stainless steel pools, ABS white, set	0.30	10.00	170882A	69.93

#### Ocean® inlet nozzle PT De Luxe DIN, short version

with ball acc DIN EN16582, suitable for liner and stainless steel pools, 2 sealings, self-drilling PT screw set, solvent connection d50/63, set

Product	G-kg	VE	Prod.No.	Price €
Inlet nozzle Ocean® PT De Luxe DIN, short version, self-drilling screw set for liner and stainless steel pools, ABS white, set	0.28	10.00	170881A	39.89
Inlet nozzle Ocean® PT De Luxe DIN, short version, self-drilling screw set for liner and stainless steel pools, ABS grey, set	0.29	1.00	7300597	92.15
Inlet nozzle Ocean® PT De Luxe DIN, short version, self-drilling screw set for liner and stainless steel pools, ABS black, set	0.29	1.00	7300599	87.12

### Ocean® inlet nozzle De Luxe DIN build-up pools (Poly-/Vinylester pools, PP)

with ball acc DIN EN16582, flange set, sealings, POM washer, clamp nut, ABS,set

Product	G-kg	VE	Prod.No.	Price €
Inlet nozzle Ocean® De Luxe DIN for polyester pools, ABS white, (incl. sealing set, clamp)	0.22	10.00	170627A	33.76
Inlet nozzle Ocean® De Luxe DIN for polyester pools ABS grey, set (incl. sealing set, clamp nut)	0.21	1.00	7300843	68.76
Inlet nozzle Ocean® De Luxe DIN for polyester pools ABS black, set (incl. sealing set, clamp nut)	0.22	1.00	170904A	36.81





for Ocean® inlet nozzles

Product	G-kg	VE	Prod.No.	Price €
Plug for Ocean® white goods with O-ring ABS white male thread R 1 1/2"	0.03	10.00	150416	4.44



#### **Ocean® installation tool**

for mounting the cover of Ocean® inlet nozzles, or for loosening the cover when adjusting the ball

Product	G-kg	VE	Prod.No.	Price €
Installation tool for Ocean® inlet nozzles	0.01	10.00	150420	5.38



#### Ocean® main drain M5 De Luxe

for liner, build-up and concrete/tile pools, with M5 A4 (SS316) thread inserts, flat cover, 2" female thread connection, flange screw set, sealing set,max. flow rate: 15 m3/h

Product	G-kg	VE	Prod.No.	Price €
$Ocean^{\otimes}$ main drain M5 De Luxe, stainless steel thread inserts A4 ABS white with M5 screws	0.92	10.00	170843	89.71



#### Ocean<sup>®</sup> main drain PT De Luxe

for liner, build-up and concrete/tile pools, with PT scres, flat cover, 2" female thread connection, flange screw set, sealing set, max. flow rate: 15 m3/h  $\,$ 

Product	G-kg	VE	Prod.No.	Price €
Ocean® main drain PT De Luxe ABS white	0.92	10.00	170842	89.42
Ocean® main drain PT De Luxe ABS black	0.92	1.00	170902	88.25



#### Ocean<sup>®</sup> flange for main drain

ABS, without grid lid, grey

Product	G-kg	VE	Prod.No.	Price €
Ocean® flange for main drain M5 and PT ABS grey	0.11	1.00	150506	52.28



#### Ocean<sup>®</sup> grid cover for main drain

ABS, grey	
Product	

Product	G-kg	VE	Prod.No.	Price €
Ocean® grid cover for main drain M5 and PT ABS grey	0.10	1.00	150505	39.42



#### Ocean® cover for main drain De Luxe stainless steel

AISI316 / V4A, d 222 mm, for Ocean® ABS main drain 170843, 170842, 170902.

Product	G-kg	VE	Prod.No.	Price €
Cover for main drain Ocean® round V4A 222 mm AISI 316	0.32	1.00	77585	195.31





#### Ocean® floor inlet nozzle for liner pools

with 2" male thread, d50 solvent connection, 2 sealings, screw set, adjustable flow, white

Product	G-kg	VE	Prod.No.	Price €
Ocean® inlet nozzle for liner pools, 2" male thread, d50 solvent socket	0.24	18.00	74396	40.35



#### Ocean® floor inlet nozzle for concrete pools

d63 or R2", white

Product	G-kg	VE	Prod.No.	Price €
Ocean® floor inlet nozzle for concrete pools ABS d63 solvent con- nection	0.10	30.00	78606	17.50
Ocean® floor inlet nozzle for concrete pools ABS R2" male thread	0.16	30.00	78607	17.50



NOTE

All dimensions and installation instructions can be found at shop.peraqua.com



#### Smart skimmer High75 ABS

ABS, white and black, suction width 700x90mm for concrete, liner and build-up pools, sealing, screw set, sieve basket, R1%+2" female thread connection for high water level 6-7 cm

Product	G-kg	VE	Prod.No.	Price €
High water level skimmer High75 white ABS with brass inserts	9.47	1.00	78491	519.42
High water level skimmer High75 black ABS with brass inserts	9.01	1.00	78515	519.42



#### Trim parts for Smart skimmer High75

Product	G-kg	VE	Prod.No.	Price €
Lid grey for Smart high water level skimmer High75	0.20	1.00	7300591	89.81
Skimmer collar grey ABS for Smart high water level skimmer High75	0.07	1.00	7301008	84.46
Skimmer flap grey for Smart high water level skimmer High75	0.50	1.00	7300592	296.66
Skimmer frame cover grey for Smart high water level skimmer High75	0.42	1.00	7300593	140.24

#### **Stainless Steel cover for Smart Skimmer High75**

Product	G-kg	VE	Prod.No.	Price €
Stainless steel cover for Smart Skimmer High75 78491+78515	1.60	10.00	7300413	469.46





#### Suction plate for Smart high water level skimmer High75 ABS

Product	G-kg	VE	Prod.No.	Price €
Suction plate for Smart high water level skimmer High75 ABS	0.14	1.00	740040	23.76



#### Smart skimmer High500 white ABS

high water level skimmer ABS, for liner and build-up pools, sealing, screw set AISI-316, sieve basket, R1  $\chi''+2''$  female thread, flow rate: 15 m<sup>3</sup>/h

Product	G-kg	VE	Prod.No.	Price €
Smart skimmer High50 white ABS	7.00	1.00	7300488	283.30

Price €

420.92

Prod.No.

7301319





Product

mechanic, ABS, water connection 3/8", body connection d63/d50, incl. adjustable floater

Stainless steel cover for Smart skimmer High500

Stainless Steel cover for Smart Skimmer High500 white ABS 7300488 1.18

Product	G-kg	VE	Prod.No.	Price €
Smart water regulation system	1.64	1.00	78583	163.32

G-kg

VE

1.00



#### Smart winter plug

Product	G-kg	VE	Prod.No.	Price €
Winter plug 1 1/2" EPDM 38 - 51 mm	0.08	100.00	77021	7.88
Winter plug 2" EPDM 51 - 63,5 mm	0.13	50.00	77020	8.56



#### Smart wide mouth skimmer

for polyester and liner pools ABS, white, incl. brass thread inserts

Product	G-kg	VE	Prod.No.	Price €
Smart wide mouth skimmer for polyester pools, ABS, white	5.80	1.00	7300031	193.52





NOTE

All dimensions and installation instructions can be found at shop.peraqua.com

#### Smart skimmer mini

for above ground pools ABS, white, with screw set and sealings

Product	G-kg	VE	Prod.No.	Price €
Smart skimmer mini white single packed für above ground pools	2.44	1.00	78735	51.10







Smart skimmer maxi

Product

for polyester and liner pools ABS, white, d50 mm solvent, imperial 1.5" solvent

for above ground pools ABS, white, with screw set and sealings

Smart skimmer maxi white single packed for above ground pools

Product	G-kg	VE	Prod.No.	Price €
Smart wall conduit for polyester and liner pools ABS white, d50 mm solvent internal, imperial 1,5" internal	0.30	10.00	7300038	13.30

G-kg

3.44

VE

1.00

Prod.No.

78736

Price €

92.58



#### Smart inlet nozzle

for above ground pools ABS, white, with sealings

Product	G-kg	VE	Prod.No.	Price €
Return fitting ABS white single packed	0.19	1.00	78737	7.70



#### Smart inlet nozzle

for polyester and liner pools ABS, white, G2A male thread, d50 solvent inner connection, recommended wall conduit 7300038, imperial 1.5" solvent inner connection, adjustable angle

Product	G-kg	VE	Prod.No.	Price €
Smart inlet nozzle for polyester- and liner pools ABS, white, G2A external thread, d50 solvent internal	0.45	10.00	7300034	31.81



#### Smart vac nozzle

for polyester and liner pools d50 mm solvent inner connection, imperial 1.5" solvent inner connection, recommended wall conduit 7300038, G2A male thread

Product	G-kg	VE	Prod.No.	Price €
Smart vacuum nozzle for polyester and liner pools d50 mm solvent internal, imperial 1,5" solvent internal	0.45	10.00	7300037	13.96



#### Smart main drain

for tile and mosaic pools ABS, 245 × 245 mm, 9 × 9" and 320 × 320 mm, 12 × 12"

Product	G-kg	VE	Prod.No.	Price €
Main drain ABS white 245 x 245 mm (9" x 9")	0.83	8.00	74349	34.58
Main drain ABS white 320 x 320 mm (12" x 12")	1.32	1.00	74350	57.46



#### Smart main drain

for tile and mosaic pools ABS, 265  $\times$  265 mm, 10  $\times$  10"

Product	G-kg	VE	Prod.No.	Price €
Main drain ABS white 265 x 265mm complete mounted UV-resistant	0.90	25.00	170183	36.51



NOTE

All dimensions and installation instructions can be found at shop.peraqua.com



### V4A STAINLESS STEEL INSTALLATION PARTS

SWIMMING IN ELEGANT SHINE







Bracket for sensor for level control

#### **DCEAN** HIGH WATER LEVEL SKIMMER HIGH500 & HIGH700 PRO

The Ocean® V4A high water level skimmer series 500 & 700 PRO allow for the highest possible waterline for skimmer pools, thanks to the U-shaped cover. The exclusive cover can be directly installed at the pool edge, creating a nearly seamless transition between the waterline and the pool edge.

- The integrated mount for a float switch (level controls in the Controls section) and the D50 overflow ensure operational safety.
- There is the option to connect a refill line, enabling automatic refilling after backwashing.
- The skimmer lid can be securely fixed to the housing with a clip.
- The 2" internal thread outlet, combined with the 2 1/2" external thread connection, offers versatile connection options.
- The large connection cross-section ensures optimal water flow and efficient surface cleaning.

### V4A INSTALLATION PARTS "SQUARE" AND "ROUND"

The minimalist, straight-line design of the V4A Ocean<sup>®</sup> installation part series is a distinctive design element in the pool. Both product lines are available with a matte or polished surface.



When used in saltwater pool water, corrosion may occur on stainless steel installation parts.





Representative image



#### Ocean high water level skimmer stainless steel V4A High500

for liner, polyester and conrete pools, with overflow and integrated holder for niveau regulation

Product	G-kg	VE	Prod.No.	Price €
Ocean® high water level skimmer stainless steel V4A High500 for concrete, liner and build-up pools with lid, stainless steel basket, suction width 460 mm, overflow d50, connection IG2" and AG 2 ½", incl. bracket for niveau sensor	17.40	1.00	7301045	1748.05

#### Ocean® stainless steel skimmer V4A High500 PRO

for liner, polyester and conrete pools, with overflow and integrated holder for niveau regulation

Product	G-kg	VE	Prod.No.	Price €
Ocean® stainless steel skimmer V4A High500 PRO for concrete, liner and build-up pools with lid, stainless steel basket, suction width 460 mm, overflow d50, connection 2" female and 2 1/2" male, incl. bracket for niveau sensor and water refill	16.40	1.00	7301307	2152.50

#### Ocean® high water level skimmer stainless steel V4A High700 PRO

for liner, polyester and conrete pools, with overflow and integrated holder for niveau regulation

Product	G-kg	VE	Prod.No.	Price €
Ocean® high water level skimmer stainless steel V4A High 700 PRO with lid, stainless steel basket, suction width 660 mm, overflow d50, connection 2" female and 2 1/2" male, incl. bracket for niveau sensor and water refill	15.40	1.00	7301227	2421.61

#### Ocean® wall conduit V4A PRO

2" female thread on piping side, 1½" female thread nozzle side

Product	G-kg	VE	Prod.No.	Price €
Ocean® wall conduit V4A PRO with water stop, thread, I=250 mm, 2" female thread, for liner, concrete and tile pools	1.83	1.00	7301189	251.78
Ocean® wall conduit V4A PRO with water stop and thread, I=300 mm, 2" female thread, for liner, concrete and tile pools	1.83	1.00	7301190	267.82







#### NOTE

All dimensions and installation instructions can be found at shop.peraqua.com

#### Ocean® Cover for Ocean® Inlet Nozzle, polished

DIN, V4A/AISI316, incl. cover, ball and spacer ring,

for Ocean® wall conduit V4A PRO, Ocean® wall conduit ABS and all Ocean® inlet nozzles ABS

Product	G-kg	VE	Prod.No.	Price €
Ocean® Cover for Ocean® inlet nozzle DIN V4A AISI 316, 1 $\%^{\prime\prime}$ male thread, d=112 mm, with 7 drilling holes à 5 mm, for liner- and polyester pools	0.15	1.00	75211	196.04
Ocean® Cover for Ocean® inlet nozzle DIN V4A AISI 316, 1 ½" male thread, d=112 mm, diameter of drilling hole 13 mm, for liner- and polyesterpools	0.15	1.00	74410	196.04
Ocean® Cover for Ocean® inlet nozzle DIN V4A AISI 316, 1 ½" male thread, d=112 mm, diameter of drillinig hole 18 mm, for liner- and polyester pools	0.15	1.00	77586	196.04





### $Ocean^{\circledast}$ Cover for $Ocean^{\circledast}$ inlet nozzle PRO "Square" DIN V4A AISI 316, brushed

V4A incl. cover, ball and spacer ring, for Ocean® wall conduit ABS and all Ocean® inlet nozzles ABS

Product	G-kg	VE	Prod.No.	Price €
Ocean® Cover for Ocean® inlet nozzle PRO DIN V4A AISI 316, 1 $\%^{\prime\prime}$ male thread, with 7 drilling holes 5 mm each, "Square", brushed, for liner- and polyester pools	0.11	1.00	7301184	196.04
Ocean® Cover for Ocean® inlet nozzle PRO DIN V4A AISI 316, 1 $\%^{\prime\prime}$ male thread, diameter of drilling hole 13 mm, "Square", brushed, for liner- and polyester pools	0.11	1.00	7301185	196.04
Ocean® Cover for Ocean® inlet nozzle PRO DIN V4A AISI 316, 1 ½" male thread, diameter of drilling hole 18 mm, "Square", brushed, for liner- and polyester pools	0.11	1.00	7301186	196.04

#### Ocean® main drain V4A PRO, polished

Product	G-kg	VE	Prod.No.	Price €
Ocean® main drain V4A PRO d150 mm, for liner, concrete and tile pools, 2″ IG, polished, with ground connection	1.80	1.00	7301188	380.08



#### Ocean® main drain V4A PRO "Square" brushed

Product	G-kg	VE	Prod.No.	Price €
Ocean® main drain V4A PRO "Square" 150x150 mm, for liner, concre- te- and tile pools, 2" female thread, brushed	1.86	1.00	7301187	331.96





**NOTE** All dimensions and installation instructions can be found at shop.peraqua.com

#### Ocean® floor inlet nozzle V4A, polished

for liner pools, polished cover, V4A, flow rate adjustable

Product	G-kg	VE	Prod.No.	Price €
Ocean® floor inlet nozzle V4A round for liner pools	0.95	1.00	7301539	330.65
Ocean® floor inlet nozzle V4A square for liner pools	1.05	1.00	7301540	363.70



#### Smart stainless steel skimmer V4A 400 with frontal removable basket

Product	G-kg	VE	Prod.No.	Price €
Smart stainless steel skimmer V4A 400 for concrete pools with frontal removable basket	11.00	1.00	7300634	2198.73
Smart stainless steel skimmer V4A 400 for concrete pools with frontal removable basket with integrated holder for niveau control	12.00	1.00	7300635	3052.35
Smart stainless steel skimmer V4A 400 for liner pools with frontal removable basket	12.00	1.00	7300638	2457.38
Smart stainless steel skimmer V4A 400 for liner pools with frontal removable basket with integrated holder for niveau control	13.00	1.00	7300639	3311.02

#### Smart stainless steel skimmer V4A 600 with frontal removable basket

Product	G-kg	VE	Prod.No.	Price €
Smart stainless steel skimmer V4A 600 for concrete pools with frontal removable basket	16.00	1.00	7300636	2457.38
Smart stainless steel skimmer V4A 600 for concrete pools with frontal removable basket and integrated holder for niveau control	17.00	1.00	7300637	3311.02
Smart stainless steel skimmer V4A 600 for liner pools with frontal removable basket	17.00	1.00	7300640	2716.06
Smart stainless steel skimmer V4A 600 for liner pools with frontal removable basket and integrated holder for niveau control	18.00	1.00	7300641	3569.69



#### Smart junction box V4A

Product	G-kg	VE	Prod.No.	Price €
Smart junction box stainless steel V4A	1.00	1.00	74503	357.94



#### Smart main drain V4A

for tile and mosaic pools

Product	G-kg	VE	Prod.No.	Price €
Main drain ss316 stainless steel 320 x 320 mm (12" x 12")	2.03	10.00	74351	289.72
Main drain ss316 stainless steel 245 x 245 mm (9" x 9")	1.24	10.00	74352	239.32

# 

#### Smart reel for pool cover, fixed

AISI304/V2A stainless steel side parts and aluminium telescopic rod, corrosion-free, incl. installation kit. recommended for pools up to 15 x 6 m

Product	G-kg	VE	Prod.No.	Price €
Smart reel for pool cover, "fixed" 2,6 - 4,3 m, AISI304 aluminium telescopic rod (incl. installation kit 50-3300)	12.50	1.00	74361	640.01
Smart reel for pool cover "fixed" 4,1 - 5,7 m, AISI304, aluminium telescopic rod (incl. installation kit 50-3305)	15.50	1.00	74362	743.06
Smart reel for pool cover "fixed" 5,3 - 6,9 m, AISI304, aluminium telescopic rod, (incl. installation kit 50-3310)	17.50	1.00	74363	846.14

#### Smart reel for pool cover, flexible

AISI304/V2A stainless steel side parts and aluminium telescopic rod, corrosion-free, incl. installation kit. recommended for pools up to 15 x 6 m

Product	G-kg	VE	Prod.No.	Price €
Smart reel for pool cover, "flexible" 2,6 - 4,3 m, AISI304 aluminium telescopic rod (incl. installation kit 50-3315)	16.00	1.00	74364	743.06
Smart reel for pool cover, "flexible" 4,1 - 5,7 m, AISI304, aluminium telescopic rod (incl. installation kit 50-3320)	19.00	1.00	74365	846.14
Smart reel for pool cover, "flexible" 5,3 - 6,9 m, AISI304, aluminium telescopic rod (incl. installation kit 50-3325)	21.00	1.00	74366	949.24

# 

#### Smart reel for pool cover, mobile

AlSI304/V2A stainless steel side parts and aluminium telescopic rod, corrosion-free, incl. installation kit. recommended for pools up to 15x6 m  $\,$ 

Product	G-kg	VE	Prod.No.	Price €
Smart reel for pool cover, "mobile" 2,6 - 4,3 m, AISI304, aluminium telescopic rod (incl. installation kit 50-3330)	17.41	1.00	74367	777.46
Smart reel for pool cover, "mobile" 4,1 - 5,7 m, AISI304, aluminium telescopic rod (incl. installation kit 50-3335)	17.50	1.00	74368	880.53
Smart reel for pool cover, "mobile" 5,3 - 6,9 m, AISI304, aluminium telescopic rod (incl. installation kit 50-3340)	22.79	1.00	74369	983.57



880

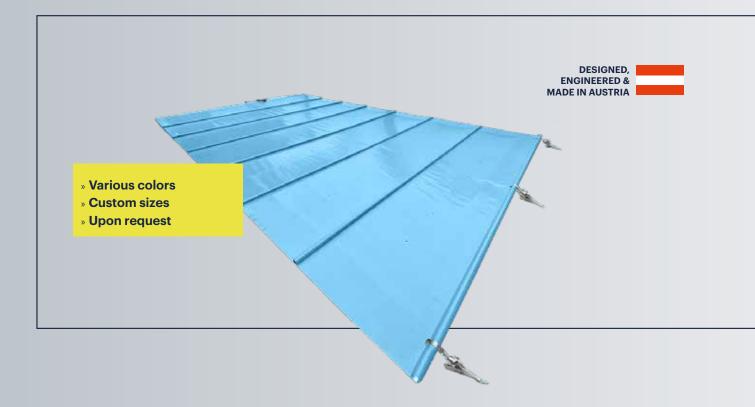
460

#### Smart reel for pool cover, height-adjustable

Height adjustable (523-823 cm)

AlSI304/ $\sqrt{2}$ A stainless steel side parts and aluminium telescopic rod, corrosion-free, incl. installation kit. recommended for pools up to 15x6 m

Product	G-kg	VE	Prod.No.	Price €
Smart reel for pool cover, "height-adjustable, fixed" 2,6 - 4,3 m, AISI304, aluminium telescopic rod, (incl. installation kit 50-3343)	14.00	1.00	74370	899.85
Smart reel for pool cover, "height-adjustable, fixed", AISI304, alumi- nium telescopic rod (incl. installation kit 50-3344)	17.00	1.00	74371	1002.96



#### **PVC POOL COVERS**

We now also offer PVC pool covers for rolling devices upon request. These covers are ideal for pool owners looking for an easy and practical way to cover their pool. The PVC pool covers for rolling devices are made from high-quality PVC material in Austria.

- Available in various sizes and colors.
- Custom fitting to the dimensions of your pool is possible. Optimal protection against dirt and debris.
- •











#### NOTE

Pool covers are an important factor for the sustainable operation and heating of pool water. Efficient thermal insulation of the pool water offers significant potential for reducing heating costs.



#### Smart stainless steel ladder STANDARD De Luxe

made of bright polished stainless steel tubes ø43 mm outside (AISI304 / V2A), including installation kit (rubber bumper, screws and nuts AISI304 / V2A), produced according to EN 13451-1, EN 13451-2

Product	G-kg	VE	Prod.No.	Price €
Smart stainless steel ladder STANDARD De Luxe, AISI 304 3-steps, antislip steps	11.50	1.00	77559	419.97
Smart stainless steel ladder STANDARD De Luxe, AISI 304 4-steps, antislip steps	14.00	1.00	77560	495.53
Smart stainless steel ladder STANDARD De Luxe, AISI 304 5-steps, antislip steps	15.00	1.00	77561	548.06

#### Smart stainless steel hand rail De Luxe, type B

made of bright polished stainless steel tubes ø43 mm (AISI304 / V2A), including installation kit (rubber bumper, screws and nuts AISI304 / V2A), produced according to EN 13451-1, EN 13451-2

Product	G-kg	VE	Prod.No.	Price €
Smart stainless steel handrail, type "B" 19" x 31" AISI 304	3.00	1.00	77597	710.98



#### Smart stainless steel handrail De Luxe

for pool and spa entry zones, made of bright polished stainless steel tubes ø43 mm (AISI 316L/V4A), including installation kit (rubber bumper, screws and nuts AISI 316L/V4A), produced according to EN 13451-1, EN 13451-2.

Product	G-kg	VE	Prod.No.	Price €
Smart stainless steel handrail De Luxe, 1219 mm AISI 316L	12.50	1.00	7300397	462.70
Smart stainless steel handrail De Luxe, 1524 mm AISI 316L	13.60	1.00	77583	514.05



NOTE

All dimensions and installation instructions can be found at shop.peraqua.com



#### LED underwater spotlight VISION Pro 17

- Can be installed in most 1½" wall conduits
- Resin-filled NoAir™ housing: no water ingress into the lamp possible
- The use of high quality polymers makes the lamp compatible with salt electrolysis
- Removable 2m rubber cable included
- 12 V AC / 2-wire
- Multifunction lamp with programmable RGBW color modes
- Dimming option
- Very wide beam angle to avoid shadow zones in the pool
- Easy installation with features such as QuickConnect™, PressFit™ and ClickOn™
- Easy smart home integration via DMX interface

Product	G-kg	VE	Prod.No.	Price €
VISION Pro 17 RGBW, 7000lm, 180W, diameter 170mm	0.99	1.00	7301674	1169.91





LED, diameter 170 mm, can also be used as a replacement for PAR56, includes 4 m 2-pin cable

Product	G-kg	VE	Prod.No.	Price €
VISION Adagio Pro 17 LED tunable white, 4250lm, 70W, diameter 170mm, dimmable	1.07	1.00	7301106	972.24
LED underwater spotlight VISION Adagio Pro 17 LED warmwhite, 4950lm, 55W, diameter 170mm	1.07	6.00	75220	701.72
LED underwater spotlight VISION Adagio Pro 17 LED white, 5500lm, 57W, diameter 170mm	1.07	6.00	75217	683.94

#### LED underwater spotlight VISION Spectra 17

- Can be installed in most 11/2" wall conduits
- Fully compatible with PAR56 niche
- Resin-filled NoAir™ housing.
- The use of high quality polymers makes the luminaire compatible with salt electrolysis
- 2 m power cable included
- 12 VAC / 2-wire
  - Wide selection of covers is available

#### QuickConnect™

Extremely reliable and easy to mount proprietary connector with gold plated contacts. The power-line wires can be inserted without the need to be stripped and are fixed with selfpiercing contact screws.

Product	G-kg	VE	Prod.No.	Price €
LED underwater spotlight VISION Spectra 17 LED RGB, 1600lm, 20W, diameter 170mm	0.78	6.00	7300789	354.48
LED underwater spotlight VISION Spectra 17 LED RGB, 2450lm, 32W, diameter 170mm	0.78	6.00	7300790	611.16
LED underwater spotlight VISION Spectra 17 LED white, 1675lm, 17W, diameter 170mm	0.78	6.00	7300791	293.37
LED underwater spotlight VISION Spectra 17 LED tunable white, 2400lm, 40W, diameter 170mm	0.78	6.00	7300792	543.92



#### VISION covers 17 for VISION LED underwater spotlights

VISION covers for Vision lights are available in V4A stainless steel, white, light blue and many more Optimal color coordination with Ocean® deluxe swimming pool liner program.

Product	G-kg	VE	Prod.No.	Price €
VISION 17 cover white	0.28	6.00	74402	70.75
VISION 17 cover sand	0.28	6.00	74405	70.75
VISION 17 cover light grey	0.28	6.00	74719	70.75
VISION 17 cover light blue	0.28	6.00	74403	70.75
VISION 17 cover blue	0.28	6.00	74404	70.75
VISION 17 cover black	0.28	6.00	74720	70.75
VISION 17 cover stainless steel	0.55	6.00	74504	277.26

## VISION UNDERWATER LIGHTING

BRING COLOR TO THE POOL

#### VISION: PRO | ADAGIO PRO | SPECTRA | MOONLIGHT

VISION stands for a wide range of pool lights. These intelligent LED lighting solutions can be easily applied to any type of swimming pool, both in new constructions and retrofits. Through innovative technologies such as QuickConnect<sup>™</sup>, PressFit<sup>™</sup>, or ClickOn<sup>™</sup>, they enable easy installation and setup.

#### QuickConnect™

#### PressFit™

An easily mountable connector with goldplated contacts allows for simple connection. The cables can be installed and secured without the need for stripping. An adjustable light mounting system that allows pool lights to be seamlessly installed on the wall, even if the wall conduits are not mounted 100% vertically. ClickOn™

An innovative concept for the effortless replacement of covers on pool lights. The wide selection of covers enhances the individual look of the pool.

#### **PRODUCT OVERVIEW**

#### VISION Pro

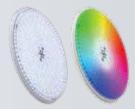
- Outstanding light performance
- Maximum light distribution through wide beam angle
- Dimmable, RGBW, fixed colors with dynamic scenes
- Sizes: d10, d5 cm
- DMX capable easy integration into smart homes
- Ultrathin installation
- QuickConnect<sup>™</sup>, PressFit<sup>™</sup>, and ClickOn<sup>™</sup>

#### **VISION Adagio Pro**

- Maximum light distribution through wide beam angle
- Adjustable white: White, Warm white
- Sizes: d17, d10, d5 cm
- DMX capable easy integration into smart homes
- Ultrathin installation
- QuickConnect<sup>™</sup>, PressFit<sup>™</sup>, and ClickOn<sup>™</sup>

#### **VISION Spectra**

- RGB, fixed colors with dynamic scenes
- Sizes: d17, d10, d5 cm
- Ultrathin installation
- QuickConnect<sup>™</sup>, PressFit<sup>™</sup>, and ClickOn<sup>™</sup>



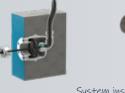
#### **VISION Moonlight**

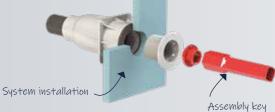
- Fully compatible with PAR56 niche for retrofitting
- RGB or white, fixed colors with dynamic scenes
- Sizes: d17 cm
- Ultrathin installation

#### **EASY & EFFORTLESS INSTALLATION**

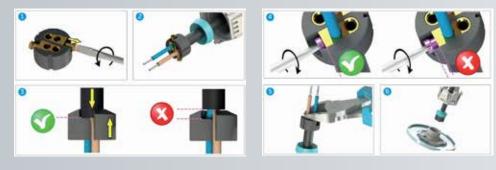








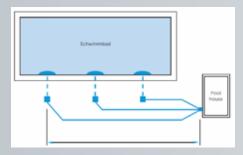
#### MANUAL QuickConnect<sup>™</sup>



#### WIRING INSTRUCTIONS

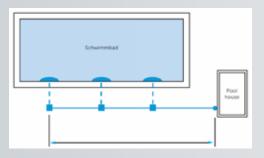
#### For new installation

Each light is connected to the transformer via a separate cable.



#### For existing installation

All spotlights are connected to the transformer via a single cable.



---- Cable included in the scope of delivery Separate cable (not included) Please refer to the required cable lengths and cross-sections in the instructions on our webshop



#### **VISION Pro 10**

- Can be installed in most 1½" wall conduits Resin-filled NoAir™ housing: no water ingress into the lamp possible
- The use of high quality polymers makes the lamp compatible with salt electrolysis
- Removable 2m rubber cable included
- 12 V AC / 2-wire
- Multifunction lamps with programmable RGBW color modes
- Dimming option
- Very wide beam angle to avoid shadow zones in the pool
- Easy installation with features such as QuickConnect™, PressFit™ and ClickOn™
- Easy smart home integration via DMX interface

Product	G-kg	VE	Prod.No.	Price €
LED underwater spotlight VISION Pro 10 RGBW, 3500 lm, 85 W, dia- meter 100 mm	0.85	6.00	7400388	1008.27





LED, diameter 100 mm, 116° beam angle, incl. 4 m 2-pole cable with connectors

Product	G-kg	VE	Prod.No.	Price €
LED underwater spotlight VISION Adagio Pro 10 LED warmwhite, 2400lm, 23W, diameter 100mm	0.98	6.00	75221	488.54
LED underwater spotlight VISION Adagio Pro 10 LED white, 2600lm, 25W, diameter 100mm	0.98	6.00	75218	470.77

#### LED underwater spotlight VISION Spectra 10

- Can be installed in most 1½" wall conduits Resin-filled NoAir™ housing
- The use of high quality polymers makes the luminaire compatible with salt electrolysis
- Removable 2m rubber cable included
- 12 VAC / 2-wire
- A wide selection of covers is available

#### QuickConnect™

Extremely reliable and easy to mount proprietary connector with gold plated contacts. The power-line wires can be inserted without the need to be stripped and are fixed with selfpiercing contact screws.

Product	G-kg	VE	Prod.No.	Price €
LED underwater spotlight VISION Spectra 10 LED RGB, 1550 lm, 20 W, diameter 100 mm	0.69	6.00	7300787	433.93
LED underwater spotlight VISION Spectra 10 LED tunable white 1500 lm, 20 W, diameter 100 mm	0.69	6.00	7300788	330.03



#### **VISION covers 10 for VISION LED underwater spotlights**

VISION covers for Vision lights are available in V4A stainless steel, white, light blue and more. Optimal colour matching with Ocean® deluxe swimming pool liners.

Product	G-kg	VE	Prod.No.	Price €
VISION 10 cover white	0.23	6.00	78596	45.36
VISION 10 cover sand	0.23	6.00	740077	45.36
VISION 10 cover light grey	0.23	6.00	74717	45.36
VISION 10 cover light blue	0.23	6.00	78593	45.36
VISION 10 cover blue	0.23	6.00	78595	45.36
VISION 10 cover black	0.23	6.00	74718	45.36
VISION 10 cover stainless steel	0.50	1.00	78594	159.84

#### **LED underwater spotlight VISION PRO 5**

- Can be installed in most 1½" wall conduits
   Resin-filled NoAir<sup>™</sup> housing: no water ingress ingress of water into the lamp possible
- The use of high quality polymers makes the lamp compatible with salt electrolysis
  - Removable 2m rubber cable included
  - 12 V AC / 2-wire
  - Multifunction lamp with programmable RGBW color modes
- Dimming option
- Very wide beam angle to avoid shadow zones in the pool

Product	G-kg	VE	Prod.No.	Price €
LED underwater spotlight VISION Pro 10 LED RGBW 1200lm, 33W, diameter 50mm	0.71	6.00	7301366	662.49

#### LED underwater spotlight VISION Adagio Pro 5

LED, diameter 50 mm, 116° beam angle, incl. 4 m 2-pole cable with connectors

Product	G-kg	VE	Prod.No.	Price €
LED underwater spotlight VISION Adagio Pro 5 LED warm white, 700 lm, 8 W, diameter 50 mm	0.89	6.00	75223	463.60
LED underwater spotlight VISION Adagio Pro 5 LED white, 750 lm, 8 W, diameter 50 mm	0.89	6.00	75219	451.80

#### LED underwater spotlight VISION Spectra 5

- Can be installed in most 1½" wall conduits
- Resin-filled NoAir™ housing
- The use of high quality polymers makes the luminaire compatible with salt electrolysis
- Removable 2m rubber cable included
- 12 VAC / 2-wire
- A wide selection of covers is available

#### QuickConnect™

Extremely reliable and easy to mount proprietary connector with gold plated contacts. The power-line wires can be inserted without the need to be stripped and are fixed with selfpiercing contact screws.

Product	G-kg	VE	Prod.No.	Price €
LED underwater spotlight VISION Spectra 5 LED RGB, 450 lm, 8 W, diameter 50 mm	0.60	6.00	7300785	256.69
LED underwater spotlight VISION Spectra 5 LED tunable white, 550 lm, 8 W, diameter 50 mm	0.60	6.00	7300786	220.01



#### VISION covers 5 for VISION LED underwater spotlights

VISION covers are available in V4A stainless steel, white, light blue and many more. Optimal color coordination with Ocean® deluxe swimming pool liner program, other colors on request

Product	G-kg	VE	Prod.No.	Price €
VISION 5 cover white	0.18	6.00	73686	40.96
VISION 5 cover light blue	0.18	6.00	740073	40.96
VISION 5 cover black	0.18	6.00	740072	40.96
VISION 5 cover stainless steel	0.45	6.00	79373	129.89









#### **VISION Wall Conduit short**

for liner and concrete pools ABS, short design, hose connection 25 mm

Product	G-kg	VE	Prod.No.	Price €
VISION wall conduit short for VISION Pro, Spectra or Adagio Pro	0.43	6.00	75230	90.67



#### **VISION Wall Conduit long**

for liner and concrete pools ABS, long design, hose connection 25 mm

Product	G-kg	VE	Prod.No.	Price €
VISION wall conduit long for VISION Pro, Spectra or Adagio Pro	0.80	6.00	75236	112.65



#### **VISION Wall Conduit short**

for polyester/vinylester pools, PP pools, etc. ABS, with lock nut and female thread

Product	G-kg	VE	Prod.No.	Price €
VISION wall conduit short for VISION Pro, Spectra or Adagio Pro	0.72	6.00	75235	109.94



#### **VISION Wall Conduit**

for stainless steel pools, V4A stainless steel, with female thread

Product	G-kg	VE	Prod.No.	Price €
VISION wall conduit stainless steel for VISION Pro, Spectra or Adagio Pro	1.54	6.00	75237	262.87

## VISION MOONLIGHT

UPGRADE YOUR POOL





#### **MOONLIGHT: SWITCH TO LED NOW**

Switching to LED underwater lighting is economical and effective. We recommend our Moonlight model for this.

The Moonlight underwater spotlight offers you a selection of fixed colors and dynamic scenarios. It impresses with its ultra-flat design and the following features:

- Diameter 17 cm
- Fully compatible with PAR56 niche
- Resin-filled NoAir<sup>™</sup> housing, prevents air pockets
- Compatible with salt electrolysis
- Including 4 m power cable
- RGB offers 16 color programs

#### **RETROFIT IN PAR56-BRACKET**





#### **VISION Moonlight RGB multicolour**

With installation clamps for all common light brands and all common 300 W light frames, niches for retrofitting, optional with remote control, IP68, input voltage 12 VAC, 4 m cable 2-wire, 16 colour variations

Product	G-kg	VE	Prod.No.	Price €
VISION Moonlight RGB, 800 lm, 13 W, diameter 170 mm	0.97	6.00	74738	284.23
VISION Moonlight RGB, 1550lm, 23W, diameter 170 mm	0.97	6.00	74739	346.41
VISION Moonlight RGB, 2200 lm, 33 W, diameter 170 mm	0.97	6.00	74740	470.77



#### **VISION Moonlight LED**

With installation clamps for all common light brands and all common 300 W light frames, niches for retrofitting, optional with remote control, IP68, input voltage 12 VAC, 4 m cable 2-wire

Product	G-kg	VE	Prod.No.	Price €
VISION Moonlight white, 1350 ml, 14 W, diameter 170 mm	0.95	6.00	74741	284.23
VISION Moonlight white, 2400lm, 23W, diameter 170 mm	0.95	6.00	74742	346.41
VISION Moonlight white, 3500 lm, 35 W, diameter 170 mm	0.95	6.00	74743	470.77



#### **VISION Moonlight installation set**

incl. cover for wall mounting

Product	G-kg	VE	Prod.No.	Price €
VISION Moonlight installation set incl. cover	0.37	6.00	74383	85.53



Lamp not included in the scope of delivery.



The remote control unit Link Touch RGB is specifically designed for RGB lights. Link Touch adjustable white only works with white lights.

#### **VISION Moonlight stainless steel cover**

Product	G-kg	VE	Prod.No.	Price €
VISION Moonlight stainless steel cover	0.50	6.00	75062	333.05

#### **LINK Touch**

- Stable connection with large range
- Free-standing or mounted on the wall
- Portable with rechargeable battery
- Slim and modern design
- Clear display
- Safe transmission via RF connection
- IP 20 protection

Product	G-kg	VE	Prod.No.	Price €
LINK Touch RGB for VISION lamps, full colour	0.00	1.00	7300887	349.99
LINK Touch TW for VISION lamps, tunable white	0.64	1.00	7300888	365.74





#### Smart under water light M5 12V LED

- For liner pools
  When using longer screws (not included) also suitable for polyester, vinylester pools or PP pools
- Easy installation, thanks to the large installation pot
- Brass bushings
- Optional gray or dark gray cover
- Energy efficient LED technology
- With RGB 16 color programs possible socket 360° swivelling
- 4m cable included

Product	G-kg	VE	Prod.No.	Price €
Smart Under Water Light, M5, LED, 12V AC, RGB 23W, ABS, with flange set for liner pools, with threaded bushings	2.11	1.00	7301401	497.66
Smart Under Water Light M5, LED, 12V AC, white 23W, ABS, with flange set for liner pools, with threaded bushings	2.11	1.00	7301400	497.66

#### Cover for Smart under water light M5 LED

Product	G-kg	VE	Prod.No.	Price €
Cover grey for Smart under water light M5 LED white and RGB	0.34	1.00	7301403	45.67
Cover dark grey for Smart under water light M5 LED white and RGB	0.34	1.00	7301404	45.67



#### **Transformer TORO DIN**

220-230 V IN, 12 VAC OUT, acc. DIN

Product	G-kg	VE	Prod.No.	Price €
Transformer TORO DIN 150W	1.40	1.00	740053	154.55
Transformer TORO DIN 350W	3.83	1.00	740054	190.08
Transformer TORO DIN 700W	7.00	1.00	740063	271.81



#### **Transformer TORO IP64**

220-230 V IN, 12 VAC OUT, IP64, encapsulated

Product	G-kg	VE	Prod.No.	Price €
Transformer TORO IP64 150W	3.08	1.00	740060	262.24
Transformer TORO IP64 350W	5.09	1.00	740061	337.22
Transformer TORO IP64 700W	9.55	1.00	740062	409.68



#### Remote control for all VISION lamps with transmitter

DMX512 and RS-485 connection, incl. 1 hand transmitter, incl. dimming function

Product	G-kg	VE	Prod.No.	Price €
Adagio Pro RGB Control DMX512 & RS-485 connectivity with 350 VA transformer, black, dimming function, 2 auxiliary outputs, with transformer 350 VA, incl. 1 handheld transmitter	7.44	1.00	7400294	788.60

#### Remote control for all VISION lamps without transmitter

DMX512 and RS-485 connection, incl. 1 hand held transmitter, incl. dimming function

Product	G-kg	VE	Prod.No.	Price €
Remote control for VISION Pro, Spectra, Adagio Pro or Moonlight, DMX and RS-485 connectivity, incl. handheld transmitter, without transformer	0.74	1.00	79380	527.63

#### Replacement handheld transmitter for all VISION remote controls

Product	G-kg	VE	Prod.No.	Price €
Replacement handheld transmitter for all VISION remote controls	0.05	6.00	75030	144.89



#### **Remote control for VISION Spectra and Moonlight with transformer**

function: OFF/ON and colour regulation, incl. hand transmitter, operating distance in optimal conditions 40-100 m, with transformer 200 VA, input 230 V AC/output 12 V AC max 200 W

Product	G-kg	VE	Prod.No.	Price €
Remote control for VISION Spectra and Moonlight with transformer 200 VA, incl. handheld transmitter	3.73	1.00	78870	449.45

#### Remote control for VISION Spectra and Moonlight without transformer

for functions OFF/ON and colour regulation, operating distance in optimal conditions 40–100 m (without transformer, incl. handheld transmitter, input 12 V AC)

Product	G-kg	VE	Prod.No.	Price €
Remote control for VISION Spectra and Moonlight without transfor- mer, incl. handheld transmitter	0.59	1.00	78600	259.37

#### Installation set for VISION Spectra and Adagio Pro

for VISION wall conduit

Product	G-kg	VE	Prod.No.	Price €
Installation set for VISION Spectra and Adagio Pro	0.82	6.00	75556	27.81





#### Smart under water light M5 300W-12V white

ABS body, 300W-12V PAR 56 bulb (162,5 lumen), 1 m cable protection hose, 2,50 m 2 x 4 cable, corrosion free, chem. resistance, IP68 protection code, sealings, screw set, change of bulb without lowering of water level, only for under water operation, side cable outlet, illumination area.: ~16 m², installation distance.: ~ 4 m, depth: 65 cm from pool edge

Product	G-kg	VE	Prod.No.	Price €
Smart under water light M5 stainless steel inserts A4, ABS 300W 12V with flange and sealing set for liner pools	2.58	1.00	74376	167.99
Smart under water light M5 incl. 18x stainless steel inserts and 25 mm screws, ABS 300W 12V with flange and sealing set for liner pools	2.80	1.00	77018a	223.29
Smart under water light M5 incl. 18x stainless steel inserts and 35 mm screws, ABS 300W 12V with flange and sealing set for polyester pools	2.58	1.00	77018	223.29

#### Smart under water light M5 300 W-12 V black

incl. 18× stainless steel inserts & 25 mm screws, ABS 300W 12V with flange and sealing set for liner pools (for polyester pools we recommend 35 mm screws)

Product	G-kg	VE	Prod.No.	Price €
Smart under water light M5, ABS, 300W 12V, black, incl. flange and sealing set & 18x brass inserts & 25 mm screws, for liner pools	2.58	1.00	78021	226.50

#### Smart under water light M5 300 W-12 V with stainless steel cover

with AISI-316 stainless steel cover and ABS niche, 300W-12V PAR 56 bulb (162.5 lumen), 2.50 m cable, HO7RN-F, 2 × 4, 1 m cable protection hose, corrosion-free, chem. resistance, protection code: IP-68, bulb change without lowering the water level, only for under water operation Illumination area: per 300 W; under water light ~ 16 m², installation distance: ~ 4 m, depth: 65 cm from pool edge

Product	G-kg	VE	Prod.No.	Price €
Smart under water light M5, 300W 12V, ss316 stainless steel cover + ABS body, with flange and sealing set, with threaded bushings, for liner pools	3.32	1.00	74354	323.17

#### Ocean® under water light PT for subsequent installation incl. halogen lamp white

ABS, halogen lamp 50 W-12 V or 100 W-12 V, 2,5 m under water cable 2 x 1,5, 1 m flexible cable protection hose, glass protection, IP68, easy installation, service friendly, UV protection, only for under water operation, illumination area/light ~ 10 m2, installation distance: ~ 2 m depth: 65 cm above pool floor

Product	G-kg	VE	Prod.No.	Price €
Smart under water light PT, ABS, 50W 12V, incl. halogen lamp white, for subsequent installation	1.20	5.00	74357	138.25
Smart under water light PT, ABS, 100W 12V, incl. halogen lamp white, for subsequent installation	1.35	1.00	74356	138.25



#### Smart cable junction box ABS, white

ABS white, compatible with all under water lights, with square lid, four stainless steel screws, incl. o-ring in lid. UV resistant, chemical resistance

Product	G-kg	VE	Prod.No.	Price €
Smart cable juncting box ABS, white, with thread connections, height=100 mm	0.29	30.00	74360	12.42







## V4A UNDERWATER LIGHTING

HIGH-QUALITY POOL LIGHTING MADE IN AUSTRIA 💳

#### **ELEGANT DESIGN, INNOVATIVE SOLUTIONS & BOLD COLORS**

The high-quality and modern design of the stainless steel Ocean® spotlights emphasizes the character of a sophisticated pool concept.

The underwater spotlights are manufactured in Austria and designed for easy installation. The RECTANGULAR series is installed using fastening bolts, while the SQUARE series uses an innovative magnetic mounting system.







The Ocean<sup>®</sup> SQUARE spotlight is installed in the pool using a unique magnetic mounting system. The design has been constructed so that the spotlights can be integrated flush into the pool wall.

Specially developed mounting brackets for mounting in the Ocean<sup>®</sup> Brick polystyrene formwork bricks or PP pools.





#### NOTE

When used with salt electrolysis systems, V2A and V4A stainless steel components may corrode.





#### Ocean®under water light SQUARE

high quality LED RGBW under water light in noble and unique design. Cover V4A 1.4571.

Great magnetic installation.

Flush mounting and therefore ideal for pool robots. RGBW with dedicated neutral white, with seamless colour transition.

Easy control box installation with quick click-on of the requested expansion channel(without wall conduit).

#### PRODUCTDETAILS:

- low casing depts of 60mm
- luminous element made of poly carbonate
- equipped with latest Philips-lumileds
- 20 LEDs of 3W class, illumination angle 160°
- RGBW, colour change with separate white
- pleasant illumination by matting
- designed and made in Austria

Product	G-kg	VE	Prod.No.	Price €
Ocean® under water light SQUARE, V4A, brushed, 110x110 mm, for liner-, concrete-, tile and stainless steel pools, RGBW LED, approx. 2500 lumen, incl. 15 m cable and flange set	1.38	1.00	7301308	1462.24
Ocean® under water light SQUARE, V4A white, powder coated, 110x110 mm, for liner, concrete, tile and stainless steel pools, RGBW LED, approx. 2500 lumen, incl. 15m cable and flange set	1.32	1.00	7301309	1462.24

#### Ocean® wall conduit V4A for under water light SQUARE

wall conduit V4A incl. fastening tabs for an unique, magnetic fastening system. Cable connection with  $\frac{34}{2}$  female thread, piping with corresponding Praher-IBG fitting and flex hose.

Product	G-kg	VE	Prod.No.	Price €
Ocean® wall conduit for under water light SQUARE, incl. fastening tabs for easy installation	0.99	1.00	7301310	317.77



#### Ocean® under water light RECTANGULAR

Stylish LED RGBW under water light with flush inground housing, ideal for pool robots. RGBW with dedicated neutral white for smooth colour transition. Easy control box installation with click-on of the requested expansion channel. (without wall conduit)

#### PRODUCTDETAILS:

- Low installation depth of 50mm
- Luminous element made of poly carbonate
- Latest CREE LEDs installed
- 18 LEDs of 1,5W class, illumination angle 160°
- RGBW, colour transisiton with separate white
- Designed and made in Austria

Product	G-kg	VE	Prod.No.	Price €
Ocean® under water light RECTANGULAR, V4A, brushed, 60x570 mm, for liner-, concrete-, tile and stainless steel pools, RGBW LED, approx. 2200 lumen, incl. 15m cable and flange set	2.94	1.00	7301311	1789.06
Ocean <sup>®</sup> under water light RECTANGULAR, V4A, white, powder coated, 60x570 mm, for liner-, concrete-, tile and stainless steel pools, RGBW LED, approx. 2200 lumen, incl. 15m cable and flange set	2.94	1.00	7301312	1789.06

#### Ocean<sup>®</sup> wall conduit V4A for under water light RECTANGULAR

wall conduit V4A 1.4571 incl. fastening tabs for a clean and quick installation. Cable connection with  $\frac{3}{2}$  female thread, piping with corresponding Praher-IBG fitting and flex hose.

Product	G-kg	VE	Prod.No.	Price €
Ocean® wall conduit for under water light RECTANGULAR incl. faste- ning tabs for easy installation	2.67	1.00	7301313	400.44













for under water light SQUARE and RECTANGULAR. Can be equipped with up to 4 channels, body IP54 specified. 1 additional channel incl., ex works with plug.

Product	G-kg	VE	Prod.No.	Price €
Ocean®control box DMX 350mA, 24V, 100W, power adapter inside, for ONE under water light SQUARE or RECTANGULAR, expandable to max. 4	2.91	1.00	7301314	1867.85

#### Ocean® expansion channel for control box with DMX function

for Ocean® under water lights SQUARE and RECTANGULAR

Product	G-kg	VE	Prod.No.	Price €
Ocean® expansion channel for control box DMX, 1x for every additio- nal Ocean® under water light SQUARE or RECTANGULAR	0.15	1.00	7301315	334.56

#### Ocean® DMX interface incl. remote control

for Ocean® under water lights SQUARE and RECTANGULAR. Remote control with touch colour wheel. Easy installation and implementation. Only necessary if no DMX is available.

Product	G-kg	VE	Prod.No.	Price €
Ocean® DMX interface incl. remote control, installed in it`s own box	1.11	1.00	7301317	592.90



#### Ocean® LED power adapter

for Ocean® under water light SQUARE and RECTANGULAR. 2 channels for one under water light with 2 colours (white + blue), or for 2 under water lights with one colour each (2x white).

Product	G-kg	VE	Prod.No.	Price €
Ocean®LED power adapter 16-24VDC, for max. two Ocean® under water lights SQUARE and RECTANGULAR	0.84	1.00	7301316	334.56

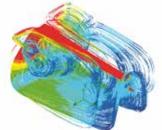


#### Ocean® installation set

for Ocean® under water light SQUARE and RECTANGULAR

Product	G-kg	VE	Prod.No.	Price €
Ocean® installation pattern and key for Ocean® under water light SQUARE and RECTANGULAR	0.84	1.00	7301318	284.18





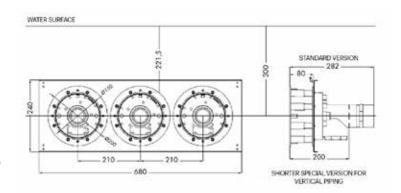
Flow simulation Triva

Jet stream TRIVA

the new JetStream TriVA countercurrent swimming unit with innovative flat technology that generates a flat, powerful current just under the surface of the water.

- Suitable for professional training
- Flow rates from 75 m³/h to 225 m³/h
- FLAT-Stream Technology
- Extremely powerful and smooth current
- Less turbulent water surface than with conventional countercurrent systems
- 3-step operation via Jetstream PIEZO
- Wall fitting in high quality ABS plastics
- Optional available: wall fittings in stainless steel (316TI) with weld flange
- Front blinds in stainless steel 316TI, mirror polished
- Voltage: three-phase current (~3N 400 V AC)
- Pump flow rate 75m³/h | 2x 75m³/h | 3x 75m³/h
- 3 flat-stream nozzles
- JetStream PIEZO
- 2 or 4 separate safety suction covers WAVE 40 | WAVE 100

Product	G-kg	VE	Prod.No.	Price €
Wall fitting set TriVA, ABS				
Wall fitting set TriVA 75 containing: - Wall fitting TriVA nozzle - Wall fitting switch - 2x wall fitting Wave 40	13.50	1.00	7300733	5593.45
Wall fitting set TriVA 150 containing: - Wall fitting TriVA nozzle - Wall fitting switch - 4x wall fitting Wave40	17.00	1.00	7300734	6772.01
Wall fitting set TriVA225 containing: - Wall fitting TriVA nozzle - Wall fitting switch - 2x wall fitting Wave100	27.30	1.00	7300735	7656.60
Wall fitting set TriVA steinless steel				
Nozzle housing TriVA 75 steinless steel	13.50	1.00	7300736	5717.52
Nozzlehousing TriVA 150 stainless steel	17.00	1.00	7300737	6533.25
Nozzlehousing TriVA 225 stainless steel	9.00	1.00	7300738	8433.32
Component kit Triva				
Component kit Triva 75: front plate TriVA, Stainless steel - Piezo switch with rect. stainless steel front plate - 2x Wave 40, 285x285mm, stainless steel - 1x Pump 3-400V, 3,5 KW 2,5" - control box - acces- sories	39.00	1.00	7300739	13921.62
Component kit Triva 150: front plate TriVA, Stainless steel - Piezo switch with rect. stainless steel front plate - 4x Wave 40, 285x285mm, stainless steel - 2x Pump 3-400V, 3,5 KW 2,5" - control box - acces- sories	67.00	1.00	7300740	13756.08
Component kit Triva 225: front plate TriVA, Stainless steel - Piezo switch with rect. stainless steel front plate - 2x Wave 100, 358x565mm, stainless steel - 3x Pump 3-400V, 3,5 KW 2,5" - control box - accessories	95.00	1.00	7300741	18018.25
Flange kit TriVA				
Flange kit TriVA 75for all wall fittings of TriVA75	2.30	1.00	7300742	1364.64
Flange kit TriVA150 for all wall fittings of TriVA150	3.00	1.00	7300743	1806.93
Flange kit TriVA225 for all wall fittings of TriVA225	5.90	1.00	7300744	2173.71



Cover dimensions:

Front panel: 640 x 220 x 15 mm Piezo-electric button: 141 x 220 x 15 mm Front panel suction wave 40: 220 x 220 x 20 mm Front panel suction wave 100: 545 x 338 x 20 mm



## COUNTER-CURRENT SYSTEMS FOR EVERY POOL

SWIMMING AGAINST THE TIDE

#### COUNTER-CURRENT SYSTEMS AKA JETSTREAM.

Activate and regulate the flow of the pool at the touch of a button and turn it into an endless swimming lane. An adjustable current turns swimming into a sporting challenge, even in smaller pools.

JetStream was the world's first counter-current system. The name comes from the JetStream weather phenomenon, an air current with a speed of up to 500 kilometers per hour that sweeps over the earth at an altitude of around 15 km.

Our range includes systems with a pumping capacity of up to 225 m<sup>3</sup> of water per hour. So every amateur swimmer and top athlete will find the right counter-current system.



#### TRIVA

For professional training and ambitious athletes\*



JUNO

Double benefit - for amateur athletes and wellness lovers

\*powerful flow just below the water surface, exactly at the level of the chest and shoulder muscles









Edelstahldesign



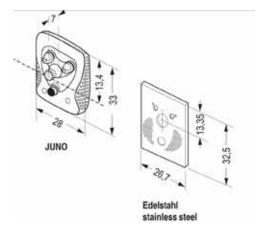
Edelstahlgehäuse

#### Jet stream JUNO

small beginnings, big effects. Is there a countercurrent system which makes big waves for a small investment? Yes, and it's called JetStream JUNO. Up to 18 litres per second can be forced through its swivel nozzle. Or just as much as you are comfortable with – because the force of the flow can be fully regulated by just turning the knob, for example, if you want a relaxing pressure point massage using the massage hose and the back jet. The flow of oxygen for a tingling air bubble bath can also be fully regulated.

- JetStream JUNO comes in three alternative materials. Premium quality plastic in white or stainless steel optic or in stainless steel.
- an installation kit that can be welded to the pool is available for stainless steel pools.
- Power consumption: 3.500 Watt
- Flow: 18 litres per second (65 m³/h)
- Integrated suction
- Swivel nozzle with fully adjustable flow
- Adjustable air bubble bath
- On/Off pneumatic air switch
- Stainless steel version with JetStream PIEZO

G-kg 5.00 3.90 30.70	VE 1.00 1.00 1.00	Prod.No. 7300745 7300746	Price € 887.28 2133.28
3.90	1.00	7300746	
3.90	1.00	7300746	
			2133.28
30.70	1.00	7000747	
30.70	1.00	7000747	
		/300/4/	6556.24
35.40	1.00	7300748	6739.64
30.70	1.00	7300749	7195.45
30.70	1.00	7300750	7343.19
30.70	1.00	7300751	9138.10
30.70	1.00	7300752	8400.97
38.00	1.00	7300753	8244.52
38.00	1.00	7300754	8400.97
0.64	1.00	7301593	364.49
0.65	1.00	74886	225.05
0.06	1.00	74887	56.27
	30.70 30.70 30.70 30.70 30.70 38.00 38.00 0.64	35.40       1.00         30.70       1.00         30.70       1.00         30.70       1.00         30.70       1.00         30.70       1.00         30.70       1.00         30.70       1.00         30.70       1.00         30.70       1.00         30.70       1.00         30.70       1.00         0.64       1.00         0.65       1.00	35.40       1.00       7300748         30.70       1.00       7300749         30.70       1.00       7300750         30.70       1.00       7300751         30.70       1.00       7300752         38.00       1.00       7300753         38.00       1.00       7300754         0.64       1.00       7301593         0.65       1.00       74886



#### **INSTALLATION MADE EASY.**

Behind each of our counter-current systems is a complex interplay of high-quality components. For easy installation, these are combined in modular, pre-assembled kits. The thoughtful design of the raw components ensures easy installation in the pool and simple assembly of the pre-assembled kits.

#### **READY-MADE KIT**

A pre-assembled kit refers to a package that is pre-assembled and contains all the essential components needed for the construction of a counter-current system.

For each counter-current system, the pre-assembled kit includes specific components. These components may include:

- » Raw components
- » Pump
- » Nozzles (including cover)
- » Control module
- » Pipes, fittings, hoses
- » Screws and other accessories for mounting



Ready-to-install kit EUROJET

#### **RAW COMPONENT**

For each counter-current system, we offer an easy-to-install raw component. It serves as the basic framework and precisely connects all other components. It provides stability and enables the "plug-and-play" installation of the pre-assembled kits. The raw component is embedded in concrete for EPS pools or professionally welded into the pool for stainless steel pools – drilling, flanging, and sealing are no longer necessary.



Raw component TRIVA



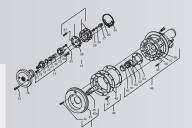
#### NOTE

We recommend planning the installation of a raw component during the construction of a pool. This makes the easy integration of a counter-current system possible even at a later stage.



Note

Use our spare parts service for all models, individual components, and raw components.







#### Jet stream EUROJET

A big performance for a small outlay: the JetStream EUROJET compact system proves it's possible. PVC ball valves, PVC pipes and the control panel – all the components are pre-assembled. It takes minimum effort to install, but gives maximum pleasure. Either 13 or 11 liters per second (there are two versions of JetStream EUROJET), a swivel nozzle, fully adjustable flow and an air bubble bath option. In short: you get a lot for a little.

- Flow: 11 to 13 liters per second
- Swivel nozzle with fully adjustable flow
- Air bubble bath
- On/Off pneumatic air switch
- Salt water resistant up to 3%
- ABS cover

Product	G-kg	VE	Prod.No.	Price €
Wall fitting EUROJET				
Wall fitting EUROJET for PVC Fittings	4.30	1.00	7300757	639.15
Component kit EUROJET				
Component kit EUROJET white, version for PVC fittings with 2,5 KW, 3-phase pump	33.00	1.00	7300758	4080.30
Component kit EUROJET white, version for PVC Fittings with 1,7 KW, 1-phase pump	25.00	1.00	7300759	4711.53
Flange kit EUROJET, DUNA				
Flange kit EUROJET, DUNA for liner and polyester pools	1.00	1.00	7300760	265.79





The DUNA counter-current system is the more powerful EUROJET with a higher-

quality, more compact front panel.

#### Jet stream DUNA

a powerful countercurrent unit for little money, similar to EUROJET, however with more compact and designed front parts. Higher performance with 11 to 18 liters / sec. Pre-assembled. Swivel nozzle. Adjustable flow and an air bubble bath option.

- Flow 11 to 18 liters / sec.
- Pre-assembled
- Nice, modern design
- Best cost/performance ratio

G-kg	VE	Prod.No.	Price €
4.30	1.00	7300761	639.15
31.00	1.00	7300762	4741.24
34.00	1.00	7300763	4679.17
1.00	1.00	7300760	265.79
	4.30 31.00 34.00	4.30     1.00       31.00     1.00       34.00     1.00	4.30         1.00         7300761           31.00         1.00         7300762           34.00         1.00         7300763





Also available in white ABS.

#### Jet stream MIRO 1

JetStream MIRO is not only an impressive sight in the side of the pool, but can also add a sophisticated touch to any swimming pool steps. The performance matches the appearance. With a maximum flow of 18 litres per second, the mighty JetStream MIRO is one of the big boys of the JetStream range. But as with all JetStream counter-current systems, on JetStream MIRO too the force of the jet can be fully regulated with the control knob. With JetStream MIRO you can do far more than just try your strength at swimming. Turn the knob and the thrusting flow from the nozzle changes to a soft shower of bubbles. Use the massage hose and the back jet to loosen up tense muscles and relax exactly those parts of your body which need it most. Or turn the pressure down to half power and stand right in front of the nozzle for a powerful all-over massage. You'll have to hold on tight though, perhaps using the handles you will find among the JetStream accessories.

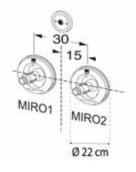
- Flow: 12 to 21 litres per second
- 1-2 swivel nozzles with fully adjustable flow
- Only Stainless steel version available
- Air bubble bath
- Separate suction

Product	G-kg	VE	Prod.No.	Price €
Wall fitting set MIRO 1				
Wall fitting set MIRO 1 ABS containing: 1x wall fitting nozzle, 1x wall fitting switch, 2x wall fitting suction	6.00	1.00	7300764	2538.02
Component kit MIRO 1				
MIRO 1 Component kit stainless steel: nozzle silver + front plate stainless steel - 3.5kW 3-400V pump - 2 suction grills stainless steel - Piezo switch - control box - various fittings and accessories	34.00	1.00	7300766	5874.66
Flange kit MIRO 1				
Flange kit MIRO 1 for liner and polyester pools	1.80	1.00	7300767	651.97

### Jet stream MIRO 2

	G-kg	VE	Prod.No.	Price €
Wall fitting set MIRO 2				
Wall Fitting set MIRO 2 ABS containing: 2x wall fitting nozzle 1x wall fitting switch 2x wall fitting suction	12.00	1.00	7300768	4559.11
Component kit MIRO 2				
Component kit MIRO 2 stainless steel: 2x nozzle silver + 2x front plate stainless steel - 3.5kW 3-400V pump 2,5" - 2 suction grills stainless steel - Piezo switch - control box - various fittings and accessories	41.00	1.00	7300770	7146.01
Flange kit MIRO 2				
Flange kit MIRO 2 for liner and polyester pools	3.00	1.00	7300771	1152.57







## FILTER & FILTER MEDIA

64 Polyester filter (private)
72 PPGF filter (side mount)
73 PPGF filter (top mount)
74 Filter glass, filter sand
80 Pool Technology Sets

### POLYESTER FILTER AND FILTER SYSTEMS

FILTERED TO THE PUREST

#### FILTER, 6-WAY VALVE AND PUMP: THE ESSENTIAL TRIO FOR FILTRATION

The pool filter is the most important component for keeping pool water clean and hygienic. It works in conjunction with a 6-way backwash valve and a pump. The pump draws in the water, which then flows through the 6-way valve into the filter tank, where it is cleaned by a filter medium. We recommend the Nature Works glass filter medium, which is particularly effective, durable, and sustainable.

Our filter systems are standardly equipped with the original manual Praher Plastics<sup>®</sup> backwash valves, but they are also available without a valve. For maximum comfort, safety, and efficiency, the 6-way valves can be upgraded or retrofitted with our automatic Aquastar<sup>®</sup> backwash valves (time- and pressure-controlled) or with the Loxone<sup>®</sup> Aquastar<sup>®</sup> Air pool control system.



#### HOW TO CHOOSE THE RIGHT FILTER?

The calculation of the filter size depends on the nominal flow rate (Q). This is determined by the pool volume (V), including the expansion tank for filter systems with overflow channels, and the circulation time (t). The circulation time (the time for a complete water exchange) depends on the load and location of the pool and should be  $\leq$  4 hours for outdoor pools. The filter size is obtained by dividing the nominal flow rate by the maximum filtration speed of 50 m/h (which

rate by the maximum filtration speed of 50 m/h (which applies to private pool systems).



8 x 4 x 1,5 m = 48 m<sup>3</sup> 48 m<sup>3</sup> / 4 h = 12 m<sup>3</sup>/h

Filter surface A:

12 m³/h / 50 m/h = 0,24 m²

Diameter D:

$$\sqrt{\frac{A[m^2]*4}{\pi}} \sim \sqrt{\frac{0.24 m^2*4}{3.1415}} = 0.55 m$$

#### CONCLUSION

We recommend a filter with a minimum diameter of 600 mm.

### SELECTION GUIDE FOR FILTER DIAMETER DEPENDING ON THE VOLUME FLOW

	FILTER PERFO	RMANCE m³/h	
V=20 m/h	V=30 m/h	V=40 m/	V=50 m/h
2,5	3,8	5,0	6,3
3,9	5,9	7,9	9,8
5,7	8,5	11,3	14,1
5,8	8,8	11,7	14,6
7,7	11,5	15,4	19,2
8,8	13,3	17,7	22,1
9,2	13,8	18,4	23,0
10,1	15,1	20,1	25,1
12,7	19,1	25,4	31,8
13,3	19,9	26,6	33,2
14,2	21,3	28,4	35,4
15,7	23,6	31,4	39,3
	V=20 m/h 2,5 3,9 5,7 5,8 7,7 8,8 9,2 10,1 12,7 13,3 14,2	V=20 m/h         V=30 m/h           2,5         3,8           3,9         5,9           5,7         8,5           5,8         8,8           7,7         11,5           8,8         13,3           9,2         13,8           10,1         15,1           12,7         19,1           13,3         19,9           14,2         21,3	2,5         3,8         5,0           3,9         5,9         7,9           5,7         8,5         11,3           5,8         8,8         11,7           7,7         11,5         15,4           8,8         13,3         17,7           9,2         13,8         18,4           10,1         15,1         20,1           12,7         19,1         25,4           13,3         19,9         26,6           14,2         21,3         28,4

Source: ÖVS recommendations



#### NOTE

The	lower	the	filtrati	on	speed,
	better				
and	additio	nally,	energy	is	saved.

When installing pool technology in the basement, it is essential to ensure proper ventilation and a correctly sized drain. Additionally, easy access to all pool technology components should be provided.

#### COMPARISON TABLE FILTER CHARACTERISTICS



### Fully Automatic Filter Control with AQUASTAR®

Peraqua filters are typically supplied with a manual Praher 6-way valve. Upon request, Peraqua can also mount the Aquastar drive on the valve. When ordering in our online shop, select a filter with a manual valve and a matching Aquastar<sup>®</sup> drive. Please indicate your installation preference in the comments section when placing the order.





#### THE RIGHT FILTER MATERIAL

For our polyester filters, we recommend the Nature Works glass filter medium, made from the purest flat glass. It filters even the smallest impurities and ensures the highest hygiene levels.

Additionally, you need up to 20% less Nature Works filter material compared to traditional filter sand.

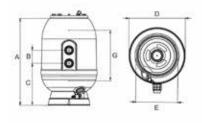
Nature Works glass filter medium is detailed in the Filter Glass, Filter Sand section.







- » Ø 390 mm Black filter lid
- » 2 bar operating pressure
- » Drainage directly under valve connections
- » **DIN EN 16713**



#### **Polyester filter BREGENZ 3**

Side mount filter container made of high-quality glass fiber reinforced plastic. With large opening at the top and drainage under the valve connections. Handmade to ensure maximum chemical and mechanical resistance. Large black lid (d390 mm). The built-in parts are made of PP, ABS and PVC. All installed screws are made of high-strength, corrosion-resistant INOX (stainless steel), nuts are made of nickel-plated brass.

#### PRODUCT DETAILS

- Including original Praher 6-way valve, 1½" or 2", black
- DIN EN 16713 compliant - Large black lid (d390 mm)
- Supplied with vent valve and pressure gauge (scale up to 4 bar)
- Water drain below the valve connections
- Max. operating pressure: 2 bar
- 2.5 bar available on request
- Test pressure 2.6 bar
- Ozone-resistant inner coating
- Side mount
- Filter arm slots of 0.25 mm
- Filter container in RAL7024 graphite gray
- 5-year guarantee on filter container tightness

#### **TECHNISCHE DETAILS**

	d500	d610	d610	d765	d920
Connection	1 1⁄2"	1 ½"	2"	2"	2"
Ø D innen mm	480	590	590	740	900
Ø D outside mm	510	620	620	770	920
Height A mm	630	735	735	805	930
Bmm	125	125	140	140	140
C mm	305	305	275	240	250
Filter area m²	0,18	0,27	0,27	0,43	0,64
Flow rate m³/h	9,1	13,7	15,8	21,5	31,9
Filter bed height mm	400	400	400	400	400
Nature Works kg	84	147	147	210	315
Sand kg	100	175	175	250	375

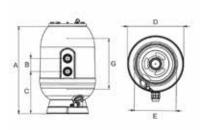
Product	G-kg	VE	Prod.No.	Price €
Polyester filter BREGENZ 3 incl. 6-way valve				
Polyester filter BREGENZ 3 d500 RAL7024 graphite grey, with black flange cover, incl. original Praher 6-way valve 1 $\%^\prime$ , black	20.00	1.00	7301680	1112.80
Polyester filter BREGENZ 3 d610 1 $\%^{\prime\prime}$ RAL7024 graphite grey, with black flange cover, incl. original Praher 6-way valve 1 $\%^{\prime\prime}$ , black	27.00	1.00	7301681	1248.00
Polyester filter BREGENZ 3 d610, 2" RAL7024 graphite grey, with black flange cover, incl. original Praher 6-way valve 2", black	52.00	1.00	7301682	1331.20
Polyester filter BREGENZ 3 d765 RAL7024 graphite grey, with black flange cover, incl. original Praher 6-way valve $2^{\prime\prime}$ , black	33.00	1.00	7301683	1617.20
Polyester filter BREGENZ 3 d920 RAL7024 graphite grey, with black flange cover, incl. original Praher 6-way valve $2''$ , black	53.00	1.00	7301684	1944.80
Polyester filter BREGENZ 3 without 6-way valve				
Polyester filter BREGENZ 3 d500 RAL7024 graphite grey, with black flange cover	19.00	1.00	7301675	993.20
Polyester filter BREGENZ 3 d610, 1 $\%^{\prime\prime}$ RAL7024 graphite grey, with black flange cover	26.00	1.00	7301676	1112.80
Polyester filter BREGENZ 3 d610, 2" RAL7024 graphite grey, with black flange cover	26.00	1.00	7301677	1196.00
Polyester filter BREGENZ 3 d765 RAL7024 graphite grey, with black flange cover	31.00	1.00	7301678	1445.60
Polyester filter $\ensuremath{BREGENZ}$ 3 d920 RAL7024 graphite grey, with black flange cover	51.00	1.00	7301679	1768.00





» Ø 390 mm Transparent filter lid

 » 2 bar operating pressure Drainage directly under valve connections DIN EN 16713



#### **Polyester filter BREGENZ 3 PRO**

Side mount filter container made of high-quality glass fiber reinforced plastic. With large opening at the top and drainage under the valve connections. Handmade to ensure maximum chemical and mechanical resistance. Large transparent filter cover (d390 mm). The built-in parts are made of PP, ABS and PVC. All installed screws are made of high-strength, corrosion-resistant INOX (stainless steel), nuts are made of nickel-plated brass.

#### PRODUCT DETAILS

- Including original Praher 6-way valve, 1½" or 2", black
- DIN EN 16713 compliant
- Large transparent lid (d390 mm)
- Supplied with vent valve and pressure gauge (scale up to 4 bar)
- Water drain below the valve connections - Max. operating pressure: 2 bar
- 2.5 bar available on request
- Test pressure 2.6 bar
- Ozone-resistant inner coating
- Side mount
- Filter arm slots of 0.25 mm
- Filter container in RAL7024 graphite gray
- 5-year guarantee on filter container tightness

#### **TECHNISCHE DETAILS**

	d500	d610	d610	d765	d920
Connection	1 ½"	1 ½"	2"	2"	2"
Ø D innen mm	480	590	590	740	900
Ø D outside mm	510	620	620	770	920
Height A mm	630	735	735	805	930
Bmm	125	125	140	140	140
C mm	305	305	275	240	250
Filter area m²	0,18	0,27	0,27	0,43	0,64
Flow rate m³/h	9,1	13,7	15,8	21,5	31,9
Filter bed height mm	400	400	400	400	400
Nature Works kg	84	147	147	210	315
Sand kg	100	175	175	250	375

Product	G-kg	VE	Prod.No.	Price €
Polyester Filter BREGENZ 3 PRO incl. 6-way valve				
Polyester filter BREGENZ 3 PRO, d500, incl. original Praher 6-way valve 1 $\%^{\prime\prime}$ in black, transparent flange cover, RAL7024 graphite grey	22.00	1.00	7301357	1419.60
Polyester filter BREGENZ 3 PRO, d610, incl. original Praher 6-way valve 1 $\%''$ in black, transparent flange cover, RAL7024 graphite grey	29.00	1.00	7301358	1545.44
Polyester filter BREGENZ 3 PRO, d610, incl. original Praher 6-way valve 2" in black, transparent flange cover, RAL7024 graphite grey	31.00	1.00	7301359	1712.88
Polyester filter BREGENZ 3 PRO, d765, incl. original Praher 6-way valve 2" in black, transparent flange cover, RAL7024 graphite grey	35.00	1.00	7301360	1979.12
Polyester filter BREGENZ 3 PRO, d920, incl. original Praher 6-way valve 2" in black, transparent flange cover, RAL7024 graphite grey	51.00	1.00	7301361	2314.00
Polyester filter BREGENZ 3 PRO without 6-way valve				
Polyester filter BREGENZ 3 PRO, d500, 1 $\%^{\prime\prime}$ connection, transparent flange cover, RAL7024 graphite grey	18.00	1.00	7301352	1276.08
Polyester filter BREGENZ 3 PRO, d610, 1 $\%^{\prime\prime}$ connection, transparent flange cover, RAL7024 graphite grey	25.00	1.00	7301353	1401.92
Polyester filter BREGENZ 3 PRO, d610, 2" connection, transparent flange cover, RAL7024 graphite grey	25.00	1.00	7301354	1479.92
Polyester filter BREGENZ 3 PRO, d765, 2" connection, transparent flange cover, RAL7024 graphite grey	30.00	1.00	7301355	1746.16
Polyester filter BREGENZ 3 PRO, d920, 2" connection, transparent flange cover, RAL7024 graphite grey	50.00	1.00	7301356	2082.08



#### FULLY AUTOMATIC FILTER CON-TROL WITH AQUASTAR®

Peraqua filters are supplied as standard with a manual Praher 6-way valve. Upon request, we can also mount the Aquastar drive on the valve at Peraqua. When ordering in our online shop, you can select a filter with a manual valve and a matching Aquastar<sup>®</sup> drive. Please specify your installation request in the remarks section of the order.



Filter & filter media | Polyester filter (private) 65



Including Ocean® filter pump » **Series O** 

#### **Pre-assembled on PE filter** » pallet

Including Praher 6-way valve »

#### **Compact filter unit BREGENZ 3 PRO side mount**

RAL7024 graphite grey, with original Praher 6-way SM valve, inco. glued piping set + 3 pcs of Ocean® screw connections, transparent flange lid, pressure gauge, with Ocean® filter pump series O, mounted on PE filter pallet, 5-year guarantee on filter container tightness

Product	G-kg	VE	Prod.No.	Price €
Compact filter unit BREGENZ 3 PRO d500, graphite grey RAL7024, d400 filter lid transparent. Praher 1 1/2" 6 way backwash valve set, Ocean filter pump O50 11,1 m3/h, 230V	0.00	1.00	7301394	2167.84
Compact filter unit BREGENZ 3 PRO d610 graphite grey RAL7024, d400 filter lid transparent. Praher 1 1/2" 6 way backwash valve set, Ocean filter pump 075 15,3 m3/h, 230V	0.00	1.00	7301395	2298.15
Compact filter unit BREGENZ 3 PRO d610 graphite grey RAL7024, d400 filter lid transparent. Praher 2" 6 way backwash valve set, Ocean filter pump O75 13,5 m3/h, 230V	0.00	1.00	7301396	2404.76



### FULLY AUTOMATIC FILTER CON-

TROL WITH AQUASTAR® Peraqua filters are supplied as standard with a manual Praher 6-way valve. Upon request, we can also mount the Aquastar drive on the valve at Peraqua. When ordering in our online shop, you can select a filter with a manual valve and a matching Aquastar® drive. Please specify your installation request in the remarks section of the order.









- » Ø 300 mm filter lid
- » 2 bar operating pressure
- » Drainage directly under valve connections
- » **DIN EN 16713**

#### Polyester filter LINZ, side mount

Laminated side mount filter for private pools made of glass fibre reinforced plastic. Handmade to ensure maximum chemical and mechanical resistance. The built-in parts are made of PP, ABS and PVC. All screws used are made of high-strength, corrosion-resistant INOX (stainless steel), nuts are made of nickel-plated brass. Supplied with vent valve and pressure gauge. Black flange cover (d300 mm).

#### PRODUCT DETAILS

- Including original Praher 6-way valve, 1½" or 2", black DIN EN 16713 compliant
- Black flange cover (d300 mm)
- Supplied with vent valve and pressure gauge (scale up to 4 bar)
- Max. operating pressure: 2 bar
- 2.5 bar available on request
- Side mount
- Laminated
- Filter container in RAL5011 steel blue
- 5-year guarantee on filter container tightness

#### **TECHNISCHE DETAILS**

	d500	d610	d610	d765	d920
Connection	1 ½"	1 ½"	2"	2"	2"
Ø D innen mm	480	590	640	740	900
Ø D outside mm	510	620	620	770	920
Height mm	630	735	735	760	940
Filter area m²	0,18	0,27	0,27	0,43	0,64
Flow rate m³/h	9,1	13,7	13,7	21,5	31,9
Filter bed height mm	400	400	400	400	400
Nature Works kg	84	147	147	210	315
Sand kg	100	175	175	250	375

Product	G-kg	VE	Prod.No.	Price €
Polyester filter LINZ incl. 6-way valve				
Polyester filter LINZ laminated, d500 side mount, RAL5011 steelblue, with black flange cover, incl. manometer, piping kit and original Praher SM 1 ½" 6 way backwash valve manual	20.02	1.00	7301603	1016.08
Polyester filter LINZ laminated, d610 side mount, RAL5011 steelblue, with black flange cover, incl. manometer, piping kit and original Praher SM 1 $\%$ 6 way backwash valve manual	27.02	1.00	7301604	1183.52
Polyester filter LINZ laminated, d610 2" side mount, RAL5011 steel- blue, with black flange cover, incl. manometer, piping kit and original Praher SM 2" 6 way backwash valve manual	28.41	1.00	7301605	1349.92
Polyester filter LINZ laminated, d765 side mount, RAL5011 steelblue, with black flange cover, incl. manometer, piping kit and original Praher SM 2" 6 way backwash valve manual	33.41	1.00	7301606	1625.52
Polyester filter LINZ laminated, d920 side mount, RAL5011 steelblue, with black flange cover, incl. manometer, piping kit and original Praher SM 2" 6 way backwash valve manual	53.41	1.00	7301607	1934.40
Polyester filter LINZ without 6-way valve				
Polyester filter LINZ laminated, d500 side mount, RAL5011 steelblue, with black flange cover, incl. manometer	18.00	1.00	7301594	872.56
Polyester filter LINZ laminated, d610 side mount, RAL5011 steelblue, with black flange cover, incl. manometer	25.00	1.00	7301595	1040.00
Polyester filter LINZ laminated, d610 2" side mount, RAL5011 steel- blue, with black flange cover, incl. manometer	25.00	1.00	7301596	1118.00
Polyester filter LINZ laminated, d765 side mount, RAL5011 steelblue, with black flange cover, incl. manometer	30.00	1.00	7301597	1393.60
Polyester filter LINZ laminated, d920 side mount, RAL5011 steelblue, with black flange cover, incl. manometer	50.00	1.00	7301598	1705.60



- » Including Ocean® filter pump Series O
- » Pre-assembled on PE filter pallet

» Including Praher 6-way valve

#### Compact filter unit LINZ side mount

RAL5011 steel blue, with original Praher 1 1/2" 6-way backwash valve set, Ocean® filter pump, installed on PE filter pallet

Product	G-kg	VE	Prod.No.	Price €
Compact filter unit LINZ d500 - 1 1/2", steel blue RAL5011, d210 filter lid black, Praher 1½" 6-way backwash valve set, filter pump Ocean® 050 2", 11,1 m³/h at 10m, P1 0,57 kW, P2 0,37 kW 230V	0.00	1.00	7301720	2160.08
Compact filter unit LINZ d610 - 1 1/2", steel blue RAL5011, d210 filter lid black, Praher 1½" 6-way backwash valve set, filter pump Ocean® O75 2", 13,5 m³/h at 10m, P1 0,80 kW, P2 0,55 kW 230V	0.00	1.00	7301721	2371.20
Compact filter unit LINZ d610 - 2", steel blue RAL5011, d210 filter lid black, Praher 1½" 6-way backwash valve set, filter pump Ocean® O75 2", 13,5 m <sup>3</sup> /h at 10m, P1 0,80 kW, P2 0,55 kW 230V	0.00	1.00	7301722	2550.08



### FULLY AUTOMATIC FILTER CONTROL WITH AQUASTAR®

Peraqua filters are supplied as standard with a manual Praher 6-way valve. Upon request, we can also mount the Aquastar drive on the valve at Peraqua. When ordering in our online shop, you can select a filter with a manual valve and a matching Aquastar<sup>®</sup> drive. Please specify your installation request in the remarks section of the order.

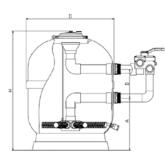








- » Ø 205 mm filter cover
- » 2 bar operating pressure



#### Polyester filter VIENNA 1, side mount, incl. 6-way valve

Side mount filter container made of reinforced, UV-resistant fibreglass. Suitable for private pools. The swivelling filter arm for easier filling of the filter with filter medium, the integrated ventilation to prevent air bubbles in the filter and the easy-to-open, transparent filter lid (d205 mm) ensure particularly easy maintenance.

#### PRODUCT DETAILS

- Including original Praher 6-way valve, 1½" or 2"
- Filter for private pools
- Including pressure gauge
- Transparent lid (d205 mm), easy to open
- Swivelling filter arm
- Integrated ventilation
- Max. operating pressure: 2 bar
- Reinforced fibreglass filter container
- UV-resistant
- Laminated - Side mount
- Filter container in RAL5005 blue- 3 year guarantee on filter container tightness

#### **TECHNISCHE DETAILS**

	d500	d600	d750	d900
Connection	1 ½"	1 1⁄2″	2"	2"
Ø D outside mm	500	600	750	900
Height H mm	805	800	985	1050
A mm	290	330	325	400
Bmm	125	125	230	230
Filter area m²	0,19	0,30	0,44	0,64
Flow rate m³/h	10	14	22	32
Filter bed height mm	415	455	555	360
Nature Works kg	75	120	220	250
Sand kg	75	125	250	275

Product	G-kg	VE	Prod.No.	Price €
Polyester filter VIENNA 1				
Polyester filter VIENNA I laminated side mount, d500 - 20", blue RAL5005 incl. manometer, piping set and original Praher 1 $\%$ 6 way valve manual		1.00	74550	618.80
Polyester filter VIENNA I laminated side mount, d600 - 24", blue RAL5005 incl. manometer, piping set and original Praher 1 ½" 6 way valve manual		1.00	74551	705.12
Polyester filter VIENNA I laminated side mount, d750 - 30", blue RAL5005 incl. manometer, piping set and original Praher 2" 6 way valve manual		1.00	74552	1014.00
Polyester filter VIENNA I laminated side mount, d900 - 36", blue RAL5005 incl. manometer, piping set and original Praher 2" 6 way valve manual		1.00	74553	1213.68
AQUASTAR EASY II, prices without filter				
AquaStar Easyll for V6 ND 1 1/2" + 2" 100-240 VAC	3.39	1.00	131308A	1420.79
AquaStar Easyll with pressure sensor for V6 ND 1 1/2" + 2" 100-240 VAC	3.44	1.00	131318A	1634.53
AQUASTAR CONTROL, prices without filter				
AquaStar Control with pressure sensor for V6 ND 1 1/2" + 2" 24V AC/DC		0.00	131492	2452.68
AquaStar Control with pressure sensor for V6 ND 1 1/2" + 2" 100-240 VAC	3.82	0.00	131493	2662.62



»	<b>Including Ocean® Filter Pump</b>
	Series O

**Pre-assembled on PE filter** » pallet

» Including Praher 6-way valve

#### Compact filter system VIENNA 1, side mount

Compact filter system consisting of polyester filter RAL5005 blue, self-priming filter pump and 6-way backwash valve. Completely piped and mounted on a noise-reducing PE filter pallet. Suitable for private pools. Neutral individual packaging

#### SCOPE OF DELIVERY

- Polyester filter Vienna 1
- d500: Ocean filter pump Series O50, 0.57 kW | d600: Ocean filter pump Series O75, 0.80 kW Original Praher 6-way valve, 1½", black
- Valve pipework set, glued
- Ocean screw connections 3 pcs.
- Pre-assembled on PE filter pallet

Product	G-kg	VE	Prod.No.	Price €
Compact filter unit VIENNA I d500 laminated, blue, side mount, incl. original Praher 6-way valve 1 1/2", incl. Ocean filter pump O50 2", 0,57 kW, 11,1 m3/h at 10m	36.80	1.00	75039	1844.90
Compact filter unit VIENNA I d600 laminated, blue, incl. original Praher 6 way valve 1 1/2", incl. Ocean filter pump O75 2", 0,80 kW, 13,5 m3/h at 10m	43.30	1.00	75040	2032.16





» 2.5 bar maximum operating pressure

#### Polyester filter VIENNA 2, top mount, incl. 6-way valve

Top mount filter container made of reinforced, UV-resistant fibreglass. Suitable for private pools. The drainage set for easier emptying of the filter and the integrated ventilation to prevent air bubbles in the filter ensure easy maintenance.

#### DESCRIPTION

- Including original Praher 6-way valve, 1½" or 2"
- Filter for private pools
- Including pressure gauge
   Filter opening (d175 mm)
- Drainage set
- Integrated ventilation
- Max. operating pressure: 2 bar
- Reinforced fibreglass filter container
- UV-resistant
- Laminated
- Top mount
- Filter container in RAL5015 blue
- 2 year guarantee on filter container tightness

#### **TECHNISCHE DETAILS**

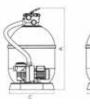
	d400	d510	d620
Connection	1 1⁄2″	1 1⁄2"	1 1⁄2″
Ø B outside mm	400	510	620
Height A mm	795	1020	1090
Cmm	535	760	830
Filter area m²	0,13	0,20	0,30
Flow rate m³/h	6,5	10,2	15,1
Filter bed height mm	375	475	525
Nature Works kg	60	100	140
Sand kg	70	100	150

Product	G-kg	VE	Prod.No.	Price €
Polyester filter VIENNA 2, laminated, top mount, d400, blue RAL5015, incl. manometer, clamping ring and original Praher TM 1 $1/2^{\prime\prime}$ 6 way backwash valve manual	12.00	1.00	7300506	585.69
Polyester filter VIENNA 2, laminated, top mount, d510, blue RAL5015, incl. manometer, clamping ring and original Praher TM 1 1/2" 6 way backwash valve manual	18.00	1.00	7300507	599.22
Polyester filter VIENNA 2, laminated, top mount, d620, blue RAL5015, incl. manometer, clamping ring and original Praher TM 1 $1/2^{\prime\prime}$ 6 way backwash valve manual	24.00	1.00	7300508	675.79
Polyester filter VIENNA 2, laminated, top mount, d750, blue RAL5015, incl. manometer, clamping ring and original Praher TM 2" 6 way backwash valve manual	38.11	1.00	7301811	1263.28
Polyester filter VIENNA 2, laminated, top mount, d900, blue RAL5015, incl. manometer, clamping ring and original Praher TM 2" 6 way backwash valve manual	47.11	1.00	7301812	1553.44



» Includes Smart Filter Pump Series M

#### » Includes PE Filter Palette





Compact filter system VIENNA 2, top mount

Compact filter system consisting of polyester filter (RAL5015 blue), self-priming filter pump and 6-way backwash valve. Completely piped and mounted on a noise-reducing PE filter pallet. Suitable for private pools. Neutral individual packaging.

#### **TECHNISCHE DETAILS**

	7301299	7	7301300	73	01301
Ø Filter mm	400		510	1	620
A mm	845		1070	1	140
Bmm	1000		1000	1000	
Cmm	600		600		600
Dmm	526		526	526	
Product		G-kg	VE	Prod.No.	Price €
Compact filter set VIENNA II laminated d400, blue RAL5015, top mount incl. original Praher 6 way backwash valve 1 ½", Smart filter pump M33 8m3/h 230V, plug-in ready		40.00	1.00	7301299	1400.10

50.00 1.00

55.00 1.00

Compact filter set VIENNA II laminated d510, blue RAL5015, top mount incl. original Praher 6 way backwash valve 1 ½", Smart filter pump M50 10m³/h 230V, plug-in ready

Compact filter set VIENNA II laminated d620, blue RAL5015, top mount incl. original Praher 6 way backwash valve 1 ½", Smart filter pump M75 12,5m3/h 230V, plug-in ready 7301300

7301301

1531.94

1695.18



» 1.8 bar operating pressure



#### **PPGF filter GRAZ 2-parts**

with original Praher 6 way valve (manual), 1,8bar operation pressure. 2 years warranty, 2 parts with chrome steel clamping ring, incl. piping set, manometer and union with PVC insert PVC  $\emptyset$  50 mm

#### TECHNISCHE DETAILS

	78612		78613	7	8614
Ø Filter D mm	400		500		600
Hmm	750		810	1	020
Anschlüsse	2 ¼" AG		2 ¼" AG	2	1⁄4" AG
Flow raterate bei 30 m³/h	3,6		6		8,4
Flow raterate bei 50 m³/h	6		10		14
Flow raterate bei 60 m³/h	7,2		12	-	16,8
Filtration area m <sup>2</sup>	0,12		0,20	(	),28
Nature Works kg	50		70		120
Sand kg	50		75		125
Max. operating pressure bar	1,8		1,8		1,8
Net weight kg	10,5		13,8	-	19,8
Product		G-kg	VE	Prod.No.	Price €
PPGF filter GRAZ 2-parts					
Filter GRAZ d400 blue, side mount with origina valve manual	l Praher 1 1/2″ 6 way	12.50	1.00	78612	690.81
Filter GRAZ d500 blue, side mount with origina valve manual	l Praher 1 1/2" 6 way	15.80	1.00	78613	743.39
Filter GRAZ d600, blue, side mount with origina valve manual	al Praher 1 1/2" 6 way	21.80	1.00	78614	863.53
AQUASTAR EASY II, prices without filter					
AquaStar Easyll for V6 ND 1 1/2" + 2" 100-240	) VAC	3.39	1.00	131308A	1420.79
AquaStar EasyII with pressure sensor for V6 NE VAC	0 1 1/2" + 2" 100-240	3.44	1.00	131318A	1634.53
AQUASTAR CONTROL, prices without filter					
AquaStar Control with pressure sensor for V6 ND 1 1/2" + 2" 24V AC/DC		3.70	0.00	131492	2452.68
AquaStar Control with pressure sensor for V6 ND 1 1/2" + 2" 100- 240 VAC		3.82	0.00	131493	2662.62
FILTER PLATE					
Filter pallet GRAZ d500		3.48	1.00	78616	88.88



» Including Smart Filter Pump Series M

» Pre-assembled on PE filter pallet

#### **Compact filter unit GRAZ**

with original Praher 6 way valve (manual), + 3 Ocean<sup>®</sup> unions d50/1½"AG. 1,8bar operation pressure. 2 years warranty, 2 parts with chrome clamp ring, incl. piping set, manometer and unions with PVC insert, PVC Ø 50 mm, with Smart filter pump series M, installed on PE filter pallet

Product	G-kg	VE	Prod.No.	Price €
Compact filter unit GRAZ d400 2-parts, blue, incl. original Praher 6 way valve 1 1/2", incl. pump 0,16 kW(0,25 HP) 6 m3/H	35.00	1.00	74429	1490.22
Compact filter unit GRAZ d500 2-parts, blue, incl. original Praher 6 way valve1 1/2", incl.pump 0,33 kW(0,50 HP) 10 m3/H	40.00	1.00	74430	1590.20
Compact filter unit GRAZ d600 2-parts, blue, incl. original Praher 6 way valve 1 1/2", incl. pump 0,55 kW(0,75 HP) 12 m3/H	45.00	1.00	74431	1858.88



» Made in Austria

- » Includes Smart Filter Pump Series M
- » Includes PE Filter Pallet

» Top quality at the best price

#### **Compact filter set ATTERSEE - PREMIUM**

with original Praher 6-way Top Mount valve installed on PPGFK plate, Smart pump, ready for plug-in, filter tank blown PE, 3x Ocean® adapter unions d50

#### TECHNISCHE DETAILS

	d300	d400	d500
Connection	1 1⁄2"	1 1⁄2"	1 1⁄2″
Ø D outside mm	300	400	500
Height mm	650	790	920
Filter bed height mm	270	365	450
Nature Works kg	25	50	70
Sand kg	25	50	75
Product		G-kg VE	Prod.No. Price€

Compact filter system ATTERSEE d300 black, incl. original Praher 6-way valve 1 1/2", incl.pump 0,16 kW (0,25 HP) 6 m3/H	12.98	1.00	7300601	886.05
Compact filter set ATTERSEE d400 black, incl. original Praher 6-way valve 1 1/2", incl. pump 0,16 kW (0,25 HP) 6 m3/H	13.26	1.00	74432	953.63
Compact filter system ATTERSEE d500 black, incl. original Praher 6-way valve 1 1/2", incl. pump 0,33 kW (0,50 HP) 10 m3/H	15.14	1.00	74433	1407.40

#### Filter glass, filter sand





#### **NSF61** Certification

Nature Works is the only NSF61 certified glass filter medium on the market worldwide. The NSF/ ANSI 61 certification indicates that a product is safe for installation in a public drinking water system and has been verified by a third party.





» Filtration down to 1 µm

» Only a single grain size is

required

» < 99.64% filtration efficiency





#### THINK BIG

The Nature Works glass filter medium is now also available in Big Bags. More details can be found in the Public Pool Construction chapter.



#### **Nature Works Glass Filter Media**

Crystal-clear pool water with the highest hygienic factor through glass filter medium made from the purest, white flat glass with regard to the environment.

- The world's only glass filter medium with NSF61 certification
- maximum performance for crystal clear, hygienic pool water
- resistant against biofilm and bacteria
- the purity of Nature Works is greater than 99.999%
- Filtration efficiency up to 99,64%, filtration up to 1 µm
- · less backwashing due to anti-compaction technology
- maximum lifetime
- · economical use of pool chemistry
- recycled flat glass
- granular size 0.6 1.2 mm or 1.5 2.5 mm available
- Certifications: NSF, Bureau Veritas ES026775-A-CPI, ES026775-CPI, IFTS-testing, accredited Absence of Biofilm

#### THIS IS WHAT MAKES NATURE WORKS SO UNIQUE AND SUSTAINABLE

Anti-compaction technology prevents compaction and micro-channel formation in the filter material. The result is low pressure loss and optimal backwashing efficiency. The pressure loss before and after filtering is minimal and has been proven to be 50-60% lower compared to other glass filter media. Nature Works® generally recommends monthly backwashing at a comparatively low filter speed of only 30m/h. Water savings of more than 75% are quite realistic with Nature Works® Hi-Tech glass filter medium. This also reduces chemical consumption.

Nature Works guarantees an almost infinite lifespan and reusability. Nature Works uses environmentally friendly, recyclable packaging made from paper with FSC certification.

Product	G-kg	VE	Prod.No.	Price €
Nature Works Hi-Tech glass filter media, granular size 0.6 - 1.2 mm, packing unit =20 kg bag	20.00	48.00	7300372	42.75
Smart Nature Works Hi-Tech glass filter media, granular size 1,5 - 2,5 mm, packing unit = 20 kg bag	20.00	48.00	7301517	42.75







#### Smart filter sand

washed, crushed und fire-dried, acc. to EN 12904, 25 kg

Product	G-kg	VE	Prod.No.	Price €
Filter sand 0,7 - 1,25 mm DIN 19623 25 kg	25.00	48.00	78086	13.90
Filter sand 1,0 - 2,0 mm DIN 19623 25 kg	25.00	48.00	78087	13.90
Filter sand 0,4 - 0,8 mm DIN 19623 25 kg	25.00	48.00	78339	13.90
Filter sand 2,0 - 3,0 mm DIN 19623 25 kg	25.00	48.00	78340	13.90
Filter sand 3,0 - 5,0 mm DIN 19623 25 kg	25.00	40.00	78341	13.90
Filter sand 5.0 - 7.0 mm DIN 19623 25 kg	25.00	40.00	78342	13.90

### INTELLIGENT POOL MANAGEMENT

THE KEY TO SUSTAINABLE POOL OPERATION

#### **IQ - POOLED INTELLIGENCE**

Peraqua® sees the key to energy-efficient and resource-saving pool operation in the intelligent interaction of pool technology and its functions. Only in this way can consistently excellent water quality and hygienically clean pools be achieved, which in turn forms the foundation for sustainable pool operation.

Intelligent pool management is a way to optimize pool operations. By introducing automation and utilizing modern smart home technologies, pool owners can operate their pools more efficiently, sustainably, and cost-effectively.



# HIGHESS & SUSTAINABILIT

#### **AUTOMATIC CONTROL**

In intelligent pool management, the operational parameters are automatically controlled, monitored, and optimized in real time. This automation of pool technology brings a number of significant benefits:

#### WATER TREATMENT

- » Water disinfection based on demand and situation
- Stable water quality thanks to automatic real-time data measurement Efficient use of pool chemicals is beneficial for the en-

vironment and reduces operational costs

#### HEATING CONTROL

- » Automatic adjustment of water temperature based on the set target temperature
- Activation of the heat pump depending on available photovoltaic surplus

**BACKWASH & FILTER PUMP CONTROL** 

- Deptimization of backwashing processes based on need and situation, as well as individual flow rates and filter times
- Reduction of backwashing cycles and optimization of water consumption
- Feedback on the actual power consumption of the filter pump

#### LEVEL CONTROL

- » Automatic level regulation = Dry-run protection
- » Automatic backwash triggers = Overflow protection



#### INTELLIGENTLY NETWORKED POOL TECHNOLOGY ON A COMPACT "BASE"

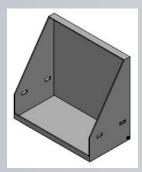


#### INTELLIGENTLY NETWORKED POOL TECHNOLOGY ON A COMPACT "BASE"

With the iQ BASES, we have created a pool technology complete set system based on the Plug & Play concept. All the pool technology components of the sets are pre-assembled and piped by our experienced technicians in a robust and transportable technical box – the BASE. This eliminates many individual assembly steps, saving time and costs on-site. The delivery is made as a connection-ready package.

#### THE ,BASE' - TECHNICAL DETAILS

- » Dimensions: 1700 x 1600 x 800 mm
- » Made of polypropylene
- » Graphite gray
- » Designed for secure transport and easy placement



Practical attachment points (handles on the sides, central 3-point attachment possible).



Leaking operating fluids can be drained via the drain cock.



Pre-assambled bypass for heat pumps.



Individual positioning of additional devices possible.



Respresentative image



#### » Smart Home Integration

- » App-compatible
- » Maximum energy savings through intelligent pool management via the app
- » Various water treatments (such as chlorine, salt) available
- » Includes software package
- » Available upon request for overflow pools



The close collaboration with Loxone® in the development of the Aquastar® Air enables seamless and wireless integration of Smart Pool into the Smart Home system.



#### FURTHER INFORMATION

- » www.iqnnect.net
- » iQnnect Folder:
- shop.peraqua.com/Downloads

LOXONE LIBRARY

» library.loxone.com/?s=peraqua

Using the open Loxone software system, we have developed our own templates for the interfaces of the iQnnect components. These are freely available through the Loxone Library.

#### **iQnnect BASE Complete - Smart Pool**

The iQnnect BASE-Complete is a complete pool technology set for skimmer pools that is easy to install. The filter, filter pump, Aquastar Air® and water treatment system are piped and pre-assembled on a BASE (excluding electrics). The optional integration of a heat pump, underwater spotlights and level control was also taken into account.

The pool control of the iQnnect BASE is based on the Loxone® Smart Home System. The Aquastar® Air with integrated Loxone® Air technology and a Loxone® Miniserver serve as the control center.

The intelligent networking of the iQnnect components enables the entire pool technology to be monitored and controlled via ONE SINGLE app: Temperature, water level, pH and redox values can be controlled in real time via the user-friendly and clear structured interface of the Loxone® app. Notifications in the event of deviating values and error messages are sent regardless of location and time.

A sample config developed specifically for the iQnnect makes it easy to configure the entire system in Loxone® Config. The software is continuously updated and optimized by Peraqua®.

#### ADVANTAGES OF SMART POOL AND IQNNECT

#### SUSTAINABLE POOL MANAGEMENT

- Stable water quality thanks to automatic measurement of real-time data
- Reduction of backwashing processes and optimization of the water consumption
- Water disinfection according to requirements and situations

- Optimization of backwashing processes (according to requirements and situations, individual flow speeds and filter times)

- Automatic backwash releases = overflow protection
- Automatic level control = dry running protection
- Automatic adjustment of the water temperature above the set target temperature
- Sustainable energy management. When integrating a photovoltaic system, the current peaks can be automatically used for pool technology (e.g. pool heating, filter processes).

#### SAFETY

Notifications for deviating values and error messages are sent via the app, regardless of location and time.

#### REMOTE MAINTENANCE

The pool expert can monitor and control the water values and the functions of the customer pools via the Loxone® app. This allows them to intervene remotely and quickly. This not only saves travel time and service costs, but also offers pool owners an additional service.

#### DETAILS

- Pool size: up to 60 m<sup>3</sup>

- Variants: Chlorine dosing system, Salt electrolysis system
- Dimensions: 1700 x 800 x 1600 mm

#### COMPONENTS

- Bregenz 3 d640 including black 2" Praher Plastics backwash valve, drain and drain tap with hose connection

- Connection
- Aquastar® Air pool control 2"
- Ocean® filter pump Inver iQ 300 speed controlled 30m³/h at 10m, P1 2,53 kW, P2 2,2 kW 230V

- Water treatment system: iQntrol dosing system DOS-Complete CLF or iQntrol salt electrolysis system SALT-Complete 25g Cl/h

- Pre-assembled Praher Plastics PVC fittings, pipes, fittings (d63)
- BASE platform: made of polypropylene, for save transport and easy placement
- Nature Works glass filter media
- iQnnect software package

#### OPTIONAL ON REQUEST

- Control cabinet: Loxone® Mini-Go, extensions (AO, Modbus, DMX)
- Heat pump (bypass pre-assembled, programming included in software module)

- RGBW underwater lights

- Automatic fresh water replenishment via solenoid valve with float switch / pressure sensor

#### PRODUCT NOTES

We recommend working with a qualified Loxone® partner for implementation.

Loxone® Mini-Go Server not included.

The iQnnect BASE is also available as a variant for overflow basins on request.

Product	G-kg	VE	Prod.No.	Price €
iQnnect BASE Salt-Complete with salt electrolysis system	137.50	1.00	7301555	17139.44
iQnnect BASE Chlor-Complete with chlorine disinfection	140.50	1.00	7301554	20174.96





#### Respresentative image



- » Automatic Pool Control
- » Various water treatments (such as chlorine, salt) available
- » Available on request for overflow pools



The Aquastar® Control-P6 is the central control unit and handles all essential tasks of pool technology, such as filtration, backwashing, heating, and level regulation.



#### FURTHER INFORMATION

» www.iqmfort.net

 iQmfort Folder: shop.peraqua.com/Downloads

#### **iQmfort BASE** - Pool Automation

The iQmfort BASE is an easy-to-install complete pool technology set for skimmer pools. The filter, filter pump, Aquastar® Easy II or Control-P6 and water treatment system are piped and pre-assembled on a BASE (excluding electrics). The optional integration of a heat pump, underwater spotlights and level control was also taken into account.

An iQmfort pool system is controlled via an Aquastar® Easy II or Control-P6. The Aquastar® Easy II or Control-P6 acts as an automatic backwash valve and pool controller at the same time. The display on the Aquastar® Easy II or Control-P6 can be used to monitor, control and automate all important tasks of the pool technology (filtering, backwashing, heating, level regulation).

The digital inputs of the Aquastar<sup>®</sup> Easy II or Control-P6 also allow the backwash to be triggered externally - making it easy to connect to a smart home system.

#### ADVANTAGES OF IQMFORT AND POOLAUTOMATION

- SUSTAINABLE POOL MANAGEMENT
- Stable water quality thanks to automatic measurement of real-time data
- Reduction of backwashing processes and optimization of the water consumption
- Optimization of backwashing processes (according to requirements and situations, individual flow speeds and filter times). To depressurize the valve disc, the pump is automatically switched off.
- Automatic backwash releases = overflow protection
- Automatic level control with integration of a float switch (skimmer pool). If the water level in the pool is too low, water is automatically added.

- Maximum user-friendliness thanks to central control of all pool technology components

#### SAFETY

- LED indicator lights for error messages
- Emergency handle
- Actuation for manual filter backwash
- Pressure sensor to trigger backwashing if system pressure is too high
- Additional valve positions "Closed" and "Winter"
- Error output for visualization (e.g. in the technical room or connection to Smart Home system)

#### DETAILS

- Pool size: up to 60 m³
- Variants: Chlorine dosing system, Salt electrolysis system
- Dimensions: 1700 x 800 x 1600 mm

#### COMPONENTS

- Polyester filter LINZ d610 incl. black 2" Praher Plastics backwash valve
- Aquastar® Control-P6 2"
- Ocean® filter pump O75 2", 13,5 m3/h at 10m, P1 0,80 kW, P2 0,55 kW 230V
- Water treatment system: iQntrol dosing system DOS-NET or iQntrol salt electrolysis system SALT-Complete 25g Cl/h
- Pre-assembled Praher Plastics PVC fittings, pipes, fittings (d63)
- BASE platform: made of polypropylene, for save transport and easy placement
- Nature Works glass filter media

OPTIONAL ON REQUEST

- Heat pump (bypass pre-assembled)
- RGBW underwater lights
- Automatic fresh water replenishment via solenoid valve with float switch

Product	G-kg	VE	Prod.No.	Price €
iQmfort Base Salt-Complete + Easy 2 with salt electrolysis system	130.50	1.00	7301557	14687.83
iQmfort Base DOS-NET with chlorine disinfection	133.50	1.00	7301556	13843.21



DESIGNED, ENGINEERED & MADE IN AUSTRIA

## BACKWASH VALVES MANUAL & AUTO-MATIC

86 Backwash valves automatic

98 Backwash valves manual

### AQUASTAR AUTOMATIC BACKWASH VALVES

SAFETY IS AUTOMATIC FOR US

DESIGNED, ENGINEERED & MADE IN AUSTRIA

#### **AUTOMATIC FILTRATION AND BACKWASHING PROCESSES**

Praher has been dedicated to the development and production of reliable, automatic 6-way backwash valves for over 50 years. Within the industry, Praher is regarded as a technological market leader in this field.

The extensive Aquastar® range is used in premium private and hotel pools, as well as in natural pools and aquaristics.

The Aquastar<sup>®</sup> series represents a revolution in the global automatic 6-way backwash valve industry. Compared to other backwash valve options (e.g., rod valves, butterfly valve assemblies), the Aquastar<sup>®</sup> series stands out for its technical and economic advantages.

#### ADVANTAGES

#### **DIRECT DRAINAGE**

Via the valve and not—as usual—through the filter, with gentle position switching achieved by shutting off the pump.

#### **INTELLIGENT FEATURES**

Included control system (time + pressure + filter pump control), optical position indicator...

#### **SAFETY FEATURES**

Manual emergency operation, optical position indicator, error relay, optional safety-pack

#### SAFETY-PACK

Fail-safe even during power outages: In the event of a power failure, the 6-way valve is set to a safe position. Optional integration available.

#### **POOL CONTROL FUNCTIONS**

With the possibility of connecting other pool technology components to the Aquastar<sup>®</sup> drive, additional practical control functions become available. With the Aquastar<sup>®</sup> Control, even complete pool control is possible, saving significant installation time and offering intuitive ease of use.

#### **EASY UPGRADE**

Through the Praher V6 valve piping kit for retrofitting. Compatible with all common filter brands. With minimal installation effort, an upgrade to the Aquastar<sup>®</sup> Control-P6 series enables the creation of a complete, intuitively operated, automated pool control system.

#### CONVERSION FROM MANUAL TO FULLY AUTOMATIC BACKWASH VALVE





#### FUNCTIONAL OVERVIEW OF ALL AQUASTAR® MODELS

	<u></u>		<b>S</b>	
		A.	46	1
	plc	Easy II	Control	Air*
Time switch		+		+
Pressure switch		optional	+	optional
Digital timer			+	+
Filter pump clock			+	+
Heating control			+	+
Solar control			+	+
Level control			+	+
1½", 2"	+	+	+	+
3"	+		+	
Manual Override	+	+	+	+
IP65	+	+	+	+
Voltage actuator 24 V AC/DC, 100-240 V AC (50-60 Hz)	24 - 230 V AC	230 AC	24 - 230 V AC	230 AC
Draining, filtering, backwashing, rinsing	+	+	+	+
Cirulate	+	+	+	+
Closed / winter position	+		+	+
13/14 Opener / Closer pump connection	+	+	+	+
Potential-free connection for ball valve EO510		+	+	+
Optional Safety-Pack	+		+	+

\* when using the Loxone® Smart Home app





» Smart control via the Loxone<sup>®</sup> Smart Home app



One app for the central control of the entire pool technology.



The Loxone® Miniserver (or Miniserver Go) connects Smart Home and Smart Pool.

#### Loxone® Aquastar® Air (11/2", 2")

#### FEATURES

- $\bullet$  Aquastar® 6-way back wash valve for automatic filter, back wash, rinse, circulation, draining and closed/winter
- IP65 protection code
- Electric actuator 100 240V AC
- Direct connection for 2- or 3-way ball valve EO510 (for instance: draining system)
- Retrofit for all well-known filter brands possible with the 11/2" and 2" Praher side mount or top mount
- valve, incl. Praher ABS piping and union systems for a quick and easy installation
- Free visualisation with Loxone® Miniserver via iPhone, iPad und Android
  - Free updates via Loxone® Miniserver

#### INTERFACES

- 1 wire connection for installation of 1-wire temperature sensors
- 1 analogue input 0.5 5V (for example for filter pressure monitoring)
- 1 analogue input 0 10V (for example for pressure sensors for water level control)
- 3 relais 250VAC 5A freely definable
- Loxone® Air technology for wireless connection to the Loxone® Miniserver
- Direct pump connection (250V AC, 8A)

#### **EXPANSION OPTIONS**

The Aquastar® Air can be integrated into a Loxone® smart home system via a Loxone® miniserver. This integration opens up numerous new application possibilities, as smart home and smart pool functions can be combined and used together:

- Integration of counter current systems
- Control of the pool lighting or integration of the pool lighting into the Smart Home lighting concept
- Integration and control of house and pool technology (shading, alarm, energy, music, etc.)
  Numerous functions for saving energy (e.g. yield-dependent control of the pool pump when using a

photovoltaic system, economy circuit for overflow pools, excess heating in the event of a PV surplus, etc.).

#### SCOPE OF DELIVERY

- Loxone® AQUASTAR® Air
- 1-Wire temperature sensor
- SMA antenna 868 MHz

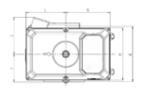
#### PREREQUISITE FOR THE USE OF THE LOXONE AQUASTAR® AIR

A Loxone® Miniserver is required for operating the Loxone® Aquastar®. The Loxone® Miniserver is not included in the scope of delivery. A Miniserver can be obtained directly from Loxone® or a Loxone® partner.

#### DIMENSIONS

	Α	В	С	D	E	F	G	н	I	J	к	L	М	N	0
11⁄2" SM	99,5	90	29,5	48	61,5	163,5	295	39	87,5	117	175	125	165	140	18,5
2" SM	110	114	38	60	81	210	339	36	114	117	228	125	165	140	26

Product	G-kg	VE	Prod.No.	Price €
Loxone Aquastar Air SM10 1 ½" ABS black, thread BSP, Top+Bottom solvent MOP 3,5 bar NBR tpe 100-240 VAC	4.86	1.00	131372A	2821.46
Loxone Aquastar Air SM20 2" ABS black thread BSP, Top+Bottom solvent, MOP 3,5 bar NBR tpe 100-240 VAC	5.91	1.00	131373A	2860.34





**NOTE** Pressure sensor not included. Pressure sensors (items 740046 and 131378) can be found in the Controls section.



#### 86 Backwash valves manual & automatic | Backwash valves automatic



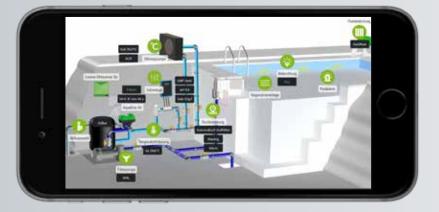
### LOXONE "AQUASTAR BACKWASH VALVE AIR

SMART-UP YOUR POOL

#### Image: The Entire Pool Control in a Single APP

The Aquastar<sup>®</sup> Air is part of the iQnnect system from Peraqua<sup>®</sup>. iQnnect is the integration of intelligently connected pool technology from the Peraqua<sup>®</sup> product range. Aimed at providing a fully automated, safe, and sustainable pool system that can be operated via a smart device, iQnnect from Peraqua<sup>®</sup> delivers 100% added value for the daily pool operation.





#### **CONTROL, MONITOR, NOTIFY**

Through the app, the functions of the pool technology can be operated automatically. The combination of pool technology and the Smart Home app also allows tracking of all pool parameters, such as pH levels, operating times of the heat pump, or overall energy consumption.

With the Automation Designer, various functions can be interdependent or different modes can be generated.

For example, it is possible to activate the "Pool Party" mode with one click, simultaneously increasing the speed of the filter pump and the salt production, as well as triggering a color change in the underwater lighting. The pool owner will also receive notifications for deviating values, error messages, or when functions are activated.





#### NOTE

Further information on the topic of Aquastar® Air and Smart Pool can be found in the Controls section.

- » www.iqnnect.net
- » www.youtube.com/peraquacom



### AQUASTAR BACKWASH VALVE CONTROL

MORE THAN JUST A BACKWASH VALVE



#### **AUTOMATIC BACKWASH TRIGGER**

A backwash is triggered based on time and pressure. Digital inputs also allow control via external systems, such as an Evon home automation system. With the new display, the backwash can also be triggered through the menu.

#### **TEMPERATURE OR SOLAR CONTROL**

The "Heating" relay can be used to turn off the heating before switching off the pump. Up to three digital 1-Wire sensors can be connected: heating control with pool sensor, solar control with additional solar sensor, and display of outside temperature.

#### **PUMP CONTROL**

The new Aquastar<sup>®</sup> Control automatically regulates the filter times, which can be adjusted through the menu. When the valve changes position, the valve disc lifts. To allow the valve disc to switch positions without pressure, the pump is automatically turned off.

#### LEVEL CONTROL

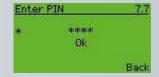
A digital input allows the connection of a float switch for skimmer pools. If the water level in the pool is too low, water is automatically replenished. The refilling process is monitored using a filling time control.

16.03.2	021	01:42PM
🗭 Н	eating Co	ntrol
Pool	21,8 %	C (25,0 °C)
Outer t	emp:	22,3 °C
Heating	g relay!	Off
Solart		22,0 °C

Perfect overview: All parameters are automatically displayed on the status screen.

Sprache	7.1
English	
Français	
Deutsch	1.1
Español	
	Zurück

Multilingual: German, English, French and Spanish available.



The PIN-protected Secure System only allows authorized users to make changes.

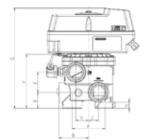
Notification Settings	7.5
Configuration alert rel.	ay
* ongoing	
Slight errors	
Off	ack

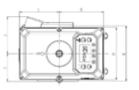
Innovative alarm system: Permanent checking, error reporting and automatic emergency stop if necessary.





#### Automatic control through settings on the digital display







#### Backwash valve AQUASTAR® Control with pressure sensor + pool control

the Aquastar control® is a fully automated backwash system for the Praher Plastics® 6 way backwash valve in sizes 11/2", 2" and 3". With its intelligent electronic control system and easy-to-read display it provides perfect clarity and numerous fully automatic functions on a single unit for use in swimming pools as well as commercial and industrial water purification. The Aquastar can also be programmed to suit individual requirements.

#### FEATURES

- Automation of 6-way valves 11/2", 2" and 3" from Praher Plastics® Austria
- A lifting and rotating actuator with control functions 24V AC/ DC and 100 265V AC
- Real RTC with 10 year battery
- Easy to retrofit
- Human interface with display and buttons
- Automated backwash trigger
- Automated pump trigger
- Niveau control
- Temperature or solar control
- Error Handling integrated
- Relays with gold contacts
- Configurable relays
- Configurable digital inputs Protection IP65
- Optical position indicator Additional position CLOSED
- Additional position Winter

#### DIMENSIONS

	Α	В	с	D	E	F	G	н	I	J	К	L	М	N	0
1½" SM	99,5	90	29,5	48	61,5	163,5	304	39	87,5	117	175	125	165	140	18,5
2" SM	110	114	38	60	81	210	348	36	114	117	228	125	165	140	26

Product	G-kg	VE	Prod.No.	Price €
Actuators AQUASTAR® Control with Pressure Sensor				
AquaStar Control with pressure sensor for V6 ND 1 $\%^{\prime\prime}$ + 2" 24V AC/ DC	3.70	0.00	131492	2452.68
AquaStar Control with pressure sensor for V6 ND 1 $\%^{\prime\prime}$ + 2" 100-240 VAC	3.82	0.00	131493	2662.62
AquaStar Control with pressure sensor for V6 ND 3" 24V AC/DC	4.22	0.00	131494	2945.88
AquaStar Control with pressure sensor for V6 ND 3" 100-240 VAC	4.30	0.00	131495	3155.82
AQUASTAR® Control with pressure sensor, with valve				
AquaStar Control with pressure sensor, SM10 AO 1 ½" ABS black, thread ends R 1 ½" BSP MOP 3,5 bar NBR, tpe 100-240 VAC	5.23	0.00	131496	2765.93
AquaStar Control with pressure sensor, SM10 3 1 $\%^*$ ABS black, BSP thread, Top+Bottom slip d50 MOP 3,5 bar NBR tpe, 100-240 VAC	5.21	0.00	131498	2758.15
AquaStar Control with pressure sensor, SM11 AO 1 $\%^{\prime\prime}$ ASA-GF nature, thread ends R 1 $\%^{\prime\prime}$ BSP MOP 5 bar NBR tpe, 100-240 VAC	5.11	0.00	131500	2870.34
AquaStar Control with pressure sensor, SM20 AO 2" ABS black thread ends, R 2" BSP MOP 3,5 bar NBR tpe, 100-240 VAC	6.10	0.00	131497	2834.80
AquaStar Control with pressure sensor, SM20 3 2" ABS black, BSP thread, Top+Bottom slip d63 MOP 3,5 bar NBR tpe, 100-240 VAC	5.98	0.00	131499	2820.36
AquaStar Control with pressure sensor, SM21 AO 2" ASA-GF nature, thread ends R 2" BSP MOP 5 bar NBR tpe, 100-240 VAC	6.26	0.00	131501	3075.84
AquaStar Control with pressure sensor, SM31 AO 3" ASA-GF nature, thread ends 3",BSP MOP 5 bar NBR EPDM, 100-240 VAC	11.69	0.00	131502	4223.31



NOTE The complete spare parts set 131450 can be found in the "PVC Products" section under Accessories.



SAFFTY-PACK In the event of a power failure, Aquastar® automatically moves to a safe position Available from February 2025!



### AQUASTAR BACKWASH VALVE EASY II

BACKWASHING MADE EASY







#### **AUTOMATIC BACKWASH TRIGGER**

The automatic Aquastar<sup>®</sup> Easy II valve triggers the backwash process thanks to the integrated timer. With an additional pressure sensor, the backwash can also be triggered as needed, depending on the level of contamination in the filter.

#### **EXTERNAL CONTROL**

Backwash triggering and circulation can be controlled through the connection of an external switch, PLC, or home automation system.

#### **EASY ERROR-HANDLING**

The integrated error relay can output error codes, allowing them to be processed by external control systems.

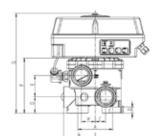
#### **PUMP MONITORING**

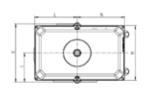
With pump monitoring activated, the Easy II checks before each backwash cycle whether the pump is turned on or connected. If this is not the case, the backwash will be delayed until the pump is switched on. If the pump is turned off during the backwash (e.g., by an external timer), the backwash process will be repeated the next time the pump is switched on.





Timer **Pressure Switch** 













#### NOTE

The valve or valve set is available in white upon request, and a pressure sensor can also be retrofitted.

The complete spare parts set 131450 can be found in the "PVC Products" section under Accessories.

#### Backwash valve AQUASTAR® easyII

For fully automatic and cost-effective backwashing of filtration systems. The backwashing process will triggered via the integrated timer positions. In the version with additional pressure switch the triggering can be time- and/or pressure-controlled.

#### FEATURES

- External backwash release and external circulation
- Error management to prevent equipment errors
- Multifunction relay
- Pump control
- Switch for the extension of the settling time
- Switch for switching to an OEM program
- Optical position indication
- Emergency handle included 100 240 VAC
- IP65
- Potential-free terminals, for controlling Praher EO510 electrical fittings
  Easy adaptability on all known filter systems with 1½" and 2" Praher side mount or top mount valve ABS (3.5 bar) including Praher PVC & ABS piping and fittings
- Retrofitting of the AQUASTAR® easyll actuator on all manual Praher Ocean V6 Side or Top Mount valves with new sealing system possible

#### DIMENSIONS

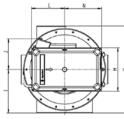
	Α	В	с	D	E	F	G	Н	I.	К	L	м	N	ο
1½" SM	99,5	90	29,5	48	61,5	163,5	295	39	87,5	175	125	165	140	18,5
2" SM	110	114	38	60	81	210	339	36	114	228	125	165	140	26

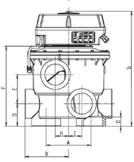
Product	G-kg	VE	Prod.No.	Price €
Backwash valvel AQUASTAR® easyII				
AquaStar Easyll SM10 3 1 ½" ABS black, BSP thread, Top+Bottom slip d50 MOP 3,5 bar NBR tpe, 100-240 VAC	4.84	1.00	131309A	1483.65
AquaStar Easyll SM10 AO 1 ½" ABS black thread ends R 1 ½" BSP, MOP 3,5 bar NBR tpe 100-240 VAC	4.65	1.00	131310A	1483.65
AquaStar Easyll SM20 3 2" ABS black BSP thread, Top+Bottom slip d63 MOP 3,5 bar NBR tpe, 100-240 VAC	5.67	1.00	131312A	1559.09
AquaStar Easyll SM20 AO 2" ABS black thread ends R 2" BSP, MOP 3,5 bar NBR tpe 100-240 VAC	5.78	1.00	131313A	1559.09
AquaStar Easyll TM12 S-flange 1 $\%^{\ast}$ ABS thread BSP, basket d50, MOP 3,5 bar NBR tpe 100-240 VAC	5.66	1.00	7300619	1725.07
Backwash valve AQUASTAR® easyII with pressure sensor				
AquaStar Easyll with pressure sensor SM10 3 1 ½" ABS black BSP thread, Top+Bottom slip d50 MOP 3,5 bar NBR tpe 100-240 VAC	4.83	1.00	131319A	1709.96
AquaStar Easyll with pressure sensor SM10 AO 1 $\%^{*}$ ABS black, thread ends R 1 $\%^{*}$ BSP MOP 3,5 bar NBR tpe 100-240 VAC	4.74	1.00	131320A	1709.96
AquaStar Easyll with pressure sensor SM20 3 2° ABS black, BSP thread, Top+Bottom slip d63 MOP 3,5 bar NBR tpe 100-240 VAC	5.76	1.00	131322A	1747.68
AquaStar Easyll with pressure sensor SM20 AO 2" ABS black, thread ends R 2" BSP MOP 3,5 bar NBR tpe 100-240 VAC	5.96	1.00	131323A	1747.68
Actuators AQUASTAR <sup>®</sup> easyII				
AquaStar Easyll for V6 ND 1 ½" + 2" 100-240 VAC	3.39	1.00	131308A	1420.79
AquaStar Easyll with pressure sensor for V6 ND 1 $\%^{\prime\prime}$ + 2" 100-240 VAC	3.44	1.00	131318A	1634.53
Backwash valve AQUASTAR® easyII with valve set				
AquaStar Easyllwith pressure sensor SM10 3 1 ½" ABS white thread BSP, withAstral/IML/Certikin/Espa valve set, distance 125mm, MOP 3,5 bar NBR tpe	3.93	1.00	7300621	1735.11
AquaStar Easyll with pressure sensor SM10 3 1 ½" ABS white thread BSP, with Hayward valve lset, distance 150mm, MOP 3,5 bar NBR tpe 100-240 VAC	5.14	1.00	7300622	1735.11
AquaStar Easyll with pressure sensor SM20 3 2" ABS white thread BSP, with Triton valve set, distance 190mm, MOP 3,5 bar NBR tpe 100-240 VAC	4.03	1.00	7300623	1789.19
AquaStar Easyll with pressure sensor SM20 3 2" ABS white thread BSP, with Astral/IML/Certikin/Espa valve set, distance 230mm, MOP 3,5 bar NBR tpe 100-240 VAC	8.02	1.00	7300624	1789.19
AquaStar Easyll with pressure sensor SM20 3 2" ABS white thread BSP, with Hayward valve set, distance152mm, MOP 3,5 bar NBR tpe 100-240 VAC	4.89	1.00	7300625	1789.19



#### » External PLC/SCADA control

» Compatible with Smart Home systems





#### Backwash valve AQUASTAR® mp6 plc

excellent in combination with a PLC control, with ABS backwash valve (max. pressure 3.5 bar) or ASA-GF (max. pressure 5 bar) version available, for fully automatic and cost-efficient back wash of filter systems d500–d1050

#### CHARACTERISTICS

• With micro processor controlled lift-rotary drive for SPS controls, where positions driven by the DC signales of the SPS

- Integrated direct error handling
- Early error identification for maintenance
- Relais with gold contact for response
- Multi-grade voltage (100-240 VAC 50-60Hz/150-300VDC or 24V AC/DC)
- For dimensions 1½", 2" and 3"
- IP65 protection code
- Valve and electric head body UV resistant
- 7 positions controllable with PLC control (f, r, k, n, z, g, e), postition 7 = winter position
- Potential free clamps, for control of Praher EO510 electric valves
- Direct pump connection
- Retro-fit installation on all manual Praher Ocean® V6 side or top mount valves with new sealing system
   on all well-known filter brands possible
- Position indication on filter lid
- TGM test certificate

#### DIMENSIONS

	Α	В	с	D	E	F	G	Н	I	J	К	L	М	Ν	Р
1½" SM	99,5	182	29,5	48	61,5	163,5	295	39	87,5	117	175	125	165	140	х
2" SM	110	228	38	60	81	210	339	36	114	117	228	125	165	140	62,5

Product	G-kg	VE	Prod.No.	Price €
AquaStar mp6 plc SM10 AO 1 $\%^{\prime\prime}$ ABS white thread connection R 1 $\%^{\prime\prime}$ BSP MOP 3,5 bar NBR tpe 24 AC/DC	3.17	1.00	131390	1791.00
AquaStar mp6 plc SM20 AO 2" ABS white thread connection R 2" BSP MOP 3,5 bar NBR tpe 24 AC/DC	4.50	1.00	131391	2062.03
AquaStar mp6 plc SM10 AO 1 $\%^\prime$ ABS white thread connection R 1 $\%^\prime$ BSP MOP 3,5 bar NBR tpe 100-240 VAC	3.42	1.00	131392	1900.80
AquaStar mp6 plc SM20 AO 2" ABS white thread connection R 2" BSP MOP 3,5 bar NBR tpe 100-240 VAC	4.78	1.00	131393	2263.20
AquaStar mp6 plc SM11 AO 1 $\%^{\prime\prime}$ ASA-GF nature thread connection R 1 $\%^{\prime\prime}$ BSP MOP 5 bar NBR tpe 24 AC/DC	3.34	1.00	131394	1986.58
AquaStar mp6 plc SM21 AO 2" PPO-GF nature thread connection R 2" BSP MOP 5 bar NBR tpe 24 AC/DC	4.92	1.00	131395	2162.61
AquaStar mp6 plc SM31 AO 1 $\%^{\prime\prime}$ ASA-GF nature thread connection R 1 $\%^{\prime\prime}$ BSP MOP 5 bar NBR tpe 100-240 VAC	3.68	1.00	131396	2175.18
AquaStar mp6 plc SM11 AO 1 1/2" ASA-GF nature thread connection R 1 1/2" BSP MOP 5 bar NBR tpe 100-240 VAC	4.72	1.00	131397	2376.36



SAFETY-PACK In the event of a power failure, Aquastar® automatically moves to a safe position.

Available from February 2025!



Sight glass S4



Union 1½", 2", 3"



Union extra long 1½", 3"



Union PVCu solvent socket



Plug for backwash valve



Plug with O-ring



Blue Aquastar® adapter for Praher V6 valve with old sealing system.

#### Accessories

Product	G-kg	VE	Prod.No.	Price €
Sight glass types				
PVC sight glass transparent DN40/d50	0.39	1.00	7300321	45.21
PVC sight glass transparent DN50/d63	0.97	1.00	7300322	55.62
PVC sight glass transparent DN65/d75	1.55	1.00	7300323	144.78
Sight Glass S4 DN80 PVC transparent PVCu solvent socket d90 metric PN16 EPDM	4.01	1.00	123256	189.24
Union 1 ½", 2", 3"				
Union Ocean PVC grey solvent socket d/ male thread d50-1 ½° BSP EPDM	0.13	1.00	170396	7.83
Union Ocean PVC white solvent socket d/ male thread d50-1 $\ensuremath{\mathcal{U}}$ " BSP EPDM	0.13	1.00	170380	9.81
Union Ocean PVC black solvent socket d/ male thread d50-1 $\%^{\prime\prime}$ BSP EPDM	0.19	10.00	170355	7.83
Union extra long 1 ½", 3"				
Union Ocean extra long PVC white solvent socket d/ male thread 50 - 1 ½" EPDM	0.23	10.00	170300	21.39
Union Ocean extra long PVC grey solvent socket d/ male thread d90- $3^{\circ}$ BSP EPDM	1.76	1.00	170185	105.19
Union PVCu solvent socket				
Union Ocean PVC grey PVCu solvent socket d50 metric EPDM	0.10	10.00	170397	6.40
Union Ocean PVC white PVCu solvent socket d50 metric EPDM	0.10	10.00	170381	7.12
Union Ocean PVC black PVCu solvent socket d50	0.10	10.00	170354	6.40
Union Ocean PVC grey PVCu solvent socket d63 metric EPDM	0.18	10.00	170403	8.03
Union Ocean PVC white PVCu solvent socket d63 metric EPDM	0.22	10.00	170387	8.73
Union Ocean PVC grey PVCu solvent socket d90 metric EPDM	1.11	10.00	170082	37.18
Plug for back wash valve				
Plug for backwash valve 1 ½" ABS weiss Klebe d50 metrisch	0.02	10.00	100206	2.30
Plug for backwash valve 2" ABS whtie Klebe d63 metric	0.03	10.00	100232	2.94
Plug for backwash valve 3" ABS white solvent d90 metric	0.15	10.00	140539	5.65
Plug for backwash valve 1 $\frac{1}{2}$ " ABS white solvent 1 $\frac{1}{2}$ " ASTM	0.02	10.00	100362	2.30
Plug for backwash valve 2" ABS white solvent d 2" ASTM	0.03	10.00	100233	2.94
Plug for backwash valve 3" ABS white solvent d 3" ASTM	0.20	10.00	140061	5.65
Plug for back wash valve with O-ring				
Plug for backwash valve with O-ring 1 ½" ABS white male thread R 1 ½" BSP EPDM	0.03	10.00	100224	4.54
Plug for backwash valve with O-ring 2" ABS white male thread R 2" $\ensuremath{BSP}$ EPDM	0.05	10.00	100229	5.65
Plug for backwash valve with O-ring 3" ABS white male thread R 3" BSP	0.13	10.00	140063	8.94
Plug for backwash valve with O-ring 1 $\%^{\prime\prime}$ ASA-GF nature male thread R 1 $\%^{\prime\prime}$ BSP EPDM	0.03	10.00	100403	6.75
Plug for backwash valve with O-ring 2" ASA-GF nature male thread R 2" BSP EPDM	0.06	10.00	100416	7.95
Plug for backwash valve with O-ring 3" ASA-GF nature male thread R 3" BSP	0.14	10.00	140024	15.62
AQUASTAR® Adapter				
Adapter for Aquastar	0.01	1.00	102026	9.00



### MANUAL BACKWASH VALVES

6-WAY / 7-POSITIONS



#### **OVER 50 YEARS OF EXPERIENCE**

Research, development, and production of the valves take place in Austria. This expertise guarantees the highest precision and innovative solutions. Praher backwash valves are used worldwide under various climatic and application-specific conditions without any issues.

#### 100% ABS HIGH-TECH ORIGINAL MATERIAL

Millions of applications and 50 years of expertise speak for the quality. We guarantee an above-average lifespan and offer a 10-year warranty on housing and lid breakage, as well as a 10-year spare parts delivery guarantee. Excluded from the warranties are wear parts.

#### **6-WAY, 7 POSITIONS**

Praher backwash valves stand out due to the additional 7th valve position. The 6-way valves allow for precise control of the water flow, while the 7th position ensures relief for the seals during winterization.

#### **OPTIMAL FLOW RATE & PRESSURE LOSS VALUES**

Praher 6-way valves are tested for function and tightness according to DIN 3230 standards. With these values, the valves are among the best in the industry when it comes to filtration and backwash processes.

#### **INNOVATIVE HOUSING SEALING SYSTEM**

The specially developed housing sealing system ensures perfect sealing performance and a long lifespan for the valve. The easily replaceable star seal in the valve disc saves time and money during service intervals.

#### **COMPATIBLE WITH ANY POOL FILTER SYSTEM**

Praher backwash valves are available in numerous versions: Side Mount / Top Mount, 1½" / 2" / 3", 3.5 – 6 bar operating pressure, with valve piping kits for all common filter brands worldwide upon request.

#### **CUSTOMIZATION IS A TOP PRIORITY**

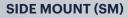
Give every technical room and filter system a distinctive identity with a custom logo and laser engraving or neutral packaging (starting from a minimum order quantity of 1,000 units).

#### SIMPLE PIPING EFFORT

The valves are designed to allow for easy and space-saving installation with Praher PVC fittings and piping in any technical room.







#### Housing material ABS

- »  $1\frac{1}{2}$ , 2", 3" | 3.5 bar
- » Available in black or white

#### Housing material ASA GF:

- » 1½" and 2" | 6 bar
- » 3" | 5 bar
- » in color ,natural'

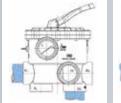
Seal material: TPE + NBR

Connection options Side Mount (SM):  $1\frac{1}{2}$  value

- » Adhesive sleeve d50 metric
- » Thread connection R1½" BSP
- » Thread connection R11/2" NPT

#### 2" valve

- » Adhesive sleeve d63 metric
- » Thread connection R2" BSP
- » Thread connection R2" NPT
- 3" valve
- » Adhesive sleeve d90 metric
- » Thread connection R3" BSP



Typ 3 SM10 3, SM20 3, SM30 3



Typ AO (all open)

incl. plugs

SM10 AO, SM20 SO, SM30 AO With SM10 AO, the lateral bottom connection is always closed

#### **TOP MOUNT (TM)**

Housing material ABS

- »  $1\frac{1}{2}$ ", 2" | 3.5 bar
- » Available in black or white

Seal material: TPE + NBR

Flange options Top Mount (TM):

- » 6" BS threaded flange
- » Clamp flange
- » Bold down flange

#### **OPTIMAL PRESSURE LOSS VALUES**

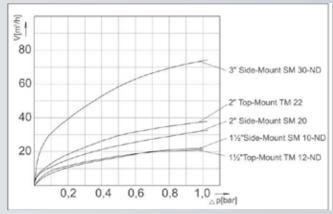
In 6-way valves, pressure loss plays an important role in filtering, as it affects the efficiency and performance of the filtration system.

A low pressure loss means that the pump needs to use less energy to push the water through the filter, resulting in lower power consumption and more cost-effective operation. A high pressure loss can lead to damage to the valve and the filtration system.

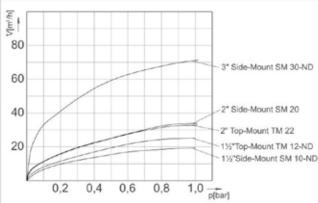
Larger valves typically have lower pressure loss than smaller valves.

The higher the flow rate, the higher the pressure loss.

#### Pressure loss\* in the "FILTER" position



#### Pressure loss\* in the "BACKWASH" position



\* Information for the valve, without filter and filter medium

#### **HOUSING SEAL SYSTEM**

Praher 6-way backwash valves are characterized by an innovative housing seal system that is specifically designed for perfect sealing. The star seal is integrated into the valve disc. What makes it unique is that when the seal wears out, it doesn't need to be painstakingly "scraped out." Instead, the valve disc can simply be replaced. This saves time and effort, ensuring that the backwash valve always functions reliably.



#### **OVERVIEW OF VARIANTS**

#### **VERSATILE AND FUNCTIONAL**

- » Praher 6-way backwash valves are available in two colors: black and white.
- » They can be ordered in various materials, operating pressures, sizes, and also with glued piping.

#### **ABS VS. ASA GF: SIMPLY EXPLAINED**

ABS is a versatile and tough plastic that can withstand impacts and stress. It is lightweight yet robust and exhibits high resistance to chemicals.

ASA GF is a reinforced version of ABS. "GF" stands for glass fiber reinforced. The glass fibers give ASA GF higher strength, rigidity, and temperature resistance compared to ABS. This is especially important when using valves in public pool facilities, where durability and resistance to harsh conditions are crucial.



### IMPORTANT TIPS FOR OPERATING YOUR 6-WAY VALVE:

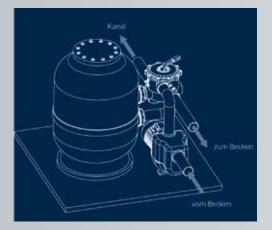
- » Always turn off the pump before adjusting the valve. This prevents damage to the filter, pipes, and the entire pool system.
- » After backwashing, always immediately add fresh water to bring the pool's water level back to the correct level. This ensures an optimal filtration process and prevents the pump from running dry.
- » The water refill can be done manually or fully automatically using pool water level controllers.
- » The frequency of backwashing depends on the pool's contamination level. As a general rule, it should be done 1 to 2 times per week under normal operating conditions.



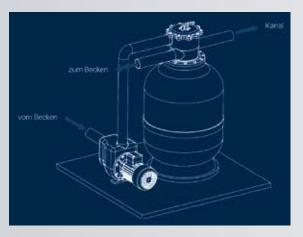
When using Nature Works glass filter media, the backwashing frequency is reduced to 0.5 times per week.

#### LOW PIPING EFFORT

#### Side side Mount



#### **Side top Mount**





- » 11/2" Connection
- » ABS Housing
- » 3.5 bar

#### 6-Way backwash valve V6 side mount 11/2" ABS

available in ABS (3.5 bar), in various colours and connections, 7 positions incl. winter position Optional with or without piping sets for all well-known filter brands.

#### APPLICATION

Swimming pool, natural pool, aquaristic, fish ponds and water attractions (fountains)up to temperature of +40°C  $\,$ 

Product	G-kg	VE	Prod.No.	Price €
WITHOUT PIPING SET				
Back wash valve V6 ND SM10 3 1 ½" ABS white thread ends R 1 ½" SSP MOP 3,5 bar NBR tpe single packed Praher-label	2.45	1.00	130751	80.53
Back wash valve V6 ND SM10 3 1 ½" ABS black thread ends R 1 ½" BSP MOP 3,5 bar NBR tpe loose packed Praher-label	1.36	1.00	130821	80.53
Back wash valve V6 ND SM10 AO 1 ½" ABS white thread ends R 1 ½" BSP MOP 3,5 bar NBR tpe single packed Praher-label	2.26	1.00	130753	89.81
Back wash valve V6 ND SM10 AO 1 1/2" ABS black thread ends R 1 1/2" 3SP MOP 3,5 bar NBR tpe single packed Praher-label	1.37	1.00	131441	89.81
3ack wash valve V6 ND SM10 3 1 ½" ABS white solvent socket d50 metric MOP 3,5 bar NBR tpe single packed Praher-label	1.34	1.00	131350	80.53
Back wash valve V6 ND SM10 3 1 ½" ABS white BSP thread, Top+Bot- com slip d50 metric MOP 3,5 bar NBR tpe single packed Praher-label	2.43	1.00	130762	80.53
Back wash valve V6 ND SM10 3 1 ½" ABS black BSP thread, Top+Bot- tom slip d50 metric MOP 3,5 bar NBR tpe single packed Praher-label	2.43	1.00	130820	80.53
Back wash valve V6 ND SM10 3 1 ½″ ABS white slip, return-was- te=thread, d50 metric MOP 3,5 bar NBR tpe single packed Praher-la- bel	1.45	1.00	130862	80.53
Back wash valve V6 ND SM10 3 1 ½" ABS black slip, return-was- te=thread, d50 metric MOP 3,5 bar NBR tpe single packed Praher-la- bel	1.36	1.00	130797	80.53
WITH PIPING SET				
Back wash valve Ocean V6 ND SM10 3 1 1/2" ABS white, clue, return-waste=thread, d50 metric MOP 3,5 par NBR tpe incl. ASTRAL pipe-system single packed Praher-label, Pipework distance: 125mm glued	1.91	0.00	131050	153.17
Back wash valve Ocean V6 ND SM10 3 1 ½° ABS white BSP thread, Top+Bottom slip d50 metric MOP 3,5 bar NBR tpe incl. pipe-system single packed Praher-label, Pipework distance 190.5 mm PENT glued	1.88	1.00	131082	162.61
Back wash valve Ocean V6 ND SM10 3 1 1/2° ABS white, BSP thread, Top+Bottom clue d50 metric MOP 3,5 par NBR tpe incl. pipe-system single packed Praher-label, Pipe elbow distance 126.5 mm CERT-MMC, glued	2.73	1.00	131042	162.61
Back wash valve Ocean V6 ND SM10 3 1 1/2" ABS black, BSP thread, Top+Bottom clue d50 metric MOP 3,5 par NBR tpe incl. pipe-system, single packed Praher-label , 125mm Astral-Certikin-MMC, glued	1.89	1.00	131447	162.61
Back wash valve Ocean V6 ND SM10 3 1 ½" ABS black BSP thread, Top+Bottom glue d50 metric MOP 3,5 bar NBR tpe incl. pipe-system single packed Praher-label, pipe elbow distance: 125 mm, union nut 2 1/4"	2.02	1.00	131471	162.61
UNION 1 ½"				
Jnion ocean PVC grey solvent socket-male thread 50-1 ½" BSP EPDM	0.13	1.00	170396	7.83
Jnion ocean PVC white solvent socket-male thread 50-1 $\%^{\prime\prime}$ BSP EPDM	0.13	1.00	170380	9.81
Jnion ocean PVC black solvent socket-male thread 50-1 ½" BSP EPDM	0.19	10.00	170355	7.83
SIGHT GLASS				
PVC sight glass transparent DN40/d50	0.39	1.00	7300321	45.21

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#### Valve Piping set ASTRAL, ESPA, CERTIKIN, IML, PROCOPI d50 1 $\rlap{l}{2} \r{l}{2} \r{l}{2}$

Product	G-kg	VE	Prod.No.	Price €
Pipe-system ASTRAL for back wash valve with union-nut 1 $\%^{\prime\prime}$ PVC white d50, distance 125 mm	0.57	1.00	170151	31.65
Pipe-system ASTRAL for back wash valve with flange 1 ½" ABS black d50, distance 125 mm	0.44	1.00	170353	31.65

#### Valve piping set HAYWARD d5011/2"

Product	G-kg	VE	Prod.No.	Price €
Pipe-system HAYWARD for back wash valve with union-nut 1 $\%^{\prime\prime}$ PVC white d50	0.66	1.00	170158	31.65
Pipe-system HAYWARD for back wash valve with union-nut 1 $\%^{\prime\prime}$ PVC black d50	0.68	1.00	170261	31.65

#### Pipe elbow d50, 245 x 158 mm

Product	G-kg	VE	Prod.No.	Price €
Pipe elbow D50 PVC white 245 x 158 mm	0.33	1.00	150064	11.85
Pipe elbow D50 PVC grey 245 x 158 mm	0.31	1.00	150063	11.85
Pipe elbow D50 PVC black 245 x 158 mm	0.31	1.00	150067	11.85



#### Connection piece d50, 122 mm

Product	G-kg	VE	Prod.No.	Price €
Connection for pipe-system d50 PVC white 122mm	0.10	1.00	150108	10.11
Connection for pipe-system d50 PVC grey 122mm	0.10	1.00	150126	10.11
Connection for pipe-system d50 PVC black 122mm	0.10	1.00	150113	10.11



» 11/2" Connection

» ASA GF Housing

» 6 bar



ANSCHLUSS/ A0



» 11/2" Connection

» ABS Housing

» **3.5 bar** 





#### 6-way backwash valve V6 side mount 11/2" ASA GF

available in ASA-GF version (6bar), 7 positions including winter position

#### CHARACTERISTICS

- Easy handling
- Multi-lingual non-smudging laser printing
- Optimal flow and pressure loss rates
- Extreme low-noise operation
- Made of high quality UV resistant and impact resistant ASA-GF
- $\boldsymbol{\cdot}$  High durable sealing material and pressure springs installed on the valve plate
- Pressure tightness and operation tests according to DIN 3230
- Easy installation on the AQUASTAR® automatic backwash valve actuator
- Additional "winter position" for release for the sealing system

#### APPLICATION

For swimming pools, sauna and spas with higher operation pressures and temperatures up to 50 °C

Product	G-kg	VE	Prod.No.	Price €
Back wash valve Ocean V6 ND SM11 AO 1 $\%'$ ASA-GF nature thread ends R 1 $\%''$ BSP MOP 6 bar NBR tpe single packed Praher-label with 1 sealing plug	2.40	1.00	130860	157.19

#### 6-way backwash valve V6 top mount 11/2" ABS

available in ABS and with various connections for all common filter brands, 7 positions including winter position

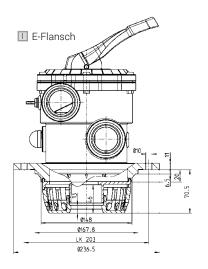
#### APPLICATION

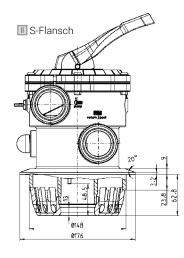
For swimming pools, natural pools, aquaristics, fish farms, water accessories (fountains) with temperatures up to +40  $^{\circ}\mathrm{C}.$ 

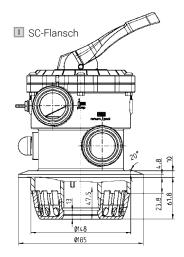
Product	G-kg	VE	Prod.No.	Price €
VALVES				
Back wash valve V6 ND TM12 B-Flange, 6" BUTTRESS 1 ½" ABS white thread ends R 1 ½" BSP / d50 MOP 3,5 bar NBR tpe single packed Praher-label	1.76	1000.00	130826	147.12
Back wash valve V6 ND TM12 S-Flange 1 ½" ABS black thread ends R 1 ½" BSP / d50 MOP 3,5 bar NBR tpe loose packed Praher-label	1.63	1.00	130810	147.12
Back wash valve V6 TM12 E-Flange 1 ½" ABS white thread ends R 1 ½" BSP / d50 MOP 3,5 bar EPDM tpe single packed Praher-label	2.11	1.00	130051A	147.12
Backwashvalve V6 ND TM12 E-Flange 1 1/2" ABS black thread ends BSP MOP 3,5 bar EPDM tpe Praher-label	2.11	0.00	131444	147.12
Back wash valve V6 ND TM12 AS-Flange 1 $\%''$ ABS black thread ends R 1 $\%''$ BSP / d50 MOP 3,5 bar NBR tpe single packed Praher-label	1.69	1000.00	130960	147.12
Back wash valve V6 TM12 T-Flange 1 $\%''$ ABS white thread ends R 1 $\%''$ BSP / d50 MOP 3,5 bar NBR single packed Praher-label	2.40	1.00	130710	147.12
CLAMP RINGS				
Clamp ring for back wash valve TM12 S-Flange 1 ½" ASA-GF black incl. screws and nuts	0.15	1.00	170362	15.19
Clamp ring for back wash valve TM12 T-Flange 1 ½" incl. screws and nuts and O-ring 183,52 X 6,99	0.30	50.00	50194	17.84
Clamp ring for back wash valve TM12 SF-Flange 1 ½" PP-GFR black -Pentair- Incl. Screws and nuts	0.20	1000.00	870035	14.22
UNION 1 ½"				
Union ocean PVC grey solvent socket-male thread 50-1 ½" BSP EPDM	0.13	1.00	170396	7.83
Union ocean PVC white solvent socket-male thread 50-1 $\%^{\prime\prime}$ BSP EPDM	0.13	1.00	170380	9.81
Union ocean PVC black solvent socket-male thread 50-1 $\%^{\prime\prime}$ BSP EPDM	0.19	10.00	170355	7.83
SIGHT GLASS				
PVC sight glass transparent DN40/d50	0.39	1.00	7300321	45.21

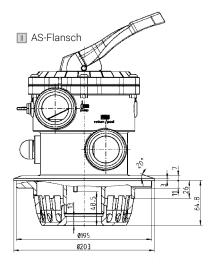
#### FLANGE CONNECTIONS TOP MOUNT 11/2"

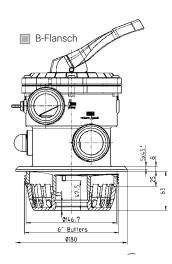
1	bold down flange
Ш	clamp flange
Ш	threaded flange

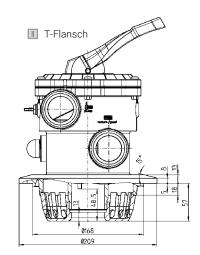


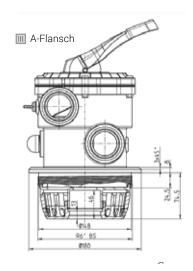














» 2" Connection

» ABS Housing

» 3.5 bar

#### 6-way backwash valve V6 side mount 2" ABS

available in ABS in various connections, 7 positions including winter position

#### CHARACTERISTICS

For swimming pools, natural pools, aquaristics, fish farms, water accessories (fountains) with temperatures up to +40 °C.

Product	G-kg	VE	Prod.No.	Price €
WITHOUT PIPING SET				
Back wash valve V6 ND SM20 3 2″ ABS white thread ends R 2″ BSP MOP 3,5 bar NBR tpe single packed Praher-label	3.37	1.00	131029	157.96
Back wash valve V6 ND SM20 3 2″ ABS black thread ends R 2″ BSP MOP 3,5 bar NBR tpe single packed Praher-label	2.41	1.00	131131	157.96
Back wash valve V6 ND SM20 AO 2" ABS white thread ends R 2" BSP MOP 3,5 bar NBR tpe single packed Praher-label	3.45	1.00	131040	178.08
Back wash valve V6 ND SM20 AO 2" ABS black, thread ends R 2" BSP MOP 3,5 bar NBR tpe, single packed, Praher-label	2.51	1.00	131442	178.08
Back wash valve V6 ND SM20 3 2" ABS white solvent d63 metric, PN3,5 NBR tpe Praher-label German/English/Turkish	2.40	1.00	131351	157.96
Back wash valve V6 ND SM20 3 2" ABS white BSP thread, Top+Bot- tom slip d63 metric MOP 3,5 bar NBR tpe single packed Praher-label	3.36	1.00	131150	157.96
Back wash valve V6 ND SM20 3 2" ABS black BSP thread, Top+Bot- tom slip d63 metric MOP 3,5 bar NBR tpe single packed - neutral label	2.50	1.00	131063	157.96
Back wash valve V6 ND SM20 3 2" ABS white slip, returnwaste=thre- ad, 63mm metric MOP 3,5 bar NBR tpe single packed - neutral label	2.40	1.00	131192	157.96
GLUED PIPING SET				
Back wash valve V6 ND SM20 3 2" ABS black BSP thread, Top+Bot- tom slip d63 metric MOP 3,5 bar NBR tpe MMC pipe-system Praher- Logo, pipe distance 190,5mm	3.02	1.00	131448	241.30
Back wash valve V6 ND SM20 3 2" ABS black BSP thread, Top+Bottom glue d63 metric MOP 3,5 bar NBR tpe incl. pipe-system single packed Praher-label, pipe elbow distance: 140 mm	4.33	1.00	131472	241.59
Back wash valve V6 ND SM20 3 2" ABS white BSP thread, Top+Bot- tom slip d63 metric MOP 3,5 bar NBR tpe incl. MMC pipe-system single packed Praher-label	3.04	1.00	131152	241.56
Back wash valve V6 ND SM20 3 2″ ABS white BSP thread, Top+Bot- tom slip d 2″ ASTM MOP 3,5 bar NBR tpe incl. PENT pipe-system glued Praher-label incl. piping set PENT	4.05	1.00	131047	241.56
Back wash valve V6 ND SM20 3 2" ABS white BSP thread, Top+Bot- tom slip d63 metric MOP 3,5 bar NBR tpe single packed Praher-label	3.22	1.00	131193	241.56
UNION 2"				
Union ocean PVC grey solvent socket-male thread 63-2" BSP EPDM	0.23	40.00	170402	9.97
Union ocean PVC white solvent socket-male thread 63-2" BSP EPDM	0.23	40.00	170386	11.79
SIGHT GLASS				
PVC sight glass transparent DN50/d63	0.97	1.00	7300322	55.62





#### Valve piping HAYWARD

Product	G-kg	VE	Prod.No.	Price €
Pipe-system HAYWARD for back wash valve with union-nut 2" ABS black d63	0.41	1.00	170208	61.76



Product	G-kg	VE	Prod.No.	Price €
Valve piping set ASTRAL for backwash valve with union $nut2^{\prime\prime}PVC$ weiss d63	0.83	1.00	170856	58.15
Pipe-system ASTRAL for back wash valve with union-nut 2" ABS black d63, distance 230 mm	0.78	1.00	170855	48.90





#### Pipe elbow d63 215 x 163 mm

Product	G-kg	VE	Prod.No.	Price €
Pipe elbow D63 PVC white 215 x 163 mm	0.47	1.00	150231	25.55
Pipe elbow D63 PVC grey 215 x 163 mm	0.44	1.00	150252	25.55
Pipe elbow D63 PVC black 215 x 163 mm	0.44	1.00	150211	25.55



#### Connection piece d63, 73 mm

optional in black and grey

Product	G-kg	VE	Prod.No.	Price €
Connection for pipe-system d63 PVC white 73mm	0.09	1.00	150232	12.60
Connection for pipe-system d63 PVC grey 73mm	0.09	1.00	150251	12.60
Connection for pipe-system d63 PVC black 73mm	0.09	1.00	150212	12.60

#### PERAQUA



#### » 2" Connection

» ASA GF Housing

» 6 bar

#### 6-way backwash valves V6 side mount 2" ASA GF

available in ASA-GF version (6 bar), 7 positions including winter position

#### APPLICATION

Swimming pools, sauna and spa, made for higher operation pressures and temperatures up to +50°C.

Product	G-kg	VE	Prod.No.	Price €
Back wash valve V6 ND SM21 AO 2" ASA-GF nature thread ends R 2" BSP MOP 6 bar NBR tpe single packed Praher-label, 2 sealing plugs	2.77	1.00	131326	484.84



- » 2" Connection
- » ABS Housing
- » 3.5 bar

#### 6-way backwash valve V6 top mount 2" ABS

available in ABS and with varous and connections, 7 positions including winter position

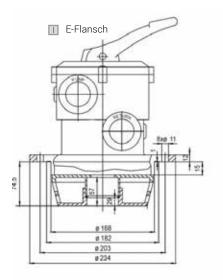
#### APPLICATION

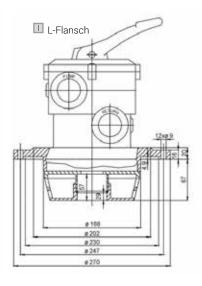
For swimming pools, natural pools, aquaristics, fish farms, water accessories (fountains) with temperatures up to +40  $^{\circ}\mathrm{C}.$ 

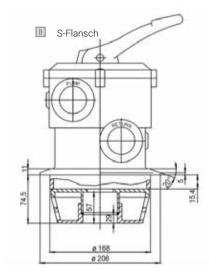
Product	G-kg	VE	Prod.No.	Price €
VALVES				
Back wash valve V6 TM22 B-Flansch, 7 1/16" BUTRESS 2" ABS black thread ends R 2" BSP / d60,325 MOP 3,5 bar NBR EPDM loose packed Praher-label	3.14	500.00	130489	193.56
Back wash valve V6 TM22 E-Flange 2" ABS white thread ends R 2" BSP / d63 MOP 3,5 bar NBR tpe single packed Praher-label	3.46	1.00	130965	193.56
Back wash valve V6 TM22 E-Flange 2" ABS black thread ends R 2" BSP / d63 MOP 3,5 bar NBR tpe Praher-label	3.07	7.00	130261	193.56
Back wash valve V6 TM22 H-Flange LK=212 2" ABS white thread ends R 2" BSP / d60,325 MOP 3,5 bar NBR tpe single packed Praher-label	3.52	500.00	130343	193.56
Back wash valve V6 TM22 L-Flange LK=247 2" ABS white thread ends R 2" BSP / d60,325 MOP 3,5 bar NBR tpe loose packed Praher-label	3.05	500.00	130648	193.56
Back wash valve V6 TM22 AS-Flange 2" ABS black thread ends R 2" BSP / d63 MOP 3,5 bar NBR tpe single packed -ESPA-ESPA-label	2.97	1.00	130927	193.56
Back wash valve V6 TM22 AS-Flange 2" ABS black thread ends R 2" BSP / d63 MOP 3,5 bar NBR tpe single packed Praher-label	0.30	1.00	72211	186.38
CLAMP RINGS				
Clamp ring for back wash valve TM12 T-Flange incl. screws 1 ½" and nuts and O-ring 183,52 X 6,99	0.30	50.00	50194	17.84
UNION 2"				
Union ocean PVC grey solvent socket-male thread 63-2" BSP EPDM	0.23	40.00	170402	9.97
Union ocean PVC white solvent socket-male thread 63-2" BSP EPDM	0.23	40.00	170386	11.79
SIGHT GLASS				
PVC sight glass transparent DN50/d63	0.97	1.00	7300322	55.62

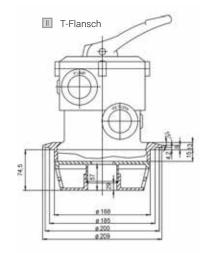
#### FLANGE CONNECTIONS TOP MOUNT 2"

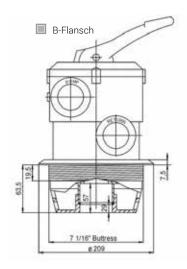
II clamp flange	I.	bold down flange
	Ш	clamp flange
III threaded flange	III	threaded flange













» 2½" Connection

#### » **3,5 bar**

#### 6-way backwash valve side mount 2 ½"

#### 3,5 bar, black

#### CHARACTERISTICS

- Easy handling
- Extreme low-noise operation
- High durable sealing material and pressure springs
- Pressure tightness and operation tests according to DIN 3230
- Easy installation on the AQUASTAR® automatic backwash valve actuator
- Additional "winter position" for release for the sealing system

#### APPLICATION

Swimming pool, natural pool, aquaristics, fish ponds and water attractions (fountains) with temperatures up to 40  $^{\rm o}{\rm C}$ 

Product	G-kg	VE	Prod.No.	Price €
VALVE				
6 way multiport valve 2 $\%^{\prime\prime}$ - d75, Top + Bottom = glue connection d75, Pump + Return + Waste = union connection glue d75 metric, neutral handle	6.66	1.00	77464	415.42
SIGHT GLASS				
PVC sight glass transparent DN65/d75	1.55	1.00	7300323	144.78



» 3" Connection

» ABS Housing

» 3.5 bar







#### 6-way backwash valve V6 side mount 3" ABS

available in ABS (3.5 bar) and in various connections, 7 positions including winter position

Product	G-kg	VE	Prod.No.	Price €
VALVES				
Back wash valve V6 ND SM30 3 3" ABS white thread ends R 3" BSP MOP 3,5 bar EPDM EPDM Praher-label	6.49	1.00	130192	929.08
Back wash valve V6 ND SM30 AO, 3° ABS black thread ends 3° BSP, MOP 3,5 bar EPDM tpe single packed - neutral label	6.98	1.00	130002	929.08
Back wash valve V6 ND SM30 AO 3" ABS white thread ends R 3" BSP MOP 3,5 bar EPDM EPDM single packed Praher-label	7.64	1.00	130000	929.08
Back wash valve V6 ND SM30 AO 3" ABS white solvent socket d90 metric MOP 3,5 bar EPDM EPDM single packed Praher-label	6.80	1.00	130074	929.08
UNION 3"				
Union ocean PVC grey solvent socket-male thread 90-3" BSP EPDM	1.11	1.00	170085	46.75
Union ocean excessive PVC grey solvent socket male thread 90 -3 $^{\prime\prime}$ BSP EPDM	1.76	1.00	170185	105.19
SIGHT GLASS				
Sight glass S4 DN80 PVC transparent PVCu solvent socket ends d90 metric PN16 EPDM	4.01	1.00	123256	189.24



» 3" Connection

» ASA GF Housing

» 5 bar







## 6-way backwash valve V6 side mount 3" ASA GF

available in ASA-GF (5 bar), 7 positions including winter position

#### CHARACTERISTICS

- Easy handling
- Multi-lingual non-smudging laser printing
- Optimal flow and pressure loss rates
- Extreme low-noise operation
- Made of high quality UV resistant and impact resistant ASA-GF
- High durable sealing material and pressure springs installed on the valve plate
- Pressure tightnes and operation tests according to nach DIN 3230
- $\bullet$  Easy installation on the AQUASTAR® automatic backwash valve actuator
- $\mbox{ \ Additional \ }\mbox{,}\mbox{winter position}\mbox{``for release for the sealing system}$

#### APPLICATION

Swimming pool, natural pool, aquaristics, fish ponds and water attractions (fountains) with temperatures up to +50  $^{\circ}{\rm C}$ 

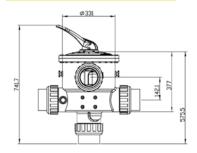
Product	G-kg	VE	Prod.No.	Price €
VALVES				
Back wash valve V6 ND SM31 AO 3" ASA-GF nature thread ends R 3" BSP MOP 5 bar EPDM EPDM single packed Praher-label	7.64	1.00	130142	1037.60
Back wash valve V6 ND SM31 AO 3" ASA-GF nature thread ends R 3" BSP MOP 5 bar FPM EPDM single packed Praher-label 2 plugs for backwash valve	7.72	1.00	130201	1172.09
UNION 3"				
Union ocean PVC grey solvent socket-male thread 90-3" BSP EPDM	1.11	1.00	170085	46.75
Union ocean PVC grey solvent socket-male thread 90-3" BSP EPDM	1.76	1.00	170185	105.19
SIGHT GLASS				
Sight glass S4 DN80 PVC transparent PVCu solvent socket ends d90 metric PN16 EPDM	4.01	1.00	123256	189.24



» 4" Connection

» ABS Housing

» 3,5 bar



## 6-way backwash valve side mount 4"

## 3,5 bar, black

CHARACTERISTICS

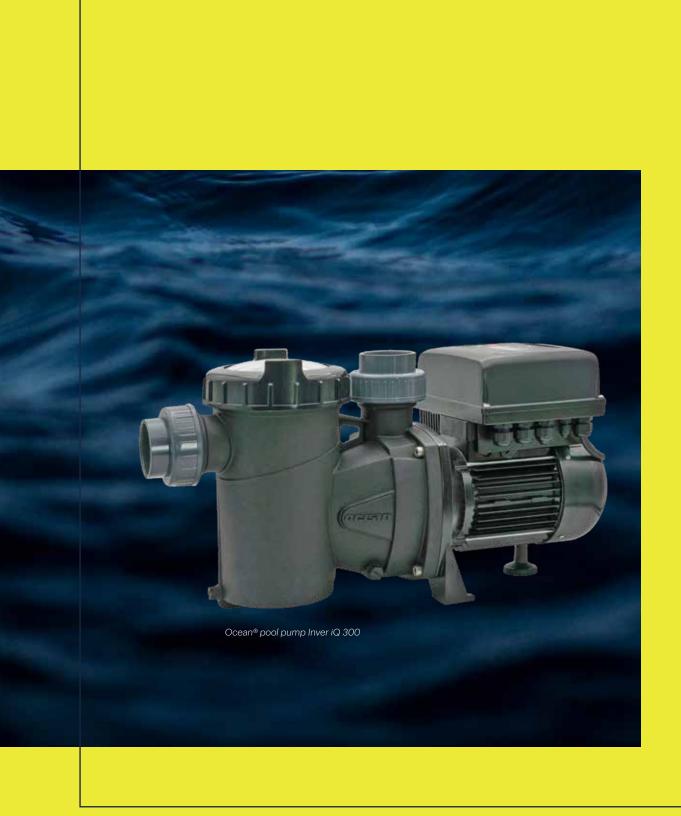
• Easy handling

- Extreme low-noise operation
- High durable sealing material and pressure springs
- Pressure tightness and operation tests according to DIN 3230
- Easy installation on the AQUASTAR® automatic backwash valve actuator
- Additional "winter position" for release for the sealing system

## APPLICATION

Swimming pool, natural pool, aquaristics, fish ponds and water attractions (fountains) with temperatures up to 40  $^{\circ}\mathrm{C}$ 

Product	G-kg	VE	Prod.No.	Price €
Back wash valve black 110-4"	20.70	1.00	78080	2242.29





112 | Ocean® pumps

115 Smart pumps

## OCEAN<sup>®</sup> & SMART FILTER PUMPS

IT'S ABOUT POWER.

## IT WORKS WITH ONLY ONE FILTER PUMP

The filter pump is the heart of a filtration system. It provides the necessary "power" for the filtration process and is responsible for the entire water treatment cycle in the swimming pool:

The pump draws water through the skimmer or the bottom drain. The basket in the skimmer and the pre-filter in the pump trap larger debris. The filter pump then pumps the water into the filter, where finer impurities are removed by the glass filter media (Nature Works<sup>®</sup>). By using a pump performance that is matched to the pool size, sufficient water circulation is ensured.

When planning, it is important to choose the right frost-proof location, ensure good ventilation, and provide easy accessibility for maintenance. Pumps mounted on solid surfaces increase the noise level. Anti-vibration feet or pads help prevent unpleasant sounds.

## **SELECTION GUIDE**

Based on the pool size for privately used skimmer pools





Ocean® Inver iQ300

Ocean® Serie O



Smart E.Pro



Pool dimensions m	Water volume m³	Flow rate m³/h bei 10m	Model
8x4	< 48	12	Inver iQ300 Serie O 50 E.Pro 150 Europro 50
8x4 bis 10x5	48 < V <= 75	12-19	Inver iQ300 Serie O 100 E.Pro 150 Europro 100
10x5 bis 12x5	75< V <= 90	19-23	Inver iQ300 Serie O 150 E.Pro 150 Europro 150
11x6 bis 12x6	75 < V <= 108	23-27	Inver iQ300 Serie O 200 E.Pro 300 Europro 200



## EXAMPLE: CALCULATION OF NOMINAL FLOW RATE ACCORDING TO ÖNORM EN 16713-2

Outdoor swimming pool with skimmer:  $8 \times 4 \times 1.5m = 48 \text{ m}^3$  water volume

Turnover time under average load: <= 4 hours

Therefore, the nominal flow rate is:  $48 \text{ m}^3 / 4 = 12 \text{ m}^3/\text{h}$ 

This calculated flow rate must be provided by the filter pump, taking into account the actual counter pressures. Thus, the appropriate filter pump is selected using the pump characteristic curve.

In addition to the nominal flow rate, according to the ÖVS recommendation, point 10.3, there is also a recommended minimum operating time for the water treatment/filter pump: The pool volume should be circulated three times within the operating time.





## COMPARISON TABLE FILTER PUMP CHARACTERISTICS





	Ocean <sup>®</sup> Inver iQ300	Ocean® Serie O	Smart E.Pro	Smart Europro	Smart Serie M
Max. Flow rate bei 10 m	< 30 m³/h	< 29 m³/h	< 37 m³/h	< 40 m³/h	13 m³/h
P1	2,53 kW	0,53-2,54 kW	1,25 / 2,25 kW	0,90-2,80 kW	0,29-1,06 kW
P2	3 PS	0,5-3 PS	1,5 / 2,6 PS	0,50-3 PS	0,25-0,95 PS
l max	10,5 A	1,7 - 12,2 A	5,6 - 10 A	3,5 - 12 A	1,26 - 4,6 A
Suitable for saltwater chlorinator pools	<b>v</b>	✓	<b>v</b>	<b>~</b>	<b>v</b>
Single-phase	<b>~</b>	~	¥	<b>~</b>	~
Three-phase		~		<b>~</b>	~
Plug-and-play versions	<b>~</b>	~	¥	<b>~</b>	
Variable speed	<b>~</b>		¥		
Programmable relays	<b>~</b>		¥		
Digital inputs	<b>~</b>		¥		
Modbus-RTU interface	<b>v</b>				
Alarm	<b>v</b>		¥		
Frost protection function	<b>v</b>		¥		
Energy meter	<b>v</b>				
Drainage	<b>v</b>	~	¥	<b>~</b>	~
Energy efficiency class	IE4	IE3	IE4	IE3	IE3
Schutzart	IP55	IP55	IPX5	IP55	IP55





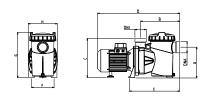
- » Variable speed
- » IE4 motor
- » MODBUS RTU
- » Suitable for < 7 g/l saltwater







Two-piece lid with key



## Ocean® Filter pump Inver iQ 300

The self-priming Ocean® filter pump Inver iQ 300 is equipped with inverter technology, is infinitely variable and can be operated at variable speed. The pump can be used for various pool sizes. The new IE4 permanent magnet motor is low-noise and highly efficient. Compared to a conventional ON/OFF pump, energy savings of up to 82% can be achieved.

The sensorless and brushless design of the motor extends the service life of the bearings and mechanical parts.

The pump is equipped with MODBUS-RTU and therefore has an open interface for integration into iQnnect and smart home systems.

The pump can also be controlled via the digital inputs using devices from the Aquastar range. This allows you to benefit from advantages such as demand-based filter performance during filtering and backwashing.

Alternatively, the control unit can also be installed up to 30 m away from the pump (minimum cable cross-section 4 x 2.5 mm<sup>2</sup>).

## FEATURES

- Highly efficient, sensorless and brushless IE4 motor
- Infinitely variable control
- 4 daily filter cleaning programs, individually configurable
- Volume flow up to 30m³/h at 10m
- Volume flow control
- External control via MODBUS-RTU, analog input 0-10V or current input 4-20mA possible
- Input for NTC temperature sensor
- 2 freely programmable relay outputs (5A/230V)
- 4 digital inputs (e.g. forced ON for overflow controls, heating control)
- Pump housing made of glass fiber reinforced plastic
- Stainless steel screws and stainless steel shaft
- Suitable for salt electrolysis (< 7gr/l)
- Maximum safety thanks to overpressure and underpressure protection, dry-running protection,
- protection against input voltage fluctuations
- Large pre-filter (4.6 l) incl. 2-part lid with key for easy opening
- Error message if pre-filter is dirty
- 2 drains
- Double connection options: internal thread 11/2" and external thread 2" (d63), high-quality IBG fittings included in the scope of delivery
- Low noise
- Ready to plug in
- Protection class IP55

	P1 kW	P2 kW - PS	l max. A	Flow rate bei 10 m	Spannung 50/60 Hz	Connection	max. db
iQ 300	2,53	2,20 - 3,00	10,5	< 30 m³/h	230 V, 1-Ph.	2" IG+AG	< 45

#### DIMENSIONS

	А	В	с	D	E	F	G	н	I	J	к	L
iQ 300	216	109	277	370	325	206	325	400	220	205	160	630
Product						C	G-kg	VE	Pr	od.No.	Pric	e€
Ocean® pool pump Inver iQ 300, 2.2 kW, 230 V, IE4 motor, variable speed, self-priming, large pre-filter, low-noise, MODBUS-RTU, suitable for salt electrolvsis. IP55							7.02	1.00	73	01537	240	7.60



NOTE Performance curves on the following pages.







#### » IE3 motor

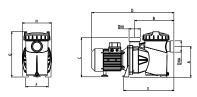
- » Suitable for < 7 g/l saltwater
- » Plug-and-play versions

## available





Two-piece lid with key





**NOTE** Performance curves on the following pages.

## Ocean® filter pump Series O

The self-priming Ocean® pump Series O for pools achieves a very high filtration performance. The particularly large pre-filter offers high filter quality and requires significantly less cleaning compared to conventional filter pumps.

The polycarbonate cover of the pre-filter is transparent and makes maintenance easier. The O series filter pump is designed so that there is no possible electrical contact with the water.

#### FEATURES

- Highly efficient IE3 engine, cataphoretic dip painting (KTL), single or three phase
- Double connection options: internal thread 11/2" and external thread 2" (d63), high-quality IBG fittings included in the scope of delivery
  - Available in six different sizes, from 0.5 to 3 HP
  - Large pre-filter (4.6l) including 2-part lid key for easy opening
  - Stainless steel screws + stainless steel shaft
  - Housing made of glass fiber reinforced plastic
  - Protection class IP55
  - 2 emptyings
  - Suitable for salt electrolysis (< 7gr/l)

	P1 kW	P2 kW - PS	l max. A	Flow rate bei 10 m	Spannung 50/60 Hz	Connection	max. db
O50	0,53 0,49	0,37 - 0,5	4,2 1,7	11,1 m³/h	230 V, 1-Ph. 400 V, 3-Ph.	2" IG+AG	66
075	0,74 0,70	0,55 - 0,75	5 2	13,5 m³/h	230 V, 1-Ph. 400 V, 3-Ph.	2" IG+AG	66
O100	0,97 0,92	0,75 - 1,0	5,5 2,2	18 m³/h	230 V, 1-Ph. 400 V, 3-Ph.	2" IG+AG	67
O150	1,38 1,33	1,10 - 1,50	7,3 2,9	21 m³/h	230 V, 1-Ph. 400 V, 3-Ph.	2" IG+AG	68
O200	1,84 1,78	1,50 - 2,00	9,2 3,5	24 m³/h	230 V, 1-Ph. 400 V, 3-Ph.	2" IG+AG	68
O300	2,64 2,54	2,20 - 3,00	12,2 5,0	29 m³/h	230 V, 1-Ph. 400 V, 3-Ph.	2" IG+AG	69

#### DIMENSIONS

	А	В	с	D	E	F	G	н	I	J	К	L
O50	216	109	109	370	325	206	325	400	220	205	160	550
075	216	109	109	370	325	206	325	400	220	205	160	550
O100	216	109	109	370	325	206	325	400	220	205	160	550
O150	216	109	109	370	325	206	325	400	220	205	160	580
O200	216	109	109	370	325	206	325	400	220	205	160	580
0300	216	109	109	370	325	206	325	400	220	205	160	630

Product	G-kg	VE	Prod.No.	Price €
Series O, single-phase 230 V				
Ocean® pool pump 050, 0.37 kW, 230 V, IE3 motor, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55, plug-in ready	12.50	1.00	7301525	561.60
Ocean® pool pump 075, 0.55 kW, 230 V, IE3 motor, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55, plug-in ready	12.50	1.00	7301527	603.20
Ocean® pool pump O100, 0.75 kW, 230 V, IE3 motor, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55, plug-in ready	14.00	1.00	7301529	660.40
Ocean® pool pump O150, 1.1 kW, 230 V, IE3 motor, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55, plug-in ready	17.00	1.00	7301531	722.80
Ocean® pool pump O200, 1.5 kW, 230 V, IE3 motor, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	18.50	1.00	7301533	847.60
Ocean® pool pump O300, 2.2 kW, 230 V, IE3 motor, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	22.00	1.00	7301535	993.20
Series O, three-phase 400 V				
Ocean® pool pump O50, 0.37 kW, 400 V, IE3 motor, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	13.00	1.00	7301526	592.80
Ocean® pool pump 075, 0.55 kW, 400 V, IE3 motor, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	13.00	1.00	7301528	639.60
Ocean® pool pump O100, 0.75 kW, 400 V, IE3 motor, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	14.00	1.00	7301530	676.00
Ocean® pool pump O150, 1.1 kW, 400 V, IE3 motor, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	15.50	1.00	7301532	733.20
Ocean® pool pump O200, 1.5 kW, 400 V, IE3 motor, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	17.00	1.00	7301534	858.00
Ocean® pool pump O300, 2.2 kW, 400 V, IE3 motor, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	19.00	1.00	7301536	1014.00



## IN FRESH COLOR



## PERSONALIZED: OCEAN® FILTER PUMP SERIES O

Give your pool equipment a personal touch!

Our powerful Ocean® filter pumps from the O series are now available in the trendy Peraqua colors Yellow and Blue. This way, your technical room will not only be functional but also a real eye-catcher.

Contact us for a no-obligation quote for the personalized filter pump starting from an annual quantity of 250 units.

info@peraqua.com



#### Ocean® filter pump control ECO 3 level

Ocean® filter pump control ECO for retrofitting of 3-phase pumps. This enables automatic control of filter times, release of salt electrolysis systems or heat pumps, forced ON/OFF function for overflow pools, etc.

#### FEATURES

- Power supply 1-phase, 230 V
- 3-stage speed control between 700-2800 r.p.m.
- 2 freely programmable relay outputs (5A/230V)
- 2 digital inputs
- NTC temperature sensor
- Contains the necessary protective measures for the pump (dry running protection and overload protection)
- 4 daily filter cleaning programs can be individually configured

Product	G-kg	VE	Prod.No.	Price €
Ocean® filter pump control ECO 3 level	3.14	1.00	7301538	1315.60

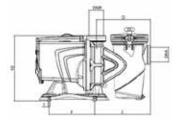
**3-speed rotation** 

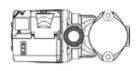


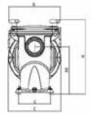
## » Variable speed

» 30 m<sup>3</sup>/h at 15.4 m

» Water-cooled









## Smart swimming pool pump E.Pro

E.Pro is a quiet and energy-efficient electric swimming pool pump with a particularly large pre-filter. E.Pro combines modern hydraulic components, frequency converter technology and a highly efficient, water-cooled permanent magnet motor. The speed of the pump can be adjusted, which enables high energy efficiency. Extremely quiet and reliable, developed for water circulation and filtration in swimming pools. Also suitable for specific applications e.g. in fisheries, agriculture and industry.

#### CONSTRUCTION

Transparent, antioxidant cover of the filter. Fibre glass reinforced technopolymer hydraulics in order to have a completely isolated motor shaft from the pumped fluid. Carbon / Alumina / NBR / AISI316 mechanical seal, filling screws that can be removed and reassembled without tools.

E.Pro is provided with a synchronous permanent magnet motor controlled by a frequency converter. The engine is water cooled (no engine fan) and runs extremely quiet. Aluminum housing with special coating to avoid oxidation. Support foot with rubber feet to reduce vibration.

## FEATURES

- Low noise: new water cooled engine
- High efficiency: thanks to the new engine, new hydraulics, new electronic engine control.
- Design: modern and compact
- Reliable: all components are designed for a long service life
- less models: one model includes the power of 4 pumps (0.33 kW, 0.5 kW, 0.75 kW, 1.1 kW)
- Control via 0-10V or digital inputs
- Suitable for salt electrolysis (< 30gr/l)

	P1 kW	P2 kW - PS	l max. A	Flow rate bei 10 m	Spannung 50/60 Hz	Connection	max. db
E.Pro 150	1,25	1,10 - 1,50	5,6	< 23 m³/h	230 V, 1-Ph.	2" IG	< 50
E.Pro 300	2,25	1,90 - 2,60	10	< 37 m³/h	230 V, 1-Ph.	2" IG	< 45

#### DIMENSIONS

	А	В	С	D	E	F	G	н	H1	H2	I
E.Pro 150	550	242	245	259	266	220	150	351	217	309	11
E.Pro 300	574	304	290	269	276	220	150	354	252	344	11
Product	roduct								Prod.No.	Pric	e€
E.Pro											
Smart pool pump E.Pro ter, low-noise, suitable f	e pre-fil-	22.00	1.00		7300445	254	7.07				
Smart pool pump E.Pro ter, low-noise, suitable f				ning, large	e pre-fil-	22.30	1.00		7300905	313	3.10
E.Pro, plug-in ready											
Smart pool pump E.Pro ming, large pre-filter, lov						22.03	1.00		7301255	269	9.73
Accessories											
Data cable for E.Pro 150		2.13	1.00		7300489	138	.80				



**NOTE** Performance curves on the following pages.



DESIGN

Innovative technological solution that combines design with robust materials and high corrosion resistance.



## **INTEGRATED PRE-FILTER**

Equipped with a large prefilter and a lid that can be opened without tools. This allows the filter basket to be easily removed and cleaned.



## **SYNCHRONOUS** PERMANENT **MAGNET MOTOR**

The new synchronous permanent magnet motor is water-cooled and guarantees high efficiency, reliability, and a low noise level.



## WATER COOLING

The motor is cooled by the circulating medium, so no fan wheel is required, resulting in more compact dimensions and a lower noise level. This allows the E-PRO to be installed in tight, poorly ventilated spaces.



Representative image without knurled screws



**USER INTERFACE** 

Intuitive interface for immediate control of the pump, allowing for settings suitable for every need. High-resolution LCD display.



## **ANTI-VIBRATION** FEET

Base plate, which ensures stability and vibration reduction through integrated rubber feet.



## **VARIABLE SPEED**

Thanks to the frequency converter, the speed and thus the flow rate can be adjusted, allowing for optimized performance and reduced energy consumption.



## **HYDRAULIC COMPONENTS**

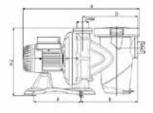
With high efficiency. Equipped with an impeller and integrated diffuser to improve efficiency.

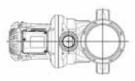


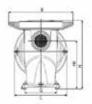




- » < 40 m³/h at 10 m
- » Custom sizes
- » Plug-and-play versions available







## Smart swimming pool pump Europro

Europro is a low-noise, particularly efficient, self-priming pool pump with a large pre-filter.

#### FEATURES

- Asynchronous motor for continuous operation, single or three-phase,
- Single-phase version with integrated thermal motor protection
- Carbon/Aluminium/NBR/AISI 316 mechanical seal
- Transparent lid that can be opened without tools. This simplifies cleaning of the pre-filter.
- Support foot with rubber feet to reduce vibrations
- Suitable for salt electrolysis (< 30gr/l)

	P1 kW	P2 kW - PS	l max. A	Flow rate bei 10 m	Spannung 50/60 Hz	Connection	max. db
Europro 50M	0,90	0,33 - 0,50	4,2	10 m³/h	220-2240 V, 1-Ph.	2″ IG	53
Europro 75M Europro 75T	1,00 0,95	0,50 - 0,75	5 3,5/2	14 m³/h	220-2240 V, 1-Ph. 230-400 V, 3-Ph.	2" IG	56
Europro 100M Europro 100T	1,30 1,20	0,75 - 1,00	6,3 4/2,4	18 m³/h	220-2240 V, 1-Ph. 230-400 V, 3-Ph.	2" IG	57
Europro 150M Europro 150T	1,60 1,50	1,10 - 1,50	7 5/2,9	23 m³/h	220-2240 V, 1-Ph. 230-400 V, 3-Ph.	2" IG	59
Europro 200M Europro 200T	1,90 1,90	1,50 - 2,00	8,6 6/3,5	28,6 m³/h	220-2240 V, 1-Ph. 230-400 V, 3-Ph.	2" IG	62
Europro 300M Europro 300T	2,80 2,80	2,20 - 3,00	12 8,7/5	40 m³/h	220-2240 V, 1-Ph. 230-400 V, 3-Ph.	2" IG	64

Dimensions	A	В	С	D	R	F	G	н	H1	H2	l	L
7300446 / 7301203	536	242	245	257	265	220	150	351	222	314	11	6,5
7300447	552	242	245	257	265	220	150	351	222	314	11	6,5
7300452	552	242	245	257	265	220	150	351	222	314	11	6,5
7300448	552	242	245	257	265	220	150	351	222	314	11	6,5
7300453	552	242	245	257	265	220	150	351	222	314	11	6,5
7300449	574	250	290	267	274	220	150	387	258	350	11	6,5
7300454	574	250	290	267	274	220	150	387	258	350	11	6,5
7300450	648	250	290	267	274	220	150	387	258	350	11	6,5
7300455	574	250	290	267	274	220	150	387	258	350	11	6,5
7300451	648	252	290	267	274	220	150	387	258	350	11	6,5
7300456	648	252	290	267	274	220	150	387	258	350	11	6.5

Product	G-kg	VE	Prod.No.	Price €
Europro, single-phase				
Smart pool pump Europro 50M, 0.33 kW, 220-240 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	16.00	1.00	7300446	707.77
Smart pool pump Europro 75M, 0.5 kW, 220-240 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55 $$	16.50	1.00	7300447	757.63
Smart pool pump Europro 50M, 0.33 kW, 220-240 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	17.00	1.00	7300448	792.52
Smart pool pump Europro 150M, 1.1 kW, 220-240 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	22.00	1.00	7300449	937.07
Smart pool pump Europro 200M, 1.5 kW, 220-240 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	24.00	1.00	7300450	1036.77
Smart pool pump Europro 300M, 2.2 kW, 220-240 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	24.50	1.00	7300451	1131.48
Europro, single-phase, plug-in ready				
Smart pool pump Europro 50M, plug-in ready, 0.33 kW, 220-240 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	16.30	1.00	7301203	804.60
Smart pool pump Europro 75M, plug-in ready, 0.5 kW, 220-240 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55 $$	16.80	1.00	7301204	844.82
Smart pool pump Europro 100M, plug-in ready, 0.75 kW, 220-240 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	17.30	1.00	7301275	884.95
Europro, three-phase				
Smart pool pump Europro 75T, 0.5 kW, 230-400 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	12.10	1.00	7300452	822.44
Smart pool pump Europro 100T, 0.75 kW, 230-400 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	13.80	1.00	7300453	857.31
Smart pool pump Europro 150T, 1.1 kW, 230-400 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	16.70	1.00	7300454	1011.85
Smart pool pump Europro 200T, 1.2 kW, 230-400 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	17.60	1.00	7300455	1121.50
Smart pool pump Europro 300T, 2.2 kW, 230-400 V, self-priming, large pre-filter, low-noise, suitable for salt electrolysis, IP55	19.90	1.00	7300456	1221.20



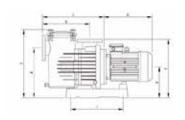
**NOTE** Performance curves on the following pages.



» Two different connection types
 » 6-15.3 m³/h at 10 m



Integrated pre-filter



## Smart filter pump series M

self priming, solvent socket d50/female thread 1½", 230 V with pre-filter

## APPLICATION

Electrical self priming pump for pools with large pre-filter. Pre-filter with transparent, polycarbonate lid that easily allows inspection of the interior of the pre-filter sieve. No possible electrical contact with the water as no part of the motor is in open to it.

#### MATERIAL

Pump body, lid and diffuser in polypropylene, resistant to the chemical products in the pools and reinforced with glass fibre, guaranteeing excellent duration. Shaft in stainless steel AISI316. Noryl impeller. Transparent lid in polycarbonate. Support base in aluminium. Mechanical seal in carbon-ceramic and stainless steel AISI316. Bolts in AISI304. The pump allows two possible connections: Female thread 1½", Connection for PVC pipe d50 to glue

#### MOTOR

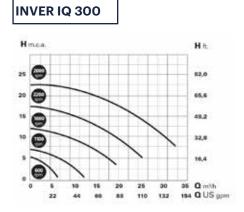
Asynchronus motor, sealed from external ventilation. Protection IP55. 2,850 rpm, 50/60 Hz . Class F insulation. Motor bearings greased for life and selected to ensure long duration and silent working.

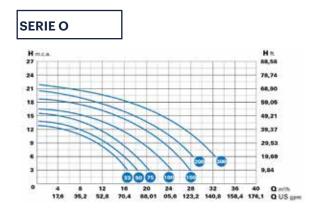
	P2 (kW)	) P1 (kW	/) Kond.	F DNA/DI	NI Netto kg	Brutto kg
M25 M	0,16	0,29	20	1 ½"	10	11,6
M33 M	0,25	0,38	20	1 1⁄2"	10	11,6
M50 M	0,37	0,57	20	1 1⁄2"	10	11,6
M75 M	0,55	0,88	20	1 1⁄2"	11	12,6
M100 M	1 0,70	1,06	20	1 1⁄2"	11	12,6

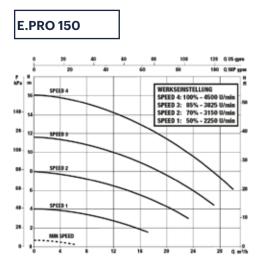
## DIMENSIONS

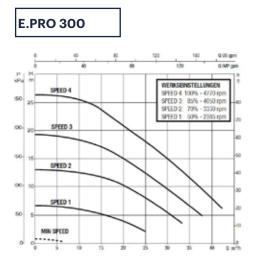
Dimensions	А	В	С	D	E	F	G	Н	I	J	L	Α	н
M25	191	205	470	285	95	233	140	180	265	197	630	230	360
M33	191	205	470	285	95	233	140	180	265	197	630	230	360
M50	191	205	470	285	95	233	140	180	265	197	630	230	360
M75	191	205	470	285	95	233	140	180	265	197	630	230	360
M100	191	205	470	285	95	233	140	180	265	197	630	230	360

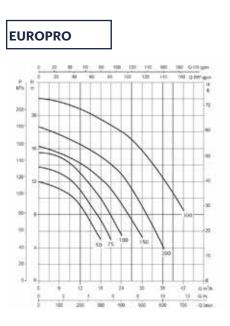
Product	G-kg	VE	Prod.No.	Price €
Series M, single phase 230V				
Smart filter pump M25 self-priming solvent socket-female thread d50-1 $\%''$ 6m3/h 230V with pre-filter	11.60	1.00	77590	459.89
Smart filter pump M33 self-priming solvent socket-female thread d50-1 $\%''$ 8m3/h 230V with pre-filter	11.60	1.00	77591	459.89
Smart filter pump M50 self-priming solvent socket-female thread d50-1 $\%''$ 10 m3/h 230V with pre-filter	11.60	1.00	77592	488.32
Smart filter pump M75 self-priming solvent socket-female thread d50-1 $\%''$ 12,5 m3/h 230V with pre-filter	12.60	1.00	77594	502.48
Smart filter pump M100 self-priming solvent socket-female thread d50-1 ½" 15,3 m3/h 230V with pre-filter	12.60	1.00	77595	554.00
Series M, three phase 400V				
Smart filter pump M25 self-priming solvent socket-female thread d50-1 $\%''$ 4m3/h 400V 0,16 kW, 0,25 HP	11.60	1.00	77590a	507.31
Smart filter pump M33 self-priming solvent socket-female thread d50-1 $\%''$ 6m3/h 400V 0,25 kW, 0,33 HP	11.60	1.00	77591a	507.31
Smart filter pump M50 self-priming solvent socket-female thread d50-1 $\%''$ 8m3/h 400V 0,33 kW, 0,5 HP	11.60	1.00	77592a	525.13
Smart filter pump M75 self-priming solvent socket-female thread d50-1 $\%''$ 10 m3/h 400V 0,55 kW, 0,75 HP	12.60	1.00	77594a	542.96
Smart filter pump M100 self-priming solvent socket-female thread d50-1 ½" 14m3/h 400V 0,75 kW, 1 HP	12.60	1.00	77595a	566.51



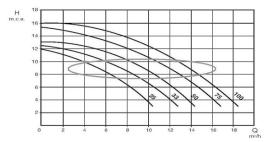














# CONTROLS

128	Pool controls
135	Niveau-, temperature controls
136	Solar controls

## Qnnect SMART POOL SYSTEM

ONE POOL. ONE SYSTEM. ONE SMART HOME APP.

## THE ENTIRE POOL CONTROL IN A SINGLE APP.

iQnnect is the integration of intelligent, networked pool technology from the Peraqua® product range for fully automated pool control. Aiming to provide a completely automatic, safe, and sustainable pool system that can be operated via a smart device, iQnnect by Peraqua® offers 100% added value in daily pool operation.





**NOTE** The iQnnect system pre-piped and assembled on a compact BASE can be found in the chapter Filter & Filtration Media "iQmfort BASE - Pool Automation."





## SUCCESSFUL CONNECTION

The close collaboration in the development of the Aquastar® Air with Loxone® enables the wireless integration of the pool control into the Loxone® app. "Air" refers to the wireless connection between the Aquastar® Air and the Loxone® Miniserver, enabling fully automated filter and backwash control.



## FIRMLY **LINK**ED

The link refers to the interface in the Loxone<sup>®</sup> Miniserver for wiring with Loxone<sup>®</sup> Extensions. This allows the integration of numerous additional devices. iQnnect requires the interface to integrate the heat pump, filter pump, underwater lighting, and water treatment.

To integrate the components into the network, various extensions are needed. Extensions act as interpreters for the iQnnect components. They send and receive program codes and signals, allowing flexibility in the functions of the automated pool control.

In general, if a device is compatible with an extension for communication, it can be integrated into the iQnnect network. This allows, for example, the integration of pool covers, video surveillance, counter-current systems, outdoor lighting, and much more. Our devices are also integrated into the Loxone Library, making integration incredibly easy.

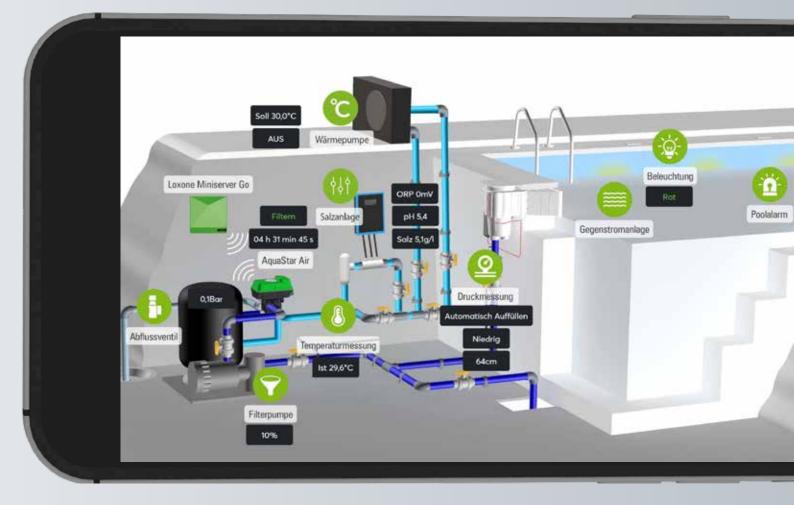


## **CONTROL, MONITOR, NOTIFY**

Through the app, the functions of the pool technology can be operated either manually or automatically.

With the Automation Designer, various functions can be interdependent or different modes can be created.

For example, with one click on the "Pool Party" mode, the speed of the filter pump and the chlorine production can be increased, while simultaneously activating a color change in the underwater lighting. The pool owner will also receive notifications for deviating values, error messages, or when functions are activated.



The system diagram in the app provides a clear display of all pool settings and values, such as pH level, redox potential, and salt content. The values can be adjusted directly through the diagram.



#### NOTE

In the Loxone® Library, you will find information and template files for the easy integration of our Peraqua products into the Loxone® software. https://library.loxone.com/?s=peraqua





- » Control and automation of backwash and filtration times with a user-friendly weekly schedule in the app.
- » Sustainable and energy-efficient filtration as needed and based on the situation, thanks to the speed-controlled Ocean® Filter Pump Inver iQ 300.
- » With the integrated energy meter (Ocean<sup>®</sup> Inver iQ300), optional integration into the Loxone<sup>®</sup> energy management system is possible.
- Individual flow rate or speed of the filter pump for different cycles, e.g., slow filtration speed and higher flow rate during backwashing.

## **LEVEL CONTROL**

Poolabdeckung

- » Regulating the water level with a pressure sensor (overflow basin) or float switch (skimmer basin).
- » The pressure sensor measures the fill level with centimeter accuracy.
- Automatic level control provides dry run protection, which protects components such as the mechanical seal of the filter pump.
- Protection against overflow in conjunction with the pressure sensor, thanks to the automatic triggering of backwashing.
- » Integrated fill time monitoring as a safety feature and for leak detection.

## WATER TEMPERATURE CONTROL

- » Heating, cooling, or heating & cooling with the Inver Silence heat pump thanks to inverter technology.
- » The automatic operation is controlled by a preset target temperature.
- » The automatic regulation of the water temperature with the Inver Silence heat pump is highly energy-efficient compared to traditional on/off heat pumps.
- » Optional integration via Loxone<sup>®</sup> Energy Manager allowing the pool to be heated only during excess electricity availability.

## WATER TREATMENT

- » Automatic dosing and real-time measurement of salt content, redox value, free chlorine level, and pH level.
- » With automatic water treatment using complete dosing systems, chemical use can be minimized. Only the necessary amount is added when needed. This helps pool owners maintain water quality and keep the pool clean and hygienic for a long time.
- » Recording of measurement values.

## **UNDERWATER LIGHTING**

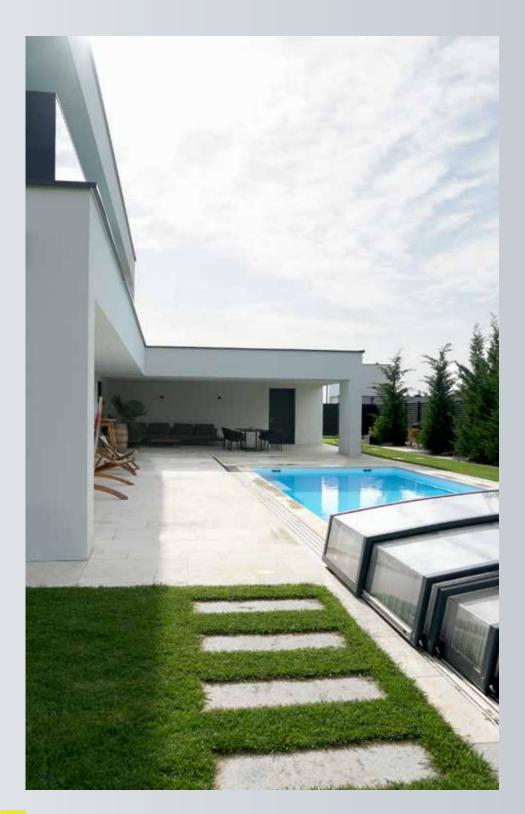
- » The VISION Pro RGBW underwater lighting can be integrated via DMX extension, allowing it to be dimmed and controlled for color changes.
- » Innovative technologies like QuickConnect<sup>™</sup>, PressFit<sup>™</sup>, or ClickOn<sup>™</sup> enable easy installation and a practical setup.
- » Color scenarios can be changed by "touch" or automatically via time control.



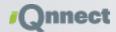
## **PRACTICAL EXAMPLE: IQNNECT**

The pool and house are designed to form a harmonious unit and be controllable together via a smart home system. Based on this request from the homeowners, a concept for the entire system was developed. For the selection of the smart home system, they chose Loxone® because it allows for seamless integration of the smart home and smart pool when combined with a Peraqua® iQnnect pool.

All functions of the house and pool technology can be fully automated and controlled through the Loxone<sup>®</sup> Smart Home app. Even the integration of a photovoltaic system can be easily accomplished. The finished system is not only very easy and time-saving to operate via the app, but also highly energy-efficient thanks to the smart coordination of the individual components.













Controls 127

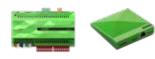




Smart control via the Loxone® Smart Home app



One app for the central control of the entire pool technology.



The Loxone® Miniserver connects Smart Home and Smart Pool.



In the event of a power failure, Aquas tar® automatically moves to a safe position.





## Loxone® AQUASTAR® Air

#### FEATURES

- Aquastar® 6-way back wash valve for automatic filter, back wash, rinse, circulation, draining and closed/winter
- IP65 protection code
- Electric actuator 100 240V AC
- Direct connection for 2- or 3-way ball valve EO510 (for instance: draining system)
- Retrofit for all well-known filter brands possible with the 11/2" and 2" Praher side mount or top mount
- valve, incl. Praher ABS piping and union systems for a quick and easy installation
- Free visualisation with Loxone® Miniserver via iPhone, iPad und Android
  - Free updates via Loxone® Miniserver

#### INTERFACES

- 1 wire connection for installation of 1-wire temperature sensors
- 1 analogue input 0.5 5V (for example for filter pressure monitoring)
- 1 analogue input 0 10V (for example for pressure sensors for water level control)
- 3 relais 250VAC 5A freely definable
- Loxone® Air technology for wireless connection to the Loxone® Miniserver
- Direct pump connection (250V AC, 8A)

#### **EXTENSION OPTIONS**

The Aquastar® Air can be integrated into a Loxone® smart home system via a Loxone® miniserver. This integration opens up numerous new application possibilities, as smart home and smart pool functions can be combined and used together:

- Integration of counter current systems
- Control of the pool lighting or integration of the pool lighting into the Smart Home lighting concept • Integration and control of house and pool technology (shading, alarm, energy, music, etc.)
- Numerous functions for saving energy (e.g. yield-dependent control of the pool pump when using a

photovoltaic system, economy circuit for overflow pools, excess heating in the event of a PV surplus, etc.).

#### SCOPE OF DELIVERY

- Loxone® AQUASTAR® Air
- 1-Wire temperature sensor
- SMA antenna 868 MHz

PRODUCT NOTE: A Loxone® Miniserver is required for operating the Loxone® Aquastar®. The Loxone® Miniserver is not included in the scope of delivery. A Miniserver can be obtained directly from Loxone® or a Loxone® partner.

Product	G-kg	VE	Prod.No.	Price €
Loxone Aquastar Air SM10 1 ½" ABS black, thread BSP, Top+Bottom solvent MOP 3,5 bar NBR tpe, 100-240 VAC	4.86	1.00	131372A	2821.46
Loxone Aquastar Air SM20 2" ABS, black BSP thread, top+bottom slip, MOP 3,5 bar NBR tpe 100-240 VAC	5.91	1.00	131373A	2860.34

## iQnnect Software packages

- for salt electrolysis systems or chlorine dosing systems
- for skimmer or overflow pools
- consists of a Loxone© Config file including all interfaces for automatic filter & backwash processes,
- filter pump control, water disinfection, level control and light control
- simple and time-saving installation for Loxone© partners
- proven, tested open source system
- software well-tested in practice
- Delivered on USB stick

Product	G-kg	VE	Prod.No.	Price €
iQnnect software complete package for skimmer pools, DOS-COM- PLETE/DOS-NET, incl. Aquastar Air, iQntrol dosing system DOS-COM- PLETE/DOS-NET, Ocean® Inver iQ300, Smart Inverter heat pump, RGB lamps DMX, level control float switch	0.02	1.00	7301785	603.20
iQnnect software complete package for skimmer pools, SALT-COM- PLETE, incl. Aquastar Air, iQntrol salt electrolysis system SALT-COM- PLETE, Ocean® Inver iQ300, Smart Inverter heat pump, RGB lamps DMX, level control float switch	0.02	1.00	7301786	603.20
iQnnect software complete package for overflow pools, DOS-COM- PLETE/DOS-NET, incl. Aquastar Air, iQntrol dosing system DOS-COM- PLETE/DOS-NET, Ocean® Inver iQ300, Smart Inverter heat pump, RGB lamps DMX, level control pressure sensor	0.02	1.00	7301787	603.20
iQnnect software complete package for overflow pools, SALT-COM- PLETE, incl. Aquastar Air, iQntrol electrolysis system SALT-COMPLETE, Ocean® Inver iQ300, Smart Inverter heat pump, RGB lamps DMX, level control pressure sensor	0.02	1.00	7301788	603.20





#### Loxone pressure sensor

for water level control in compensation tank

Product	G-kg	VE	Prod.No.	Price €
Pressure sensor, 0-10V, 0-0,3 bar	0.18	1.00	740046	494.62

## Pressure sensor for Loxone Aquastar Air incl. connection cable

for filter pressure control

Product	G-kg	VE	Prod.No.	Price €
Spare part kit pressure sensor for Loxone Aquastar Air, set includes pressure sensor and connection cable	0.09	1.00	131378	489.48





## **AQUASTAR®** Air extensions

The Aquastar<sup>®</sup> Air can be used to control the filter and backwash times. It can also be used to regulate the water level and measure the ACTUAL temperature.



PRESSURE SENSOR

for automatic backwashing in the event of a pressure increase (not included in the delivery)



PRESSURE SENSOR

for level regulation of the overflow expansion tank (not included in the deliverv)

€∕

TEMPERATURE SENSOR

## iQnnect pool system with AQUASTAR® Air

Additional integration of underwater lighting (controllable and dimmable), heat pump, filter pump, salt electrolysis and dosing systems via extensions.



LOXONE MODBUS\* Control and integration of salt electrolysis units and heat pumps



LOXONE DMX\* Control and integration of Adagio Pro underwater lighting



LOXONE AO

Integration of Smart swimming pool pump E.PRO



**NOTE** Further information about Smart Pool and iQnnect can be found here:



www.iqnnect.net

This is the address for a clear presentation of all information about the iQnnect system.



The iQnnect guide provides detailed information on the implementation of an iQnnect pool. This includes technical information, installation instructions, system diagrams, article numbers and much more.

shop.peraqua.com/en/downloads

## Qmfort ALL-IN-ONE POOL SYSTEM

EIN POOL. EIN SYSTEM. EINE STEUERUNG.

## AUTOMATICALLY CONTROL THE ENTIRE POOL TECHNOLOGY.

A good, connected control system for the pool saves the pool owner a lot of time, is energy-efficient, and contributes to sustainable operation. With the right pool technology, many automation options are available. The heart of the iQmfort pool is the Aquastar<sup>®</sup> Control-P6, through which many functions of the entire Peraqua<sup>®</sup> pool technology can be centrally controlled.



## **FUNCTIONS**

## **FILTER & FILTER PUMP CONTROL**

- » Automation of backwash and filtration times with a userfriendly weekly schedule.
- » Sustainable and energy-efficient filtration.
- » Increase in pump performance during the backwashing process, resulting in more efficient filter cleaning.

## WATER TEMPERATURE CONTROL

- » Heating, cooling, or heating & cooling with the inverter heat pump thanks to inverter technology.
- » The automatic operation is regulated by a preset target temperature.
- » Automatic regulation of the water temperature with the Full-Inverter Plus heat pump.
- » PV-ready: The heat pump can be activated via a release contact as soon as the photovoltaic system produces enough energy.

## **LEVEL CONTROL**

- » Regulate the water level with a float switch (skimmer basin).
- » Automatic level control provides dry run protection, which helps protect components such as the mechanical seal of the filter pump.

## WATER TREATMENT

» Automatic water treatment allows for the reduction of chemical use. Chlorine and pH-minus are dosed only as needed and in the required amounts. This helps the pool owner maintain water quality and keep the pool clean and hygienic over a long period of time.

## UNTERWASSERBELEUCHTUNG

- » Innovative technologies such as QuickConnect™, PressFit™, or ClickOn™ enable easy installation and a practical setup.
- » Color scenarios can be changed automatically via time control.





» Automatic control of the entire pool technology

## Pool Control-P6 AQUASTAR® Control with pressure sensor

the Aquastar Control® is a fully automated backwash system for the Praher Plastics® 6 way backwash valve in sizes 1½", 2" and 3". With its intelligent electronic control system and easy-to-read display it provides perfect clarity and numerous fully automatic functions on a single unit for use in swimming pools as well as commercial and industrial water purification. The Aquastar can also be programmed to suit individual requirements.

## FEATURES

- Automation of 6-way valves 1½", 2" and 3" from Praher Plastics® Austria
- A lifting and rotating actuator with control functions
- 24V AC/ DC and 100 265V AC
- Real RTC with 10 year battery
- Easy to retrofit
- Operation with display and buttons included into the cover
- Automated backwash trigger
- Automated pump trigger
- Level control
- Temperature or solar control
- Error Handling integrated
- Relays with gold contacts
- Configurable relays
- Configurable digital inputs
- Protection IP65
- Optical position indicator
- Additional position CLOSED
- Additional position Winter

Product	G-kg	VE	Prod.No.	Price €
AQUASTAR® Control with pressure sensor, with valve				
AquaStar Control with pressure sensor, SM10 AO 1 ½" ABS black, thread ends R 1 ½" BSP MOP 3,5 bar NBR, tpe 100-240 VAC	5.23	0.00	131496	2765.93
AquaStar. Control with pressure sensor, SM20 AO 2" ABS black thread ends, R 2" BSP MOP 3,5 bar NBR tpe, 100-240 VAC	6.10	0.00	131497	2834.80
AquaStar Control with pressure sensor, SM31 AO 3" ASA-GF nature, thread ends 3",BSP MOP 5 bar NBR EPDM, 100-240 VAC	11.69	0.00	131502	4223.31
Accessories				
2/2-Way Solenoid Valve 24VDC 6211 NBR, IP65, SCE 238C002 24VDC	0.44	1.00	50631	436.85
Miniature-Float switch 5m cable MSK2-PVC-PG7-S 0040	0.01	1.00	31150	256.52
Miniature-Float switch 15m cable MSK2-PVC-PG7-S 0040	0.40	1.00	31152	335.08



**NOTE** Dimensions in the chapter on automatic backwash valves.



position. Available from February 2025!





#### » Includes pool management

» Touchscreen

» App-compatible

» Plug-and-play

 » Low-salt compatible (up to 12.5g Cl/h at 2g/l salt concentration)

» Also suitable for magnesium salt



Class B DIN EN 17645



#### DID YOU KNOW THAT ...

...our iQntrol SALT-COMPLETE could just as well be called an electrolysis system? Electrolysis (from the Greek hydor meaning "water" and lysis meaning "solution, breakdown, dissolution") formally refers to the splitting of a chemical compound in reaction with water. This means that every electrolysis system is a salt system.

## iQntrol salt electrolysis system SALT-COMPLETE

iQntrol SALT-COMPLETE is a high-precision disinfection system with intelligent pool management functions, measures the salt content and the redox value, monitors the set pH value, adjusts the dosage to the changing ambient conditions, doses the set amount of algaecide daily in relation to the swimming pool volume

#### POOL MANAGEMENT FUNCTIONS

- Filter times (two time intervals per day)
- Level control: The water level can be monitored with the optional pressure sensor or float switch; the water level can be monitored in up to four levels for overflow basins

- Backwash control (backwash frequency): in combination with the Aquastar Easy 2 automatic backwash valve (backwash duration)

- Pump control: connection for ON/OFF pump via integrated socket, for speed-controlled pump via 4 potential-free contacts, when changing the valve position (automatic 6-way valve) the pump is

- switched off, when backwashing the speed is increased for more efficient backwashing
- Heating control: Intelligent control of the set water temperature for electric heaters, heat exchangers, heat pumps (supports temperature-dependent heat pump release)
- Economy mode possible for overflow basins

#### PRODUKCT DETAILS

- For private pools up to 75 m<sup>3</sup>
- Dosing capacity: 25g Cl/h
- Required salt concentration: 1.5 4 g/l
- Measuring parameters: Salt content, redox value, pH value, water temperature, flow rate
  - Dosing: pH minus, algaecide
- Dosing pump capacity: 60 ml/min, max. 1 bar
- App-capable, RS485+LAN interface, read & alarm functions
- Water-cooled
- Touch screen
- Ready to plug in
- Max. operating pressure: 1.5 bar
- Power supply: 230 V AC 50 60 Hz
- Incl. flow sensor with fine filter, salt content sensor integrated in the fine filter
- Max. output for directly plugged-in filter pumps: 1.4kW | 230V
- Frost protection: Winterisation without draining the water, heating is activated from a certain outside temperature and the pool pump is active 24 hours a day
- Protection class IP30

Product	G-kg	VE	Prod.No.	Price €
iQntrol salt electrolysis system SALT-Complete 25g Cl/h	14.00	1.00	7301688	4979.29









» Includes pool management

» App-compatible, RS485+LAN

» Dosing:

Liquid chlorine, pH-minu, Algaecide, Flocculant



## iQntrol dosing system DOS-COMPLETE

iQntrol DOS-COMPLETE is a high-precision disinfection system with intelligent pool management functions. Thanks to the four dosing pumps, disinfection, pH liquid, algaecide and flocculant can be dosed with one device. The touchscreen display shows all the information about the water quality and makes it easy to set up the entire system. With the internet connection, you can monitor the parameters of your pool via a mobile and/or web application.

#### WATER TREATMENT

The DOS-COMPLETE dosing system ensures crystal-clear water in your pool using the smallest possible quantities of chemical additives. The free chlorine or redox value is measured using a membrane probe or redox probe. It monitors the set pH value of the pool water and automatically adjusts the dosing to the changing ambient conditions.

In addition, the dosing system doses the set amount of algaecide daily in relation to the swimming pool volume. The additional use of algaecide reduces the chlorine requirement. The slow, continuous dosing of flocculant binds even the smallest impurities and improves filter efficiency.

#### POOL MANAGEMENT FUNCTIONS

- Filter times (two time intervals per day)
- Level control: The water level can be monitored with the optional pressure sensor or float switch; the water level can be monitored in up to four levels for overflow basins

- Backwash control (backwash frequency): in combination with the Aquastar Easy 2 automatic backwash valve (backwash duration)

- Pump control: connection for ON/OFF pump via integrated socket, for speed-controlled pump via 4 potential-free contacts, when changing the valve position (automatic 6-way valve) the pump is switched off, when backwashing the speed is increased for more efficient backwashing

- Heating control: intelligent control of the set water temperature for electric heaters, heat exchangers, heat pumps (supports temperature-dependent heat pump release)

- Economy mode possible for overflow basins

## PRODUCT DETAILS

- For pools up to 250 m<sup>3</sup>
- Measuring parameters: Redox value/free chlorine, pH value, water temperature, flow rate
- Dosing: liquid chlorine, pH minus, algaecide, flocculant
- Dosing pump capacity: 60 ml/min, max. 1 bar
- App-capable, RS485+LAN interface, read & alarm functions
- Touch screen
- Plug-in ready
- Max. operating pressure: 1.5 bar
- Connection: external thread 1/4"
- Power supply: 230 V AC 50 60 Hz
- Incl. flow sensor with fine filter, pH probe, Redox/CLF probe
- Filter pump connection: max. 230 V, potential-free relay
- Max. power for directly connected filter pumps: 1.4kW | 230V
- Frost protection: Winterisation without draining the water, heating is activated from a certain outside temperature and the pool pump is active 24 hours a day
- Protection class IP30

Product	G-kg	VE	Prod.No.	Price €
iQntrol dosing system DOS-Complete CLF	9.00	1.00	7301685	5687.14
iQntrol dosing system DOS-Complete Redox	9.00	1.00	7301686	5129.74



## iQmfort pool control set Skimmerpool Complete

This set is used as an accessory for the following water treatment systems: DOS-Complete REDOX/CLF and SALT-Complete.

This set allows the full potential of the pool management functions of the dosing systems to be utilised: - Automatic backwash via Aquastar Easy II

- Automatic level control using float switch + solenoid valve
- Temperature control thanks to included temperature sensor
- Filter pump control for Ocean Inver iQ300 (backwash with increased volume flow)
- App function, allowing remote access (read function) to water parameters such as pH value, redox value, Cl value, temperature and chemical fill level
- Notifications via app in the event of a fault
- Photometer for easy monitoring of automatic water treatment: should be carried out weekly in accordance with ÖVS recommendation.

Product	G-kg	VE	Prod.No.	Price €
iQmfort pool control set skimmerpool Complete, Aquastar Easy II, float switch, solenoid valve, Ocean Inver iQ300, Lovibond Scuba3s, Transparent vaccination line	0.00	1.00	7301813	4710.56



## iQmfort pool control set overflow pool Complete

This set is used as an accessory for the following water treatment systems: DOS-Complete REDOX/CLF and SALT-Complete.

This set allows the full potential of the pool management functions of the dosing systems to be utilised: - Automatic backwash via Aquastar Easy II

- Automatic level control using level sensor + solenoid valve
- Temperature control thanks to included temperature sensor
- Filter pump control for Ocean Inver iQ300 (backwash with increased volume flow)
- App function, allowing remote access (read function) to water parameters such as pH value, redox value, Cl value, temperature and chemical fill level
- Notifications via app in the event of a fault
- Photometer for easy monitoring of automatic water treatment: should be carried out weekly in accordance with ÖVS recommendation.

Product	G-kg	VE	Prod.No.	Price €
iQmfort pool control set overflow pool Complete, Aquastar Easy II, level sensor, solenoid valve, Ocean Inver iQ300, Lovibond Scuba3s, Transparent vaccination line	0.00	1.00	7301814	5588.20



## Water level control NC01

Ready to plug in, with time delay switch (from 2–135 sec), incl. magnetic floater for easy installation on Ocean® skimmer M5 and PT, as those skimmers are equipped with an integrated and adjustable holder for the niveau floater.

Product	G-kg	VE	Prod.No.	Price €
Niveau-Set NC01 230VAC with solenoid valve	1.30	1.00	130293	986.94
2/2 way solenoid valve 24VDC NBR, G 1/2", IP65, normally closed	0.44	1.00	50631	436.85
Miniature-Float switch 5 m cable	0.01	1.00	31150	256.52
Miniature-Float switch 15m cable	0.40	1.00	31152	335.08



## High quality solenoid valve

made of brass, 230VAC, normally closed

Product	G-kg	VE	Prod.No.	Price €
1/2"	0.54	1.00	7300699	236.08
3/4"	1.19	1.00	7300700	358.22
1″	1.19	1.00	7300701	573.15



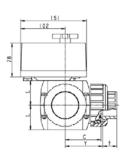
## Socket for solenoid valve

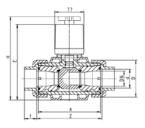
with varistor and LED

Product	G-kg	VE	Prod.No.	Price €
Socket for solenoid valve with varistor and LED for iQntrol-P5 und iQntrol-P4 (in order to avoid overvoltage)	0.03	1.00	7300702	64.28
Socket for solenoid valve with varistor and LED for iQntrol-P5 und iQntrol-P4 (in order to avoid overvoltage) incl. 90° schuko plug and connected 1,5m cabel	0.30	1.00	7300845	132.40



» Plug-and-play





## Solar control SCO1 with 2-way ball valve

consisting of a ready to plug-in compact control unit, the required pool temperature can be set manually (+20  $^{\circ}{\rm C}$  up to +40 Grad  $^{\circ}{\rm C}$ ).

## TECHNICAL DATA

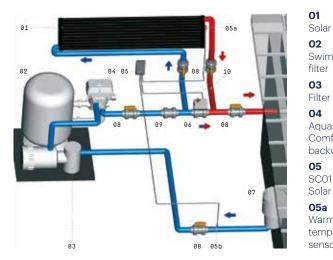
- Cold water sensor with 3 m cable
- Warm water sensor with 10 m cable
- Original Praher® 2-way PVC ball valve with EO510 electric actuator
- IND 12-24 V AC/DC (DN40/d50 or DN50/d63)
- Manual override
- IP54 protection code
- CE-marking
- Optical position indication

#### DIMENSIONS

d	DN	G	А	D	E	н	t	Z	PN
mm	mm	Zoll	mm	mm	mm	mm	mm	mm	bar
50	40	1½"	77	101,5	135	155	31,5	87	16
63	50	2"	87	115,3	142	163	38,5	99	16

Product	G-kg	VE	Prod.No.	Price €
Solar set SC01 mit 2-way ball valve S6 DN40 PVC PVCu solvent socket ends d50 metric PN3 EPDM PTFE EO510 24V IND	2.83	1.00	129635	1113.06
Solar set SC01 mit 2-way ball valve S6 DN50 PVC PVCu solvent socket ends d63 metric PN3 EPDM PTFE EO510 24V IND	3.11	1.00	129636	1176.14

#### INSTALLATION SCHEME



## ...

Solar collectors **02** Swimming pool filter

03 Filter pump 04

Aquastar® Comfort, autom. backwash valve **05** 

Solar controls

**05a** Warm water temperature sensor

#### 05b

Cold water temperature sensor

## 06

Solar pump **07** 

Ocean® skimmer deluxe M5

## 08

PVC 2-way ball valve S6

09

PVC cone check vlave



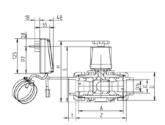
NOTE

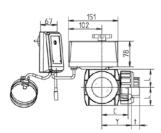
PE absorbers can be found in the chapter on pool heating.





» Plug-and-play





## Solar control SC01 with 3-way ball valve

consisting of a ready to plug-in compact control unit, the required pool temperature can be set manually (+20  $^{\circ}{\rm C}$  up to +40 Grad  $^{\circ}{\rm C}$ ).

## **TECHNICAL DATA**

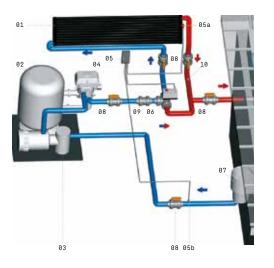
- Cold water sensor with 3 m cable
- Warm water sensor with 10 m cable
- Original Praher® 2-way PVC ball valve with EO510 electric actuator
- IND 12-24 V AC/DC (DN40/d50 or DN50/d63)
- Integrated pressure hole in the ball
- Manual override
- IP54 protection code
- CE-marking
- Optical position indication

## DIMENSIONS

d	DN	G	Α	с	D	Е	н	L	Y	t	Z	PN
mm	mm	Zoll	mm	mm	mm	mm	mm	mm	mm	mm	mm	bar
50	40	1½"	162	81	101	200	220	56	85,5	31,5	171	16
63	50	2"	181	90,5	121,5	216	236	64	96,5	38,5	193	16

Product	G-kg	VE	Prod.No.	Price €
Solar set SC01 with 3-wayball valve s4 DN40 PVC PVCu solvent socket ends d50 metric PN3 EPDM tpe EO 510 24V IND solar	4.09	1.00	129637	1314.20
Solar set SC01 with 3-wayball valve s4 DN50 PVC PVCu solvent socket ends d63 metric PN3 EPDM tpe EO 510 24V IND solar	5.10	1.00	129638	1534.10

#### INSTALLATION SCHEME



## 01

Solar collectors **02** Swimming pool filter

**03** Filter pump

**04** Aquastar Comfort, autom. backwash valve

**05** SC01

Solar control **05a** 

Warm water temperature sensor

## **05**b

Cold water temperature sensor **06** 

Ocean skimmer deluxe M5

**07** PVC 2-way ball

valve S6

PVC cone check vlave

#### 09

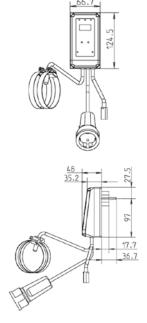
Energy PVC pipes and fittings

10

power supply, socket



#### **Plug-and-play**



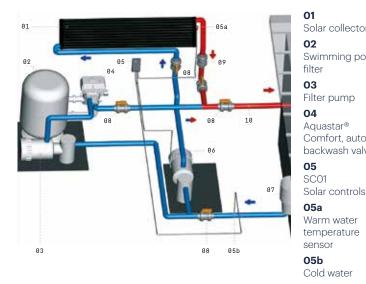
## Solar control SCO2

#### the SCO2 consists of a ready to plug-in and compact (acc. to DIN) control box, the required pool temperature can be set manually.

Furthermore this control system has an integrated connection for the "solar pump" 230V for direct control, digital display, cooling function as control function that in case of increasing pool water temperature set-up temperature is not exceeded ("red blinking leds"), adjustment of temperature difference between pool and collector from +2°C up to 20°C, switch from Celsius to Fahrenheit possible. Furthermore there are incluced a cold water temperature sensor with 3 m connection cable as well as a warm water temperature sensor with 10 m connection cable which have to fixed after the skimmer or the solar absorber. The SCO2 solar controls are mainly used for solar heatings in private pools. This provides a substantial extension of the outdoor pool season.

Product	G-kg	VE	Prod.No.	Price €
Solar-Control SC02 230VAC	1.45	1.00	120848	767.03

#### INSTALLATION SCHEME



Solar collectors Swimming pool

Filter pump

PVC 2-way ball Comfort, autom. valve S6 backwash valve 09

PVC cone check vlave

temperature

Solar pump

deluxe M5

Ocean® skimmer

sensor

06

07

08

10

Energy PVC pipes and fittings



## Solar control SCO4 with 2- and 3-way ball valve

#### ECONOMICAL AND EFFICIENT 2 AND 3 WAY PVC VALVE WITH INTEGRATED SOLAR CONTROL.

The SCO4 which can be easily integrated in the hose piping by using hose nozzles (optional accessories).

Another possibility is the direct installation on the Ocean V6 (installation diagram on request). With this compact solar control all necessary functions are integrated with the EO510 electric actuator. Adjustment of pool water temperature from +20°C up to +40°C is possible. Also included are: a cold water sensor with 3 m connection cable, and a warm water sensor with 10 m connection cable (each one) which can be fixed to the piping or after the skimmer respectively on the solar absorber, 2 or 3 way Praher PVC ball valves DN40/ d50 or DN50/d63 with EO510 electric actuator 230V AC/DC with integrated balance hole in the ball (3 way), manual override, protection code IP54, CE marking and optical position indication.

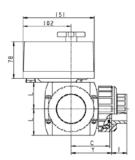
Product	G-kg	VE	Prod.No.	Price €
Solar control SC04 mit 2-way ball valve S6 DN40 PVC grey PVCu solvent socket ends d50 metric PN3 EPDM PTFE EO510 100-240 VAC	2.43	1.00	126566A	894.88
Solar control SC04 with 3-W-T-ball DN40 PVC grey PVCu solvent socket ends d50 metric PN3 EPDM tpe EO510 100-240 VAC	3.77	1.00	126564A	1056.84

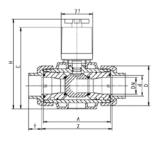


NOTE PE absorbers can be found in the chapter on pool heating.



## » Specifically developed for solar controls.





## 3-way ball valve S4 SOLAR EO510 eco/ind

## **TECHNICAL DATA**

- Optical position indication
- Manual override
- Compact construction
- Chlorine and sea water resistant (corrosion-free)
- IP 54 (EO510) protection codeElectr. position feedback
- CE-marking

• Integrated pressure balance system (by-pass system) by a drillhole in the T-ball and pressure ring, therefore 100% tightness not guaranteed

• also compatible for other common solar controls

Product	G-kg	VE	Prod.No.	Price €
3-WAY BALL VALVE S4 SOLAR E0510 IND				
Ball Valve S4 3W T-ball DN32 PVC grey PVCu solvent socket ends d40 metric PN3 EPDM tpe EO510 IND 12-24V AC/DC solar	2.69	1.00	122635	597.27
Ball Valve S4 3W T-ball DN40 PVC grey PVCu solvent socket ends d50 metric PN3 EPDM tpe EO510 IND 12-24V AC/DC solar	2.72	1.00	129791A	655.28
Ball Valve S4 3W T-ball DN50 PVC grey PVCu solvent socket ends d63 metric PN3 EPDM tpe EO510 IND 12-24V AC/DC solar	3.77	1.00	122636	833.16
3-WAY BALL VALVE S4 SOLAR E0510 ECO				
Ball Valve S4 3W T-ball DN32 PVC grey PVCu solvent socket ends d40 metric PN3 EPDM tpe EO510 ECO 230VAC solar	2.72	1.00	120647	591.80
Ball Valve S4 3W T-ball DN40 PVC grey PVCu solvent socket ends d50 metric PN3 EPDM tpe EO510 ECO 230VAC solar	3.84	1.00	120651	601.16
Ball Valve S4 3W T-ball DN50 PVC grey PVCu solvent socket ends d63 metric PN3 EPDM tpe EO510 ECO 230VAC solar	3.79	1.00	120655	779.80

## Verchromte Messing Tauchhülse

Product	G-kg	VE	Prod.No.	Price €
Verchromte Messing Tauchhülse für Tauchfühler d10	0.08	1.00	7300695	98.25



## PVC Tauchhülse für aggressive Medien

Product	G-kg	VE	Prod.No.	Price €
PVC Tauchhülse für aggressive Medien zum Einkleben in ein PVC T-Stück für Tauchfühler d10	0.01	1.00	7300696	98.25

## **Product** PVC Tauchhülse für ag





DESIGNED, ENGINEERED & MADE IN AUSTRIA

## AUTOMATIC VALVES

144	I.	Automatic ball valves
153	T	Automatic butterfly valve

157 Automatic diaphragm valve

Automatic Valves



## SAFE, AUTOMATIC WATER REGULATION

The level of pool automation is also increasing significantly in private pool systems. The high-quality fittings series from Praher Plastics® offers reliability, durability, and cost-effectiveness for pool systems of any size.

In addition to automatic ball valves, Praher Plastics® manufactures an extensive range of electric and pneumatic shut-off valves (d75 d225) and diaphragm valves for public pool construction, which stand out due to numerous technical advantages over conventional metal fittings.



## 2- AND 3-WAY BALL VALVES EO510

The automatic EO510 ball valves from Praher Plastics impress with durability and safety. In combination with an automatic Aquastar® backwash valve, the ball valve can be automatically controlled and opened during backwashing, rinsing, and draining. This prevents water loss during the repositioning of the backwash valve or when the valve is in the "winter" position.

The specially developed solar version with a patented pressure compensation system (Bypass system) is compatible with all pool solar absorber systems (EPDM, PE, PP) and pool solar controls. Drilled holes in the T-ball and pressure ring allow for optimal use in pool solar applications.



NOTE

A selection of solar controllers can be found in the Solar Controllers chapter. PE absorbers can be found in the Pool Heating chapter.





VS drive



# **ELECTRIC ER/VS DRIVE**

ER drive coordinated and tested for the M1 ball valve and the K4 shut-off valve. Optionally available with ER POSI for individually adjustable positioning or ER FAILSAFE with integrated battery in case of a power failure.

VS drives for shut-off valves in sizes from DN150.

# **PNEUMATIC DRIVE**

Pneumatically coordinated and tested actuator for the M1 ball valve and the K4 shut-off valve, available in single-acting or double-acting versions. Optional with position feedback and solenoid valve.

PO-NC - spring-loaded closed, meaning the control pressure opens the valve.

PO-NO - spring-loaded open, meaning the control pressure closes the valve.

PO-DA - double-acting, meaning the control pressure opens/closes the valve.



# 2-way ball valve M1 with electric actuator 24 V

#### **TECHNICAL DATA ER SERIES**

- CE standard
  - Position feedback
- Optical position indication
- Manual override
- Compact design
- Adjustable limit switches
- Torque limitingProtection code IP65
- PN16

#### VE Price € G-kg Prod.No. Product Ball Valve M1 2W DN10 PVC grey, PVCu solvent socket ends d16 1.00 124000A 519.25 1.82 metric PN16 EPDM PTFE EO, ER20 24V AC/DC, KIWA NSF/ANSI/CAN 61 K98073 Ball Valve M1 2W DN15 PVC grey, PVCu solvent socket ends d20 metric PN16 EPDM PTFE EO, ER20 24V AC/DC, KIWA NSF/ANSI/CAN 1.79 1.00 124001A 520.65 61 K98073 Ball Valve M1 2W DN20 PVC grey, PVCu solvent socket ends d25 2.36 1.00 124002A 526.54 metric PN16 EPDM PTFE EO, ER20 24V AC/DC, KIWA NSF/ANSI/CAN 61 K98073 Ball Valve M1 2W DN25 PVC grey, PVCu solvent socket ends d32 metric PN16 EPDM PTFE EO, ER20 24V AC/DC, KIWA NSF/ANSI/CAN 2.43 1.00 124003A 534.70 61 K98073 Ball Valve M1 2W DN32 PVC grey, PVCu solvent socket ends d40 metric PN16 EPDM PTFE EO, ER20 24V AC/DC, KIWA NSF/ANSI/CAN 2.61 1.00 124004A 552.22 61 K98073 Ball Valve M1 2W DN40 PVC grey, PVCu solvent socket ends d50 2.33 1.00 124005A 687.29 metric PN16 EPDM PTFE EO, ER20 24V AC/DC, KIWA NSF/ANSI/CAN 61 K98073 Ball Valve M1 2W DN50 PVC grey, PVCu solvent socket ends d63 metric PN16 EPDM PTFE EO, ER20 24V AC/DC, KIWA NSF/ANSI/CAN 124006A 723 84 2.68 1.00 61 K98073 Ball Valve M1 2W DN65 PVC grey PVCu solvent socket d75 metric 5.50 1.00 124245 1684.83 PN16 EPDM PTFE EO ER60 24V AC/DC Ball Valve M1 2W DN80 PVC grey, PVCu solvent socket ends d90 metric PN16 EPDM PTFE EO, ER60 24V AC/DC 7.50 1.00 124246 1559.44 Ball Valve M1 2W DN80 PVC grey, PVCu solvent socket ends d110 1817.45 7.59 1.00 124247 metric PN16 EPDM PTFE EO, ER60 24V AC/DC

# 2-way ball valve M1 with electric actuator 230V

#### **TECHNICAL DATA ER SERIES**

- CE standard
- Position feedback
- Optical position indication
- Manual override
- Compact design
- Protection code PN65
- Adjustable limit switches
  PN16

Duradurat	0.1	VE	Due d Ma	Duite a O
Product	G-kg	VE	Prod.No.	Price €
Ball Valve M1 2W DN10 PVC grey, PVCu solvent socket ends d16 metric PN16 EPDM PTFE EO, ER20 90-240VAC, KIWA NSF/ANSI/CAN 61 K98073	1.82	1.00	124007A	519.25
Ball Valve M1 2W DN15 PVC grey, PVCu solvent socket ends d20 metric PN16 EPDM PTFE EO, ER20 90-240VAC, KIWA NSF/ANSI/CAN 61 K98073	1.79	1.00	124008A	641.21
Ball Valve M1 2W DN20 PVC grey, PVCu solvent socket ends d25 metric PN16 EPDM PTFE EO, ER20 90-240VAC, KIWA NSF/ANSI/CAN 61 K98073	2.36	1.00	124009A	601.48
Ball Valve M1 2W DN25 PVC grey, PVCu solvent socket ends d32 metric PN16 EPDM PTFE EO, ER20 90-240VAC, KIWA NSF/ANSI/CAN 61 K98073	2.43	1.00	124010A	646.06
Ball Valve M1 2W DN32 PVC grey, PVCu solvent socket ends d40 metric PN16 EPDM PTFE EO, ER20 90-240VAC, KIWA NSF/ANSI/CAN 61 K98073	2.61	1.00	124011A	621.25
Ball Valve M1 2W DN40 PVC grey, PVCu solvent socket ends d50 metric PN16 EPDM PTFE EO, ER20 90-240VAC, KIWA NSF/ANSI/CAN 61 K98073	2.33	1.00	124012A	807.70
Ball Valve M1 2W DN50 PVC grey, PVCu solvent socket ends d63 metric PN16 EPDM PTFE EO, ER20 90-240VAC, KIWA NSF/ANSI/CAN 61 K98073	2.68	1.00	124013A	830.28
Ball Valve M1 2W DN65 PVC grey, PVCu solvent socket ends d75 metric PN16 EPDM PTFE EO, ER60 90-240VAC	5.50	1.00	124248	1653.22
Ball Valve M1 2W DN80 PVC grey, PVCu solvent socket ends d90 metric PN16 EPDM PTFE EO, ER60 90-240VAC	7.50	1.00	124249	1546.52
Ball Valve M1 2W DN80 PVC grey, PVCu solvent socket ends d110 metric PN16 EPDM PTFE EO, ER60 90-240VAC	7.59	1.00	124250	1646.43





Integrated mounting bracket

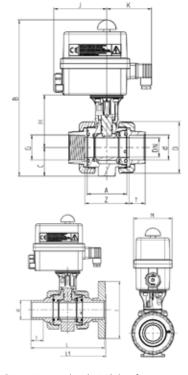


Reliable buttress thread

# OVERVIEW OF TECHNICAL DETAILS 2-WAY BALL VALVE M1 WITH ELECTRIC ACTUATOR ER20

	Electric actuator
Туре	ER20
Torque	20Nm
Voltage 24 V Voltage 230 V	24V 50/60Hz (24V DC) 90 - 240 V 50/60 Hz (90-350V DC)
Manipulation time	13s
Demand	15W
ISO connection	F03-F04-F05
Octagon	14
End switch	two preset end switches two indicators
Mechanical top	90°
High duty cycle	30%
Pivot angle	90°
Protection code	IP65
Ambiant temperature	up to +55°C
Weight	1 kg

# DIMENSIONS



Dimensions and technical data for DN65 - DN80/d110 with ER60 actuator on request.

DN d	10 16	15 20	20 25	25 32	32 40	40 50	50 63
Flange image	F04	F04	F04	F04	F05	F05	F05
G <sub>GM</sub> <sup>1</sup>	3⁄8″	1⁄2″	3⁄4″	1″	1 1⁄4″	1½″	2″
А	45	45	53.5	54	62	78	87
В	260	260	272.5	278	295	306	320.5
С	33	33	40	43	51	56	64
D	55.5	55.5	62	70	84	101	115
E	5.5	5.5	5.5	6.5	6.5	6.5	6.5
F	34	34	36	38	40	45	50
Н	80	80	85.5	88	97	103	109.5
I	-	97	105	125	140	150	165
J	90	90	90	90	90	90	90
К	107	107	107	107	107	107	107
t <sub>KM</sub> 2	16	16.5	19.5	23	26.5	31.5	38.5
t <sub>KS</sub> <sup>3</sup>	17	16.5	19.5	23	26.5	31.5	38.5
Z <sub>km</sub> <sup>2</sup>	51	50	59.5	60	68.5	86	98
Z <sub>GM</sub> <sup>1</sup>	48	50	60	60	68	87	98
L <sub>KS</sub> <sup>3</sup>	98	123.5	143.5	153.5	173.5	193.5	223.5
L1 <sub>FF</sub> <sup>4</sup>	-	130	150	160	180	200	230
М	92	92	92	92	92	92	92



# 2-way ball valve S6 EO510 eco 230V AC/IND 12-24V AC/DC

# **TECHNICAL DATA**

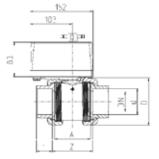
- IND 12–24V AC/DC manipulation time: 90° 12 sec
- Eco 230V AC manipulation time: 90° 22 sec
- Protection code: IP65, on-time: 60% / max. 20 min
- Input: P = 4 W / P max = 8 W
- CE standard
- Position indication
- Optic position indication
- Manual override
- Compact construction • PN3

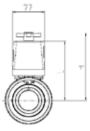
#### APPLICATION

- Private and public swimming pool and water treatment industry
  Natural pool and fish farming industry
- Irrigation and cooling systems
- Water attractions (fountains, water falls, ...)
- Control valve for jet streams

	Ва	ll valve P\	/C-U				Actu	ator
DN	d	А	D	t 1 KM	Z	PN	E	Н
32	40	77	101,5	26,5	87	3	138,5	159
40	50	77	101,5	31,5	87	3	138,5	159
50	63	87	115,3	38,5	99	3	143,5	164

Product	G-kg	VE	Prod.No.	Price €
PRICES 2-WAY BALL VALVE S6 E0510 IND 12-24V AC/DC				
Ball Valve S6 2W DN32 PVC grey PVCu solvent socket d40 metric PN3 EPDM PTFE EO510 IND 12-24V AC/DC	1.47	1.00	129804A	491.47
Ball Valve S6 2W DN40 PVC grey PVCu solvent socket d50 metricPN3 EPDM PTFE EO510 IND 12-24V AC/DC	1.49	1.00	129801A	499.28
Ball Valve S6 2W DN50 PVC grey PVCu solvent socket d63 metric PN3 EPDM PTFE EO510 IND 12-24V AC/DC	1.77	1.00	129802A	507.07
PRICES 2-WAY BALL VALVE S6 E0510 ECO 230V AC				
Ball Valve S6 2W DN32 PVC grey PVCu solvent socket d40 metric PN3 EPDM PTFE EO510 ECO 230VAC	2.35	1.00	126546	413.45
Ball Valve S6 2W DN40 PVC grey PVCu solvent socket d50 metric PN3 EPDM PTFE E0510 ECO 230VAC	2.51	1.00	126547	421.25
Ball Valve S6 2W DN50 PVC grey PVCu solvent socket d63 metric PN3 EPDM PTFE E0510 ECO 230VAC	2.54	1.00	126548	460.25







# 3-way ball valve S4 EO510 ECO EO510 230VAC

# **TECHNICAL DATA**

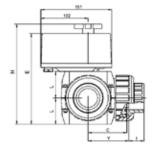
- Manipulation time: 90° 22 sec
- Optical position indication
- Manual override
- Compact construction T-ball
- Chlorine- and sea water proof (corrosion-free)
- Protection code IP 65
- Electr. Position indication
- CE marking
- PN3

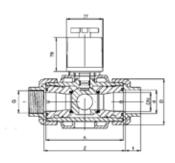
# APPLICATION

- Private and public swimming pool and water treatment industry
- Natural pool- and fish farming industry
   Irrigation and cooling systems
- Water attractions (fountains, water falls, ....)
- Control valve for jet streams

		I	Ball val	ve PVC·	·U					На	lterung	/ Actua	tor
DN	d	А	С	D	t 1/ KM 2 KS	Y	Z	Z1 <sub>KS</sub> <sup>2</sup>	bar	E	Н	К	L
10	16	100	50	53	16,5	53	106	153	10	196,5	216,5	38	33
15	20	100	50	53	16,5	53	106	163	10	196,5	216,5	38	33
20	25	120	60	70	20	63	126	-	10	216,5	236,5	38	43
25	32	120	60	70	22,5	63	126	200	10	216,5	236,5	38	43
32	40	162	81	101	27,5	84,5	169	-	3	205	225	-	56
40	50	162	81	101	31,5	85,5	171	261	3	205	225	-	56

Product	G-kg	VE	Prod.No.	Price €
Ball Valve S4 3W T-ball DN10 PVC grey PVCu solvent socket ends d16 metric PN10 EPDM PTFE EO510 ECO 230VAC	1.49	1.00	129594	513.77
Ball Valve S4 3W T-ball DN15 PVC grey PVCu solvent socket ends d20 metric PN10 EPDM PTFE EO510 ECO 230VAC	1.48	1.00	129602	513.77
Ball Valve S4 3W T-ball DN20 PVC grey PVCu solvent socket ends d25 metric PN10 EPDM PTFE EO510 ECO 230VAC	1.91	1.00	129610	515.35
Ball Valve S4 3W T-ball DN25 PVC grey PVCu solvent socket ends d32 metric PN10 EPDM PTFE EO510 ECO 230VAC	1.92	1.00	129280	515.35
Ball Valve S4 3W L-ball DN32 PVC grey PVCu solvent socket ends d40 metric PN3 EPDM PTFE EO510 ECO 230VAC	2.79	1.00	129628	622.80
Ball Valve S4 3W T-ball DN40 PVC grey PVCu solvent socket ends d50 metric PN3 EPDM PTFE EO510 ECO 230VAC	2.81	1.00	129630	566.51







# 3-way ball valve S4 EO510 IND 12-24V AC/DC 50-60hz

# **TECHNICAL DATA**

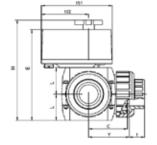
- IND 12–24V AC/DC manipulation time: 90° 12 sec
- Optical position indication
- Manual override
- Compact construction T-ball Chlorine- and sea water proof (corrosion-free)
- Protection code IP 65
- Electr. position indication
   CE marking
- PN3

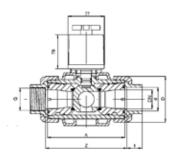
# APPLICATION

- Private and public swimming pool and water treatment industry
- Natural pool and fish farming industry
   Irrigation and cooling systems
- Water attractions (fountains, water falls, ....)
- Control valve for jet streams

		I	Ball val	ve PVC	·U					На	lterung	/ Actua	itor
DN	d	А	С	D	t 1/ KM 2 KS	Y	Z	Z1 <sub>KS</sub> <sup>2</sup>	bar	E	Н	K	L
10	16	100	50	53	16,5	53	106	153	10	196,5	216,5	38	33
15	20	100	50	53	16,5	53	106	163	10	196,5	216,5	38	33
20	25	120	60	70	20	63	126	-	10	216,5	236,5	38	43
25	32	120	60	70	22,5	63	126	200	10	216,5	236,5	38	43
32	40	162	81	101	27,5	84,5	169	-	3	205	225	-	56
40	50	162	81	101	31,5	85,5	171	261	3	205	225	-	56

Product	G-kg	VE	Prod.No.	Price €
Ball valve S4 3way T-ball DN10 PVC grey PVCu solvent socket ends d16 metric PN10 EPDM, PTFE EO510 IND 12-24V AC/DC - grey cover	1.62	1.00	129860	614.80
Ball valve S4 3way T-ball DN15 PVC grey PVCu solvent socket ends d20 metric PN10 EPDM, PTFE EO510 IND 12-24V AC/DC - grey cover	1.44	1.00	129864	614.80
Ball valve S4 3way T-ball DN20 PVC grey PVCu solvent socket ends d25 metric PN10 EPDM, PTFE EO510, IND 12-24V AC/DC - grey cover	1.94	1.00	129867	616.60
Ball valve S4 3way T-ball DN25 PVC grey PVCu solvent socket ends d32 metric PN10 EPDM, PTFE EO510 IND 12-24V AC/DC - grey cover	2.04	1.00	129871	616.60
Ball valve S4 3way T-ball DN32 PVC grey PVCu solvent socket ends d40 metric PN3 EPDM, PTFE EO510 IND 12-24V AC/DC - grey cover	2.76	1.00	129625A	565.27
Ball valve S4 3way T-ball DN40 PVC grey PVCu solvent socket ends d50 metric PN3 EPDM, PTFE EO510 IND 12-24V AC/DC - grey cover	1.28	1.00	129629A	566.51









» Specifically developed for solar controls

# 3-way ball valve S4 SOLAR IND 12-24 V AC/DC 50-60hz/eco 230V AC

#### **TECHNICAL DATA**

- IND 12–24 V AC manipulation time: 90° 12 sec
- Eco 230V AC manipulation time: 90° 22 sec
- Optical position indication
- Manual override
- Compact construction, T-ball
- Chlorine and sea water resistant (corrosion-free)Protection code IP 65 (EO510)
- Electr. position indication
- CE marking
- On-time: 60%/max. 20 min.

#### PATENTED PRESSURE VENTING SYSTEM

Small drill holes in the T-ball and in the pressure ring – ideal for pool solar application

# APPLICATION

In combination with all pool solar absorber systems (EPDM, PE, PP) and pool solar control possible

#### DIMENSIONS

					Halter	ung / Act	tuator					
DN	d	G <sup>1</sup> <sub>GM</sub>	А	С	D	t <sup>2</sup>	$Y_{GM}^{1/2}$	Z1 _1/ <sup>2</sup>	bar	Е	Н	L
32	40	1¼"	162	81	101	27,5	85	170	3	205	225	56
40	50	11⁄2"	162	81	101	31,5	85	171	3	205	225	56
50	63	2"	181	90,5	124,5	38,5	96	192	3	221	241	65

Product	G-kg	VE	Prod.No.	Price €
PRICES 3-WAY BALL VALVE S4 EO510 IND 12-24V AC/DC SOLAR				
Ball Valve S4 3W T-ball DN32 PVC grey PVCu solvent socket d40 metric PN3 EPDM tpe EO510 IND 12-24V AC/DC Solar	2.69	1.00	122635	597.27
Ball Valve S4 3W T-ball DN40 PVC grey PVCu solvent socket d50 metric PN3 EPDM tpe EO510 IND 12-24V AC/DC Solar	2.72	1.00	129791A	655.28
Ball Valve S4 3W T-ball DN50 PVC grey PVCu solvent socket d63 metric PN3 EPDM tpe EO510 IND 12-24V AC/DC Solar	3.77	1.00	122636	833.16
PRICES 3-WAY BALL VALVE S4 EO510 230V AC				
Ball Valve S4 3W T-ball DN32 PVC grey PVCu solvent socket d40 metric PN3 EPDM tpe EO510 ECO 230VAC Solar	2.72	1.00	120647	591.80
Ball Valve S4 3W T-ball DN40 PVC grey PVCu solvent socket d50 metric PN3 EPDM tpe EO510 ECO 230VAC Solar	3.84	1.00	120651	601.16
Ball Valve S4 3W T-ball DN50 PVC grey PVCu sovlent socket d63 metric PN3 EPDM tpe EO510 ECO 230VAC Solar	3.79	1.00	120655	779.80





NOTE

A selection of solar controllers can be found in the Solar Controllers chapter. PE absorbers can be found in the Pool Heating chapter.



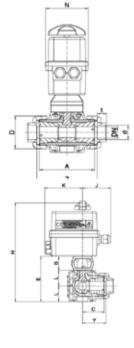
# 3-way ball valve S4 with electric actuator 24V/230V

# **TECHNICAL DATA**

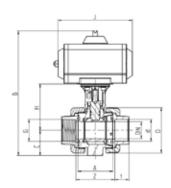
- Manipulation time: 12 sec.
- Protection code: IP66
- Current
- CE standard Position feedback signal
- Optic position indication
- Voltage: 15-30V 50/60Hz (12-48V DC),100-240V 50/60Hz (100 350V DC)
- Double shaft sealing
- Anti-condensation system
- Manual override
- Compact construction
- PN16
- High switch on time: 50%Ambient temperature: 10°C up to +55°C
- Swing angle 360° clockwise

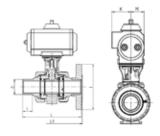
					Ball v	alve P	/C-U							Actuato	r
DN	d	А	В	С	D	Е	Н	L	Υ	Ζ	t	PN	J	К	Ν
10	16	100	38	50	53	105	257	33,5	53	106	16,5	16	79	107	92
15	20	100	38	50	53	105	257	33,5	53	106	16,5	16	79	107	92
20	25	120	38	60	70	122	274	42	63	126	20	16	79	107	92
25	32	120	38	60	70	122	274	42	63,5	126	22,5	16	79	107	92
32	40	162	48	81	101	160	312	56	84,5	169	27,5	16	79	107	92
40	50	162	48	81	101	160	312	56	85,5	171	31,5	16	79	107	92
50	63	181	48	90,5	124,5	178	330	65	96,5	192	38,5	16	79	107	92

Product	G-kg	VE	Prod.No.	Price €
PRICES 15-30 V AC				
Ball Valve S4 3W T-ball DN10 PVC grey PVCu solvent socket ends d16 metric PN16 EPDM PTFE ER20 15-30VAC GF4	2.03	1.00	124112	1746.83
Ball Valve S4 3W T-ball DN15 PVC grey PVCu solvent socket ends d20 metric PN16 EPDM PTFE ER20 15-30VAC GF4	2.02	1.00	124116	1746.83
Ball Valve S4 3W T-ball DN20 PVC grey PVCu solvent socket ends d25 metric PN16 EPDM PTFE ER20 15-30VAC GF4	2.36	1.00	124120	1806.34
Ball Valve S4 3W T-ball DN25 PVC grey PVCu solvent socket ends d32 metric PN16 EPDM PTFE ER20 15-30VAC GF4	2.38	1.00	124124	1806.34
Ball Valve S4 3W T-ball DN32 PVC grey PVCu solvent socket ends d40 metric PN16 EPDM PTFE ER20 15-30VAC GF4	3.72	1.00	124128	1874.22
Ball Valve S4 3W T-ball DN40 PVC grey PVCu solvent socket ends d50 metric PN16 EPDM PTFE ER20 15-30VAC GF4 $$	3.75	1.00	124132	1884.69
Ball Valve S4 3W T-ball DN50 PVC grey PVCu solvent socket ends d63 metric PN16 EPDM PTFE ER20 15-30VAC GF4	4.66	1.00	124175	1928.74
PRICES 90-240 V AC				
Ball Valve S4 3W T-ball DN10 PVC grey PVCu solvent socket ends d16 metric PN16 EPDM PTFE ER20 90-240VAC GF4	2.03	1.00	124113	1746.83
Ball Valve S4 3W T-ball DN15 PVC grey PVCu solvent socket ends, d20 metric PN16 EPDM PTFE EO ER20, 90-240VAC GF4	2.89	1.00	124117	1746.83
Ball Valve S4 3W T-ball DN20 PVC grey PVCu solvent socket ends d25 metric PN16 EPDM PTFE ER20 90-240VAC GF4	2.36	1.00	124121	1806.34
Ball Valve S4 3W T-ball DN25 PVC grey PVCu solvent socket ends d32 metric PN16 EPDM PTFE ER20 90-240VAC GF4	2.38	1.00	124125	1806.34
Ball Valve S4 3W T-ball DN32 PVC grey PVCu solvent socket ends d40 metric PN16 EPDM PTFE ER20 90-240VAC GF4	3.72	1.00	124129	1874.22
Ball Valve S4 3W T-ball DN40 PVC grey PVCu solvent socket ends d50 metric PN16 EPDM PTFE ER20 90-240VAC GF4	3.71	1.00	124133	1884.69
Ball Valve S4 3W T-ball DN50 PVC grey PVCu solvent socket ends d63 metric PN16 EPDM PTFE ER20 90-240VAC GF4	4.60	1.00	124176	1928.74









# 2-way ball valve M1 with pneumatic actuator

PO-NC spring pressure closed, PO-NO spring pressure opened, PO-DA double acting

DIMENSION	,						
DN	10	15	20	25	32	40	50
d	16	20	25	32	40	50	63
Flanschbild	F04	F04	F04	F04	F05	F05	F05
G _M1	3⁄8″	1⁄2″	3⁄4″	1″	1¼″	1 ½″	2″
А	45	45	53,5	54	62	78	87
С	33	33	40	43	51	56	64
D	55,5	55,5	62	70	84	101	115
E	5,5	5,5	5,5	6,5	6,5	6,5	6,5
F	34	34	36	38	40	45	50
Н	80	80	85,5	88	97	103	109,5
I.	-	97	105	125	140	150	165
t <sub>KM</sub> <sup>2</sup>	16	16,5	19,5	23	26,5	31,5	38,5
Z <sub>KM</sub> <sup>2</sup>	51	50	59,5	60	68,5	86	98
L <sub>KS</sub> <sup>3</sup>	98	123,5	143,5	153,5	173,5	193,5	223,5
L1 <sub>FF</sub> <sup>4</sup>	-	130	150	160	180	200	230
В	214	214	226,5	232	269	280	294,5
J	119	119	119	119	165	165	165
К	40	40	40	40	50	50	50
М	27	27	27	27	35	35	35
В	214	214	226,5	232	269	280	294,5
J	119	119	119	119	165	165	197
K	40	40	40	40	50	50	50
М	27	27	27	27	35	35	35

Product	G-kg	VE	Prod.No.	Price €
PO-NC				
Ball Valve M1 2W DN10 PVC grey,PVCu solvent socket ends d16 metric PN16 EPDM PTFE,PO-NC UT05-2,KIWA NSF/ANSI/CAN 61 K98073	1.73	1.00	124028A	222.98
Ball Valve M1 2W DN15 PVC grey, PVCu solvent socket ends d20 metric PN16 EPDM PTFE, PO-NC UT05-2, KIWA NSF/ANSI/CAN 61 K98073	1.70	1.00	124029A	222.98
Ball Valve M1 2W DN20 PVC grey, PVCu solvent socket ends d25 metric PN16 EPDM PTFE, PO-NC UT05-2, KIWA NSF/ANSI/CAN 61 K98073	2.18	1.00	124030A	254.22
Ball Valve M1 2W DN25 PVC grey, PVCu solvent socket ends d32 metric PN16 EPDM PTFE, PO-NC UT05-2, KIWA NSF/ANSI/CAN 61 K98073	2.24	1.00	124031A	296.34
Ball Valve M1 2W DN32 PVC grey, PVCu solvent socket ends d40 metric PN16 EPDM PTFE, PO-NC UT15-4, KIWA NSF/ANSI/CAN 61 K98073	3.08	1.00	124032A	382.34
Ball Valve M1 2W DN40 PVC grey, PVCu solvent socket ends d50 metric PN16 EPDM PTFE, PO-NC UT15-4, KIWA NSF/ANSI/CAN 61 K98073	3.45	1.00	124033A	566.49
Ball Valve M1 2W DN50 PVC grey, PVCu solvent socket ends d63 metric PN16 EPDM PTFE, PO-NC UT17-4, KIWA NSF/ANSI/CAN 61 K98073	4.94	1.00	124034A	502.58
Ball Valve M1 2W DN65 PVC grey PVCu solvent socket ends d75 metric PN16 EPDM PTFE PO-NC UT30-4	8.82	1.00	124257	1203.69
Ball Valve M1 2W DN80 PVC grey PVCu solvent socket ends d90 metric PN16 EPDM PTFE PO-NC UT35-4	14.29	1.00	124258	1277.88
Ball Valve M1 2W DN80 PVC grey PVCu solvent socket ends d110 metric PN16 EPDM PTFE PO-NC UT35-4	14.38	1.00	124259	1385.12
PO-NO				
Ball Valve M1 2W DN10 PVC grey, PVCu solvent socket ends d16 metric PN16 EPDM PTFE, PO-NO UT05-2, KIWA NSF/ANSI/CAN 61 K98073	1.73	1.00	124042A	222.98
Ball Valve M1 2W DN15 PVC grey,PVCu solvent socket ends d20 metric PN16 EPDM PTFE, PO-NO UT05-2, KIWA NSF/ANSI/CAN 61 K98073	1.70	1.00	124043A	222.98
Ball Valve M1 2W DN20 PVC grey, PVCu solvent socket ends d25 metric PN16 EPDM PTFE, PO-NO UT05-2, KIWA NSF/ANSI/CAN 61 K98073	2.18	1.00	124044A	228.80
Ball Valve M1 2W DN25 PVC grey, PVCu solvent socket ends d32 metric PN16 EPDM PTFE, PO-NO UT05-2, KIWA NSF/ANSI/CAN 61 K98073	2.24	1.00	124045A	268.06

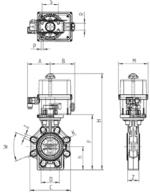
Product	G-kg	VE	Prod.No.	Price €
Ball Valve M1 2W DN32 PVC grey, PVCu solvent socket ends d40 metric PN16 EPDM PTFE, PO-NO UT15-4, KIWA NSF/ANSI/CAN 61 K98073	3.08	1.00	124046A	424.82
Ball Valve M1 2W DN40 PVC grey, PVCu solvent socket ends d50 metric PN16 EPDM PTFE, PO-NO UT15-4, KIWA NSF/ANSI/CAN 61 K98073	3.45	1.00	124047A	451.13
Ball Valve M1 2W DN50 PVC grey, PVCu solvent socket ends d63 metric PN16 EPDM PTFE, PO-NO UT17-4, KIWA NSF/ANSI/CAN 61 K98073	4.94	1.00	124048A	446.73
Ball Valve M1 2W DN65 PVC grey PVCu solvent socket ends d75 metric PN16 EPDM PTFE PO-NO UT30-4	8.82	1.00	124268	1203.69
Ball Valve M1 2W DN80 PVC grey PVCu solvent socket ends d90 metric PN16 EPDM PTFE PO-NO UT35-4	14.29	1.00	124269	1277.88
Ball Valve M1 2W DN80 PVC grey PVCu solvent socket ends d110 metric PN16 EPDM PTFE PO-NO UT35-4	14.38	1.00	124270	1385.12
PO-DA				
Ball Valve M1 2W DN10 PVC grey, PVCu solvent socket ends d16 metric PN16 EPDM PTFE, PO-DA UT05DA, KIWA NSF/ANSI/CAN 61 K98073	2.13	1.00	124056A	205.12
Ball Valve M1 2W DN15 PVC grey, PVCu solvent socket ends d20 metric PN16 EPDM PTFE, PO-DA UT05DA, KIWA NSF/ANSI/CAN 61 K98073	2.10	1.00	124057A	205.12
Ball Valve M1 2W DN20 PVC grey, PVCu solvent socket ends d25 metric PN16 EPDM PTFE, PO-DA UT05DA, KIWA NSF/ANSI/CAN 61 K98073	1.36	1.00	124058A	212.03
Ball Valve M1 2W DN25 PVC grey, PVCu solvent socket ends d32 metric PN16 EPDM PTFE, PO-DA UT05DA, KIWA NSF/ANSI/CAN 61 K98073	2.29	1.00	124059A	220.28
Ball Valve M1 2W DN32 PVC grey, PVCu solvent socket ends d40 metric PN16 EPDM PTFE, PO-DA UT15DA, KIWA NSF/ANSI/CAN 61 K98073	2.69	1.00	124060A	309.01
Ball Valve M1 2W DN40 PVC grey, PVCu solvent socket ends d50 metric PN16 EPDM PTFE, PO-DA UT15DA, KIWA NSF/ANSI/CAN 61 K98073	3.06	1.00	124061A	325.50
Ball Valve M1 2W DN50 PVC grey, PVCu solvent socket ends d63 metric PN16 EPDM PTFE, PO-DA UT15DA, KIWA NSF/ANSI/CAN 61 K98073	4.11	1.00	124062A	432.33
Ball Valve M1 2W DN65 PVC grey PVCu solvent socket ends d75 metric PN16 EPDM PTFE	6.23	1.00	124274	1096.40
Ball Valve M1 2W DN80 PVC grey PVCu solvent socket ends d90 metric PN16 EPDM PTFE	8.24	1.00	124275	1166.80
Ball Valve M1 2W DN80 PVC grey PVCu solvent socket ends d110 metric PN16 EPDM PTFE	8.33	1.00	124276	1272.43
ACCESSORIES				
Flow control silencer 1/8"	0.03	1.00	50716	47.39
Silencer 1/8" for solenoid valve	0.01	1.00	50890	21.91
Elect.position indicator for pneumatic actuators IP65 UT pi-250V with 2 limit switches additional	0.37	1.00	50914	291.20
Solenoid Valve for pneumatic actuators 5/2+3/2-way Namur-flange G1/4" IP65 24V DC	0.42	1.00	51615	304.14
Solenoid Valve for pneumatic actuators 5/2+3/2-way Namur-flange G1/4" IP65 230VAC	0.42	1.00	51616	295.25











# Automatic butterfly valve K4 24V AC/DC (ER)

#### **TECHNICAL DATA**

- Operation pressure: PN10
- Body made of PP-GF
- Direct installation of the actuator without any additional adapter or screws
- Mechanical limit stops
- Manual override
- Position indication
- Torque and force limiters
- Only sealing flange and disc in contact with medium
- Fix point mounting

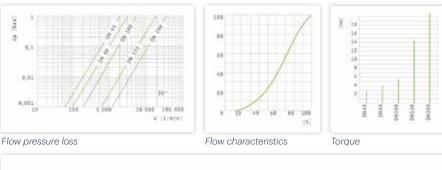
# ELECTRIC ACTUATOR (ER)

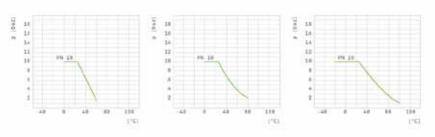
- Plastic body
- Power input up to 45W
- 4 end switch adjustable
- Swing able 90° (180°)
- On-time 30%
- Protection code IP65
- Ambient temperature -10°C +55°C
- ISO connection F05 F07 octagonal screw 22 mm

#### DIMENSIONS

	DN	d	G	D	с	w	J	к	н	h	Α	В	м	z	S	R	Р	F
ER 35	65	75 (63)	2,5"	65	33	90°	19	127 -145	409	100	98	107	128	46	55	25	7	232
ER 60	80	90	3"	80	76	45°	19	146 -160	16	00	98	107	128	49	70	30	9	239
ER 60	100	10	4"	100	06	45°	19	175 -190,5	46	15	98	107	128	56	85	35	9	269

Product	G-kg	VE	Prod.No.	Price €
Butterfly Valve K4 DN65 PVC grey flange-connection d63 PN10 EPDM ER35 24V AC/DC	3.82	1.00	128570	1261.90
Butterfly Valve K4 DN65 PVC grey flange connection 75 - 2 $1/2^{\ast}$ DIN-ANSI-JIS-BS PN10 EPDM ER35 24V AC/DC	3.82	1.00	128507	1261.90
Butterfly Valve K4 DN80 PVC grey flange connection 90 - 3" DIN-ANSI- JIS-BS PN10 EPDM ER60 24V AC/DC	2.90	1.00	128509	1507.16
Butterfly Valve K4 DN100 PVC grey flange connection 110 - 4" DIN- ANSI-JIS-BS PN10 EPDM ER60 24V AC/DC	4.21	1.00	128511	1521.18
Butterfly Valve K4 DN125 PVC grey flange connection 140-5" DIN-AN- SI-JIS-BS PN10 EPDM ER100 24V AC/DC	5.50	1.00	128770	1965.85
Butterfly Valve K4 DN150 PVC grey flange connection 160 - 6" DIN- ANSI-JIS-BS PN10 EPDM VS150 24V AC/DC	9.39	1.00	128513	2742.81
Butterfly Valve K4 DN200 PVC grey flange connection 225 - 8" DIN- ANSI-JIS-BS PN10 EPDM VS300 24V AC/DC	11.84	1.00	128515	2751.68



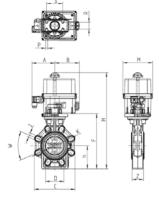


Pressure temperature



For flange set prices, see page <?>.





# Automatic butterfly valve K4 90-240VAC

#### **TECHNICAL DATA**

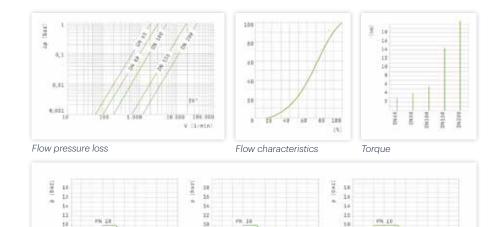
- Operation pressure: PN 10
- Body made of: PP-GF
- Direct installation of the actuator without any additional adapter or screws
- Mechanical limit stops
- Manual override
- Position indication
- Torque and force limiters
- Only sealing flange and disc in contact with medium
- Fix point mounting

# ELECTRIC ACTUATOR (ER)

- Plastic-aluminium body
- Power input up to 85W
- 4 end switch adjustable
- Swing able 90° (180°)
- On-time 50%
- Protection code IP67
- Ambient temperature -20 °C +70 °C
  ISO connection F07 F10 octagonal screw 22 mm

DIME	INSI	ONS																		
	DN	d	G	D	С	w	J	к	н	h	Α	В	м	N	z	s	R	Ρ	F	Е
VS 150	150	160	6"	150	261	45°	23	234,5 -241,3	591	147,5	85	190	94	140	70	110	45	9	333	48
VS 300	200	225	8"	200	314	45°	23	290 -298,5	653	175	85	190	94	140	71	145	40	9	395	48

Product	G-kg	VE	Prod.No.	Price €
Butterfly Valve K4 DN65 PVC grey Flange-connection d63 PN10 EPDM ER35 90-240VAC	3.87	1.00	128571	1597.75
Butterfly Valve K4 DN65 PVC grey Flange-connection 75-2 1/2" DIN- ANSI-JIS-BS PN10 EPDM ER35 90-240VAC	3.77	1.00	128506	1315.25
Butterfly Valve K4 DN80 PVC grey Flange-connection 90-3" DIN-ANSI- JIS-BS PN10 EPDM ER60 90-240VAC	2.90	1.00	128508	1507.16
Butterfly Valve K4 DN100 PVC grey Flange-connection 110-4" DIN- ANSI-JIS-BS PN10 EPDM ER60 90-240VAC	4.21	1.00	128510	1521.18
Butterfly Valve K4 DN125 PVC grey Flange-connection 140-5" DIN- ANSI-JIS-BS PN10 EPDM ER100 90-240VAC	5.50	1.00	128772	1965.85
Butterfly Valve K4 DN150 PVC grey Flange-connection 160-6" DIN- ANSI-JIS-BS PN10 EPDM VS150 100-240 VAC	9.39	1.00	128512	2742.81
Butterfly Valve K4 DN200 PVC grey Flange-connection 225-8" DIN- ANSI-BS PN10 EPDM VS300 100-240 VAC	11.84	1.00	128514	3341.92



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For flange set prices, see page <?>.

Pressure temperature

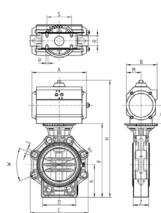
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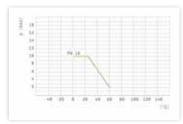
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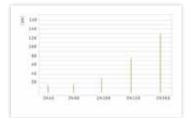




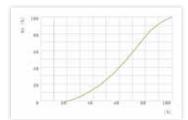




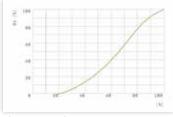
Pressure temperature



Torque



Flow characteristics



Flow pressure loss

# Automatic butterfly valve K4 with pneumatic actuator

PO-NC spring pressure closed, PO-NO spring pressure opened, PO-DA double acting

#### **TECHNICAL DATA**

- Operation pressure: PN 10
- Best pressure and temperature resistance
- Optical position indication
- Manual override
- Solid butterfly body
- Resistant sealing system (chlorine- and sea water resistant, corrosionfree)
- Multi purpose flange drilling (ANSI, DIN, JIS)
- Short manipulation time
- Comprehensive accessories: solenoid valves, electr. position indicators, 4–20 mA position control available

#### PNEUMATIC ACTUATOR

- 2 counter acting pistons over gear rack, elastic sealing
- Body aluminium anodized, lid: aluminium epoxide resin, coated, screws and nuts: stainless steel
- Ambient temperature: -20 °C bis +80 °C
- Control air: filtered air acc. PNEUROP/ISO class 4
- Installation position: optional
- Control functions / control pressure: DA: double acting / min 5.5 bar max 10 bar, SR: single acting / min 5.5 bar max 8 bar
- Swivel angle: 90°, end position adjustable on both sides -10° up to + 10°
- Fixing: actuator valve: ISO 5211, actuator control valve: NAMUR (VDI/VDE3845), actuator signal device: NAMUR (VDI/VDE3845)
  - Accessories: end switch box, 3/2 and 5/2 solenoid valve

DN	d	G	w	J	к	D	с	z	s	R	Р	h	F	PN
	mm		0	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	bar
65	75	2,5″	90	19	127-145	65	133	46	55	25	7	100	232	10
80	90	3″	45	19	146-160	80	176	49	70	30	9	100	239	10
100	110	4"	45	19	175-190,5	100	206	56	85	35	9	115	269	10
150	160	6″	45	23	234,5-241,5	150	261	70	110	45	9	147,5	333	10
200	225	8″	45	23	290-298,5	200	314	71	145	40	9	175	395	10

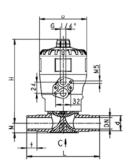
Product	G-kg	VE	Prod.No.	Price €
PO-NC				
Butterfly Valve K4 DN65 PVC grey flange connection 75 - 2 1/2" DIN- ANSI-JIS-BS PN10 EPDM PO-NC UT25-4	6.15	1.00	125885	748.89
Butterfly Valve K4 DN80 PVC grey flange connection 90 - 3" DIN-ANSI- JIS-BS PN10 EPDM PO-NC UT30-4	6.21	1.00	125886	861.21
Butterfly Valve K4 DN100 PVC grey flange connection 110 - 4" DIN- ANSI-JIS-BS PN10 EPDM PO-NC UT35-4	11.01	1.00	125887	1095.26
Butterfly Valve K4 DN125 PVC grey flange connection 140 - 5" DIN- ANSI-JIS-BS PN10 EPDM PO-NC UT40-5	13.16	1.00	128766	1329.29
Butterfly Valve K4 DN150 PVC grey flange connection 160 - 6" DIN- ANSI-JIS-BS PN10 EPDM PO-NC UT45-5	19.70	1.00	125888	1586.72
Butterfly Valve K4 DN200 PVC grey flange connection 225 - 8" DIN- ANSI-JIS-BS PN10 EPDM PO-NC UT50-5	31.72	1.00	125889	2415.19
PO-NO				
Butterfly Valve K4 DN65 PVC grey flange connection 75 - 2 1/2" DIN- ANSI-JIS-BS PN10 EPDM PO-NO UT25-4	6.15	1.00	125935	748.89
Butterfly Valve K4 DN80 PVC grey flange connection 90 - 3" DIN-ANSI- JIS-BS PN10 EPDM PO-NO UT30-4	6.21	1.00	125936	705.84
Butterfly Valve K4 DN100 PVC grey flange connection 110 - 4" DIN- ANSI-JIS-BS PN10 EPDM PO-NO UT35-4	11.01	1.00	125937	1095.26
Butterfly Valve K4 DN125 PVC grey flange connection 140 - 5" DIN- ANSI-JIS-BS PN10 EPDM PO-NO UT40-5	13.16	1.00	128767	1329.29
Butterfly Valve K4 DN150 PVC grey flange connection 160 - 6" DIN- ANSI-JIS-BS PN10 EPDM PO-NO UT45-4	19.70	1.00	125938	1586.72
Butterfly Valve K4 DN200 PVC grey flange connection 225 - 8" DIN- ANSI-JIS-BS PN10 EPDM PO-NO UT50-4	29.71	1.00	125939	2415.19
PO-DA				
Butterfly Valve K4 DN65 PVC grey flange connection 75 - 2 1/2" DIN- ANSI-JIS-BS PN10 EPDM PO-DA UT17DA	4.08	1.00	125910	561.67
Butterfly Valve K4 DN80 PVC grey flange connection 90 - 3" DIN-ANSI- JIS-BS PN10 EPDM PO-DA UT20DA	3.62	1.00	125911	655.28
Butterfly Valve K4 DN100 PVC grey flange connection 110 - 4" DIN- ANSI-JIS-BS PN10 EPDM PO-DA UT25DA	6.08	1.00	125912	720.81
Butterfly Valve K4 DN125 PVC grey flange connection 140 - 5" DIN- ANSI-JIS-BS PN10 EPDM PO-DA UT30DA	8.24	1.00	128768	992.30
Butterfly Valve K4 DN150 PVC, grey Flange-connection 160-6", DIN- ANSI-JIS-BS PN10 EPDM UT35DA	11.36	1.00	125913A	1418.78
Butterfly Valve K4 DN200 PVC grey flange connection 225 - 8" DIN- ANSI-JIS-BS PN10 EPDM PO-DA UT40DA	15.52	1.00	125914	1507.16

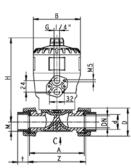


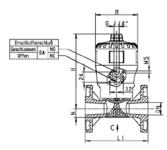


Product	G-kg	VE	Prod.No.	Price €
ACCESSORIES				
Flow control silencer 1/8"	0.03	1.00	50716	47.39
Silencer 1/8" for solenoid valve	0.01	1.00	50890	21.91
Elect.position indicator for pneumatic actuators IP65 UT pi-250V 2 limit switches additional	0.37	1.00	50914	291.20
PLS-labelling insert for Butterfly Valve K4 DN150/DN200 PBT, red	0.01	10.00	101828	9.97
Solenoid Valve for pneumatic actuators 5/2+3/2-way Namur-flange G1/4" IP65 24V DC	0.42	1.00	51615	304.14
Solenoid Valve for pneumatic actuators 5/2+3/2-way Namur-flange G1/4* IP65 230VAC	0.42	1.00	51616	295.25
PVC flange set (DIN PN10)				
Flange set for Butterfly Valve K4 DN65 PVC grey 63 - 2" DIN PN10 (screw set zonc coated)	2.44	1.00	142166	91.06
Flange set for Butterfly Valvee K4 DN65 PVC grey 75 - 2 1/2" DIN PN10 (screw set zonc coated)	2.73	1.00	142167	116.96
Flange set for Butterfly Valve K4 DN80 PVC grey 90 - 3" DIN PN10 (screw set zonc coated)	4.70	1.00	142168	191.37
Flange set for Butterfly Valve K4 DN100 PVC grey 110 - 4" DIN PN10 (screw set zonc coated)	4.89	1.00	142169	240.46
Flange set for Butterfly Valve K4 DN125 PVC grey 140 - 5" DIN PN10 (screw set zonc coated)	6.24	1.00	142170	274.82
Flange set for Butterfly Valve K4 DN150 PVC grey 160 - 6" DIN PN10 (screw set zonc coated)	9.49	1.00	142171	451.51
Flange set for Butterfly Valve K4 DN200 PVC grey 225 - 8" DIN PN10 (screw set zonc coated)	11.84	1.00	142172	583.95











# Automatic diaphragm valve T4 with pneumatic actuator

PO-NC spring pressure closed, PO-NO spring pressure opened, PO-DA double acting

# TECHNICAL DATA

- High pressure and temperature resistance
- Optical position indication
- Robust actuator body
- Resistant sealing system (chlorine- and sea water resitant, corrosion-free)
- Short manipulation time
- Comprehensive accessories:
- solenoid valves, electr. position indicator, 4-20 mA position control

d	DN	G	А	D	F	к	L	L1	м	t	z
mm	mm	Zoll	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	15	1⁄2"	90	43	25	M6	124	130	17	16	96
25	20	3/4"	108	53	25	M6	144	150	17	19	114
32	25	1"	116	60	25	M6	154	160	21	22	122
40	32	1¼"	136	74	45	M8	174	180	33	26	142
50	40	1½"	154	83	45	M8	194	200	33	31	160
63	50	2"	184	103	45	M8	224	230	40,5	38	190

Product	G-kg	VE	Prod.No.	Price €
PO-NC				
Diaphragm Valve T4 DN15 PVC grey union/PVCu solvent socket d20 metric PN10 EPDM EPDM PO-NC K62	1.10	1.00	125616	455.10
Diaphragm Valve T4 DN20 PVC grey union/PVCu solvent socket d25 metric PN10 EPDM EPDM PO-NC K62	1.09	1.00	125619	465.35
Diaphragm Valve T4 DN25 PVC grey union/PVCu solvent socket d32 metric PN10 EPDM EPDM PO-NC K82	1.91	1.00	125622	654.56
Diaphragm Valve T4 DN32 PVC grey union/PVCu solvent socket d40 metric PN10 EPDM EPDM PO-NC K122	6.89	1.00	125625	853.98
Diaphragm Valve T4 DN40 PVC grey union/PVCu solvent socket d50 metric PN10 EPDM EPDM PO-NC K122	7.35	1.00	125628	859.09
Diaphragm Valve T4 DN50 PVC grey union/PVCu solvent socket d63 metric PN10 EPDM EPDM PO-NC K123	7.60	1.00	125631	1007.39
PO-NO				
Diaphragm Valve T4 DN15 PVC grey PVCu union solvent socket ends d20 metric PN10 EPDM EPDM PO-NO K62	1.32	1.00	125642	281.73
Diaphragm Valve T4 DN15 PVC grey PVCu union solvent socket ends d20 metric PN10 FPM fpm PO-NO K62	1.32	1.00	125643	483.15
Diaphragm Valve T4 DN20 PVC grey PVCu union solvent socket ends d25 metric PN10 EPDM EPDM PO-NO K62	0.86	1.00	125644	287.65
Diaphragm Valve T4 DN25 PVC grey PVCu union solvent socket ends d32 metric PN10 EPDM EPDM PO-NO K82	1.87	1.00	125645	404.37
Diaphragm Valve T4 DN32 PVC grey PVCu union solvent socket ends d40 metric PN10 EPDM EPDM PO-NO K122	6.73	1.00	125646	529.59
Diaphragm Valve T4 DN40 PVC grey PVCu union solvent socket ends d50 metric PN10 EPDM EPDM PO-NO K122	6.82	1.00	125647	532.94
Diaphragm Valve T4 DN50 PVC grey PVCu union solvent socket ends d63 metric PN10 EPDM EPDM PO-NO K123	7.51	1.00	125648	622.56
PO-DA				
Diaphragm Valve T4 DN15 PVC grey union/PVCu solvent socket d20 metric PN10 EPDM EPDM PO-DA K62	0.84	1.00	125635	388.62
Diaphragm Valve T4 DN20 PVC grey union/PVCu solvent socket d25 metric PN10 EPDM EPDM PO-DA K62	1.09	1.00	125636	393.75
Diaphragm Valve T4 DN25 PVC grey union/PVCu solvent socket d32 metric PN10 EPDM EPDM PO-DA K82	1.37	1.00	125637	557.38
Diaphragm Valve T4 DN32 PVC grey union/PVCu solvent socket d40 metric PN10 EPDM EPDM PO-DA K122	6.89	1.00	125638	726.14
Diaphragm Valve T4 DN40 PVC grey union/PVCu solvent socket d50 metric PN10 EPDM EPDM PO-DA K122	7.00	1.00	125639	731.22
Diaphragm Valve T4 DN50 PVC grey union/PVCu solvent socket d63 metric PN10 EPDM EPDM PO-DA K123	7.51	1.00	125640	853.98



# **PVC PRODUCTS & SOLVENT CEMENTS**

162	Valves
193	Pipes
199	Fittings
225	Solvents, cleaner
229	FlexFit fittings
234	FlexFit <sup>®</sup> flexible PVC pressure hoses



# PLASTIC IS NOT JUST PLASTIC.

In the production of Praher Plastics<sup>®</sup> and IBG<sup>®</sup> PVC products, we rigorously avoid environmentally harmful or even potentially health-damaging additives. The environmentally-friendly manufacturing process adheres to particularly strict criteria.

It is important to us that all products can be disassembled into their smallest components after wear and can be separated by material. This ensures optimized disposal, recycling, and sustainable preservation and use of all resources.

A comprehensive spare parts warranty (up to 10 years for Praher® products) and above-average durability due to high-quality materials guarantee long-term usability.

Our FlexFit® series products are designed so that, through adhesive-free connections between the PVC FlexFittings and hoses, both the environment and human health are protected.

DESIGNED, ENGINEERED & MADE IN AUSTRIA



Our raw materials are tested according to international standards.

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# SUSTAINABLE PLASTIC

# **PVC-U**

PVC-U (unplasticized PVC or rigid PVC) is produced without the addition of plasticizers. PVC-U is a thermoplastic with a wide range of applications due to its good chemical, corrosion, and weather resistance. Additionally, PVC-U parts are suitable for contact with drinking water and food, as they are proven to be physiologically harmless.



# SEALING MATERIALS IN PRAHER PLASTICS® AND IBG® PRODUCTS

PTFE	PTFE, commonly known by the brand name Teflon, is a thermoplastic plastic with a milky white color and a waxy feel. Due to its unique material properties, it occupies a distinctive	EPDM	EPDM (short for Ethylene-Propylene-Diene Monomer Rubber) is a class of high-quality plastics or synthetic rubbers. EPDM is known for its exceptional resistance to various exter- nal influences. It is primarily used as a weather- resistant sealing membrane, but is also used
PE	position compared to other thermoplastics. In addition to its excellent chemical properties, PTFE also has very good sliding characteristics.	FPM	in the production of insulation boards, hoses, seals, and filling materials. EPDM is resistant to most chemicals in the pool area.
	Polyethylene belongs to the group of polyole- fins and is semicrystalline and non-polar. It is by far the most widely used (standard) plastic in the world. All types of polyethylene are characterized by high chemical resistance, good electrical insulation properties, and excellent sliding cha- racteristics. However, its mechanical properties are moderate compared to other plastics.		Fluoroelastomer (FPM) is characterized by ex- cellent resistance to high temperatures, ozone, oxygen, mineral oils, synthetic hydraulic fluids, fuels, aromatics, many organic solvents, and chemicals. Its gas permeability is low, similar to that of butyl rubber. Special FPM compounds offer enhanced resistance to acids, fuels, water, and steam.

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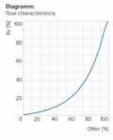


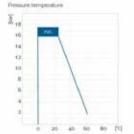
# 2-way ball valve S6

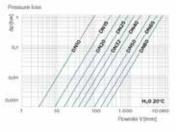
- Housing secured on both sides
- Up to +60 °C Best flow flow rates due to non-reduced diameter
- High durability due to ball seating ring made of PTFE or PE
- Low weight
- Radial installation and disassemblyDouble shaft sealing
- Corrosion-free
- 100% functional and leaktest
  Approvals: EURASEC, hygiene certificate, GOST certificate, Rostechnadzor use permit
  - Available in all common connection types

# DIMENSIONS

DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
G <sub>GM</sub> 1	3⁄8″	1⁄2″	3/4"	1″	1¼″	1½″	2″	2½"	3″	4″
А	44,5	44,5	50	52,5	61	77	87	110	136	136
В	42,5	42,5	55	55	65	75	75	111	133,5	133,5
D	55,5	55,5	62	70	87	101,5	115,5	144,5	180,5	180,5
Н	47	47	53	55,5	76	88,5	98	126	150,5	150,5
t <sub>KM</sub> 2	16,5	16,5	19,5	22,5	26,5	31,5	38,5	45	56,5	61
t s <sup>3</sup>	17	17	20	22,5	26,5	31,5	38,5	45	54	-
t ss pe	13	14,5	15,5	18,5	15,5	29	31	32	30	-
t 5 <sub>SM PE</sub>	14,5	16	17	19,5	22	25	29	31,5	38	42
Z <sub>KM</sub> <sup>2</sup>	51	49	56	58	68	85	98	121	153	162
Z _1	50	50	57	60	67	86	98	123	156	-
Z 5 PE	54	51	60	64	75	97	115	138	182	186
L <sub>KS</sub> <sup>3</sup>	98	107	125	133	151	176	201	260	297	-
L <sup>4</sup> <sub>SS PE</sub>	95	105	123	130	119	162	175	226	266	-
PN <sub>PVC</sub>	16	16	16	16	16	16	16	16	16	16
PN <sub>PE</sub>	16	16	16	16	16	16	16	16	16	10







5
AN 2
1.00

8 P c

Z P C

Standard version (PE) with orange handle

Product	G-kg	VE	Prod.No.	Price €
SOLVENT SOCKET PE/EPDM SWIMMING POOL				
Ball Valve S6 2W DN10 PVC grey PVCu solvent socket d16 metric PN16 EPDM PE loose packing	0.10	50.00	127696	12.92
Ball Valve S6 2W DN15 PVC grey PVCu solvent socket d20 metric PN16 EPDM PE loose packing	0.17	50.00	127697	13.24
Ball Valve S6 2W DN20 PVC grey PVCu solvent socket d25 metric PN16 EPDM PE loose packing	0.23	50.00	127698	14.66
Ball Valve S6 2W DN25 PVC grey PVCu solvent socket d32 metric PN16 EPDM PE loose packing	0.29	40.00	127699	18.16
Ball Valve S6 2W DN32 PVC grey PVCu solvent socket d40 metric PN16 EPDM PE loose packing	0.48	20.00	127700	21.49
Ball Valve S6 2W DN40 PVC grey PVCu solvent socket d50 metric PN16 EPDM PE loose packing	0.82	20.00	125462	23.71
Ball Valve S6 2W DN50 PVC grey PVCu solvent socket d63 metric PN16 EPDM PE loose packing	1.16	10.00	125463	32.13
Ball Valve S6 2W DN65 PVC grey PVCu solvent socket d75 metric PN16 EPDM PE loose packing	2.53	4.00	128400	117.64
Ball Valve S6 2W DN80 PVC grey PVCu solvent socket d90 metric PN16 EPDM PE loose packing	4.97	4.00	128428	182.99
Ball Valve S6 2W DN80 PVC grey PVCu solvent socket d110 metric PN16 EPDM PE loose packing	4.59	4.00	129793	321.21
THREAD SOCKET IG PE/EPDM SWIMMING POOL				
Ball Valve S6 2W DN10 PVC grey thread socket R 3/8" BSP PN16 EPDM PE loose packing	0.25	50.00	127701	15.67

Product	G-kg	VE	Prod.No.	Price €
Ball Valve S6 2W DN15 PVC grey thread socket R 1/2" BSP PN16 PDM PE loose packing	0.24	50.00	127702	15.67
3all Valve S6 2W DN20 PVC grey thread socket R 3/4″ BSP PN16 :PDM PE loose packing	0.24	50.00	127703	20.14
Ball Valve S6 2W DN25 PVC grey thread socket R 1" BSP PN16 EPDM PE loose packing	0.29	40.00	127704	24.96
all Valve S6 2W DN32 PVC grey thread socket R 1 1/4" BSP PN16 PDM PE loose packing	0.50	20.00	127705	27.49
all Valve S6 2W DN40 PVC grey thread socket R 1 1/2" BSP PN16 PDM PE loose packing	0.86	20.00	125466	34.70
all Valve S6 2W DN50 PVC grey thread socket R 2" BSP PN16 EPDM PE loose packing	1.22	10.00	125467	43.97
Ball Valve S6 2W DN65 PVC grey thread socket R 2 1/2" BSP PN16 PDM PE loose packing	2.34	4.00	129027	186.11
PE FUSION-SPIGOT PE/EPDM SWIMMING POOL				
Ball Valve S6 2W DN10 PVC grey PE fusion-spigot d16 metric PN16 PDM PE loose packing	0.24	50.00	127706	17.38
Ball Valve S6 2W DN15 PVC grey PE fusion-spigot d20 metric PN16 PDM PE loose packing	0.17	50.00	127707	17.54
Ball Valve S6 2W DN20 PVC grey PE fusion-spigot d25 metric PN16 PDM PE loose packing	0.23	50.00	127708	18.23
8all Valve S6 2W DN25 PVC grey PE fusion-spigot d32 metric PN16 PDM PE loose packing	0.28	40.00	127709	25.89
Ball Valve S6 2W DN40 PVC grey PE fusion-spigot d50 metric PN16 PDM PE loose packing	0.80	15.00	125468	36.57
all Valve S6 2W DN50 PVC grey PE fusion-spigot d63 metric PN16 PDM PE loose packing	1.11	10.00	125469	46.72
all Valve S6 2W DN32 PVC grey PE fusion-spigot d40 metric PN16 PDM PE loose packing	0.49	20.00	127710	28.72
all Valve S6 2W DN65 PVC grey PE fusion-spigot d75 metric PN16 PDM PE loose packing	2.37	4.00	129023	202.79
SOLVENT SOCKET PTFE/EPDM OR FPM				
Ball Valve S6 2W DN10 PVC grey PVCu solvent socket d16 metric N16 EPDM PTFE single packed	0.18	20.00	126965	21.70
3all Valve S6 2W DN10 PVC grey PVCu solvent socket d16 metric PN16 FPM PTFE single packed	0.10	20.00	126986	28.66
3all Valve S6 2W DN15 PVC grey PVCu solvent socket d20 metric PN16 EPDM PTFE single packed	0.10	20.00	126974	21.70
3all Valve S6 2W DN15 PVC grey PVCu solvent socket d20 metric PN16 FPM PTFE single packed	0.10	20.00	126987	28.66
all Valve S6 2W DN20 PVC grey PVCu solvent socket d25 metric N16 EPDM PTFE single packed	0.39	20.00	126975	24.38
all Valve S6 2W DN20 PVC grey PVCu solvent socket d25 metric N16 FPM PTFE single packed	0.22	20.00	127654	32.09
all Valve S6 2W DN25 PVC grey PVCu solvent socket d32 metric PN16 EPDM PTFE single packed	0.44	15.00	126976	26.07
3all Valve S6 2W DN25 PVC grey PVCu solvent socket d32 metric N16 FPM PTFE single packed	0.20	15.00	127655	40.91
3all Valve S6 2W DN32 PVC grey PVCu solvent socket d40 metric N16 EPDM PTFE single packed	0.49	20.00	126985	35.52
Sall Valve S6 2W DN32 PVC grey PVCu solvent socket d40 metric N16 FPM PTFE single packed	0.49	20.00	127656	50.49
Sall Valve S6 2W DN40 PVC grey PVCu solvent socket d50 metric N16 EPDM PTFE single packed	0.84	20.00	125486	37.53
Sall Valve S6 2W DN40 PVC grey PVCu solvent socket d50 metric N16 FPM PTFE single packed	0.84	20.00	125498	48.88
3all Valve S6 2W DN50 PVC grey PVCu solvent socket d63 metric Y116 EPDM PTFE single packed	1.18	10.00	125487	51.47
Sall Valve S6 2W DN50 PVC grey PVCu solvent socket d63 metric N16 FPM PTFE single packed	1.26	10.00	125499	64.55
3all Valve S6 2W DN65 PVC grey PVCu solvent socket d75 metric N16 EPDM PTFE single packed	2.52	4.00	128401	176.74
Ball Valve S6 2W DN65 PVC grey PVCu solvent socket d75 metric PN16 FPM PTFE single packed	2.54	4.00	128402	224.65
all Valve S6 2W DN80 PVC grey PVCu solvent socket d90 metric	4.16	1.00	128429	305.51
2N16 EPDM PTFE single packed Ball Valve S6 2W DN80 PVC grey PVCu solvent socket d90 metric	4.56	1.00	128430	359.96
N16 FPM PTFE single packed Sall Valve S6 2W DN80 PVC grey PVCu solvent socket d110 metric	5.13	1.00	129794	630.48
PN16 EPDM PTFE single packed	5.16	1.00	129795	753.06
Ball Valve S6 2W DN80 PVC grey PVCu solvent socket d110 metric				
Sall Valve S6 2W DN80 PVC grey PVCu solvent socket d110 metric Pn16 FPM PTFE single packed FHREAD SOCKET IG PTFE/EPDM OR FPM				





PTFE version with red handle



Standard version with orange PE/EPDM handle. Available on request with other colors for the handle and personalized laser marking.



S6 ball valve housing secured on both sides for optimum operational safety

Product	G-kg	VE	Prod.No.	Price €
Ball Valve S6 2W DN10 PVC grey thread socket R 3/8" BSP PN16 FPM PTFE single packed	0.17	20.00	127672	31.06
Ball Valve S6 2W DN15 PVC grey thread socket R 1/2" BSP PN16 EPDM PTFE single packed	0.25	20.00	127668	24.14
Ball Valve S6 2W DN15 PVC grey thread socket R 1/2" BSP PN16 FPM PTFE single packed	0.17	20.00	127673	31.06
Ball Valve S6 2W DN20 PVC grey thread socket R 3/4" BSP PN16 EPDM PTFE single packed	0.39	20.00	127669	28.05
Ball Valve S6 2W DN20 PVC grey thread socket R 3/4" BSP PN16 FPM PTFE single packed	0.39	20.00	127674	35.80
Ball Valve S6 2W DN25 PVC grey thread socket R 1" BSP PN16 EPDM PTFE single packed	0.30	15.00	127670	30.51
Ball Valve S6 2W DN25 PVC grey thread socket R 1" BSP PN16 FPM PTFE single packed	0.29	15.00	127675	45.35
Ball Valve S6 2W DN32 PVC grey thread socket R 1 1/4" BSP PN16 EPDM PTFE single packed	0.50	20.00	127671	40.79
Ball Valve S6 2W DN32 PVC grey thread socket R 1 1/4" BSP PN16 FPM PTFE single packed	0.50	20.00	127676	55.74
Ball Valve S6 2W DN40 PVC grey thread socket R 1 1/2" BSP PN16 EPDM PTFE single packed	0.88	20.00	125490	42.48
Ball Valve S6 2W DN40 PVC grey thread socket R 1 1/2" BSP PN16 FPM PTFE single packed	0.88	20.00	125502	54.28
Ball Valve S6 2W DN50 PVC grey thread socket R 2" BSP PN16 EPDM PTFE single packed	1.24	10.00	125491	57.72
Ball Valve S6 2W DN50 PVC grey thread socket R 2″ BSP PN16 FPM PTFE single packed	1.24	10.00	125503	71.04
Ball Valve S6 2W DN65 PVC grey thread socket R 2 1/2° BSP PN16 EPDM PTFE single packed	2.56	4.00	129029	193.37
Ball Valve S6 2W DN65 PVC grey thread socket R 2 1/2" BSP PN16 FPM PTFEsingle packed	2.32	4.00	129030	243.37
FUSION-SOCKET PE PTFE/EPDM OR FPM				
Ball Valve S6 2W DN10 PVC grey PE socket d16 metric PN16 EPDM PTFE single packed	0.23	20.00	126966	26.63
Ball Valve S6 2W DN10 PVC grey PE_socket d16 metric PN16 FPM PTFE single packed	0.16	20.00	126977	33.57
Ball Valve S6 2W DN15 PVC grey PE_socket d20 metric PN16 EPDM PTFE single packed	0.24	20.00	126967	26.63
Ball Valve S6 2W DN15 PVC grey PE_socket d20 metric PN16 FPM PTFE single packed	0.16	20.00	126978	33.57
Ball Valve S6 2W DN20 PVC grey PE_socket d25 metric PN16 EPDM PTFE single packed	0.22	20.00	126968	29.11
Ball Valve S6 2W DN20 PVC grey PE_socket d25 metric PN16 FPM PTFE single packed	0.21	20.00	126979	36.83
Ball Valve S6 2W DN25 PVC grey PE_socket d32 metric PN16 EPDM PTFE single packed	0.27	15.00	126969	31.83
Ball Valve S6 2W DN25 PVC grey PE_socket d32 metric PN16 FPM PTFE single packed	0.27	15.00	126980	46.71
Ball Valve S6 2W DN32 PVC grey PE_socket d40 metric PN16 EPDM PTFE single packed	0.47	20.00	126970	42.49
Ball Valve S6 2W DN32 PVC grey PE_socket d40 metric PN16 FPM PTFE single packed	0.46	20.00	126981	57.47
Ball Valve S6 2W DN40 PVC grey PE_socket d50 metric PN16 EPDM PTFE single packed	0.79	20.00	126971	49.94
Ball Valve S6 2W DN40 PVC grey PE_socket d50 metric PN16 FPM PTFE single packed	0.79	20.00	126982	62.26
Ball Valve S6 2W DN50 PVC grey PE_socket d63 metric PN16 EPDM PTFE single packed	1.05	10.00	126972	69.10
Ball Valve S6 2W DN50 PVC grey PE_socket d63 metric PN16 FPM PTFE single packed	1.07	10.00	126983	84.00
Ball Valve S6 2W DN65 PVC grey PE_socket d75 metric PN16 EPDM PTFE single packed	2.22	4.00	129021	210.04
Ball Valve S6 2W DN65 PVC grey PE_socket d75 metric PN16 FPM PTFE single packed	2.24	4.00	129022	260.04
Handle, optional DN40 in yellow				
Handle for ball valves S6 2W DN40 ABS yellow	0.05	0.00	102767	8.41
Handle extension				
	0.08	15.00	125424	25.27
Handle extension Handle extension DN10/15 PVC grey				
Handle extension	0.08 0.08 0.03	15.00 10.00 15.00	125424 125425 125426	25.27 26.27 27.49

0.15 15.00

15.00

0.16

125428

125429

36.33

45.31



Handle extension DN65 PVC grey

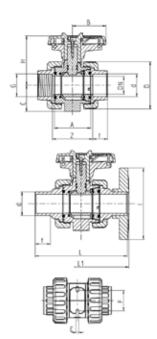
Handle extension DN80 PVC grey

» PE socket

PERAQUA



- » Industry standard
- » Modular
- » Highest safety
- » Silicone-free

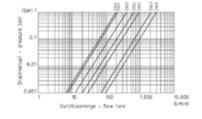


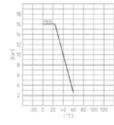
# 2-way ball valve M1

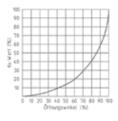
modular industrial ball valve M1, 100% tested quality, made in Austria, buttress thead. Integrated dome for installation of the adapter sets for actuators, integrated support. PVC, PP on request. Floating ball, different connection types. PTFE ball seating ring. EPDM or FPM sealing.

- Operation temperature max. 60°
- Best flow rates due to non-reduced diametterHigh durability due to ball seating ring made of PTFE
  - Low weight
  - Radial installation and disassembly
- Silicon free
- Buttress thread • Double shaft sealing
- Safety handle system

DN	10	15	20	25	32	40	50
d	16	20	25	32	40	50	63
G _1	3/8	1/2	3⁄4	1	1 1⁄4	1 1⁄2	2
А	45	45	53,5	54	62	78	87
В	39,5	39,5	51	51	63,5	72	84
С	33	33	40	43	51	56	64
D	55,5	55,5	62	70	84	101	115
E	5,5	5,5	5,5	6,5	6,5	6,5	6,5
F	34	34	36	38	40	45	50
Н	70,5	70,5	77	79,5	98	105,5	114
l.	-	97	105	125	140	150	165
t <sub>KM</sub> 2	16	16,5	19,5	23	26,5	31,5	38,5
t <sup>3</sup>	17	16,5	19,5	23	26,5	31,5	38,5
t 4 <sub>SS PE</sub>	13	14	15,5	18,5	15	29	31
t 5 NM PE	14,5	16	17	19	21,5	25	29,5
Z <sub>KM</sub> <sup>2</sup>	51	50	59,5	60	68,5	86	98
Z <sub>GM</sub> <sup>1</sup>	48	50	60	60	68	87	98
Z <sub>sm</sub> <sup>5</sup> PE	52,5	50	62	64,5	75	97	110,5
L <sub>KS</sub> <sup>3</sup>	98	123,5	143,5	153,5	173,5	193,5	223,5
L <sup>4</sup> <sub>SS</sub> PE	95	106,5	126,5	131	120	162,5	175
L1 <sub>FF</sub> <sup>6</sup>	-	130	150	160	180	200	230
PN	16	16	16	16	16	16	16







Flow pressure loss



Opening angle

Product	G-kg	VE	Prod.No.	Price €
M1 ball valve PTFE/EPDM				
Ball Valve M1 2W DN10 PVC grey PVCu solvent socket ends d16 metric PN16 EPDM PTFE single packed	0.22	9.00	128809A	46.09
Ball Valve M1 2W DN15 PVC grey PVCu solvent socket ends d20 metric PN16 EPDM PTFE single packed	0.22	9.00	128810A	47.99
Ball Valve M1 2W DN20 PVC grey PVCu solvent socket ends d25 metric PN16 EPDM PTFE single packed	0.27	8.00	128811A	55.19
Ball Valve M1 2W DN25 PVC grey PVCu solvent socket ends d32 metric PN16 EPDM PTFE single packed	0.34	8.00	128812A	65.45
Ball Valve M1 2W DN32 PVC grey PVCu solvent socket ends d40 metric PN16 EPDM PTFE single packed	0.55	8.00	128813A	87.19
Ball Valve M1 2W DN40 PVC grey PVCu solvent socket ends d50 metric PN16 EPDM PTFE single packed	1.03	6.00	128814A	107.79
Ball Valve M1 2W DN50 PVC grey PVCu solvent socket ends d63 metric PN16 EPDM PTFE single packed	1.44	4.00	128815A	127.52



Product	G-kg	VE	Prod.No.	Price €
Ball Valve M1 2W DN65 PVC grey PVCu solvent socket d75 metric PN16 EPDM PTFE single packed	2.74	1.00	124227	272.13
Ball Valve M1 2W DN80 PVC grey PVCu solvent socket d90 metric PN16 EPDM PTFE single packed	4.81	1.00	124228	335.08
Ball Valve M1 2W DN80 PVC grey PVCu solvent socket d110 metric PN16 EPDM PTFE single packed	4.90	1.00	124229	455.67
2-WAY BALL VALVE M1 WITH LIMIT SWITCH BOX				
Ball Valve M1 2W DN10 PVC grey, PVCu solvent socket ends d16 me- tric PN16 EPDM PTFE, pi NO Ag-Ni 15-250V AC single packed, KIWA NSF/ANSI/CAN 61 K98073	0.67	0.00	129814A	214.19
Ball Valve M1 2W DN15 PVC grey, PVCu solvent socket ends d20 me- tric PN16 EPDM PTFE, pi NO Ag-Ni 15-250V AC single packed, KIWA NSF/ANSI/CAN 61 K98073	0.64	1.00	129815A	217.05
Ball Valve M1 2W DN20 PVC grey PVCu solvent socket ends d25 metric PN16 EPDM PTFE pi NO Ag-Ni 15-250V AC single packed	0.78	1.00	129816A	269.52
Ball Valve M1 2W DN25 PVC grey PVCu solvent socket ends d32 metric PN16 EPDM PTFE pi NO Ag-Ni 15-250V AC single packed	1.46	1.00	129817A	289.99
Ball Valve M1 2W DN32 PVC grey, PVCu solvent socket ends d40 me- tric PN16 EPDM PTFE, pi NO Ag-Ni 15-250V AC single packed, KIWA NSF/ANSI/CAN 61 K98073	1.67	1.00	129818A	317.64
Ball Valve M1 2W DN40 PVC grey, PVCu solvent socket ends d50 me- tric PN16 EPDM PTFE, pi NO Ag-Ni 15-250V AC single packed, KIWA NSF/ANSI/CAN 61 K98073	1.39	1.00	129819A	424.76
Ball Valve M1 2W DN50 PVC grey, PVCu solvent socket ends d63 me- tric PN16 EPDM PTFE, pi NO Ag-Ni 15-250V AC single packed, KIWA NSF/ANSI/CAN 61 K98073	1.74	1.00	129820A	450.59
Ball Valve M1 2W DN65 PVC grey PVCu solvent socket d75 metric PN16 EPDM PTFE pi NO Ag-Ni 15-250V AC single packed	4.16	1.00	124239	1081.22
Ball Valve M1 2W DN80 PVC grey PVCu solvent socket d90 metric PN16 EPDM PTFE pi NO Ag-Ni 15-250V AC single packed	6.28	1.00	124240	1240.67
Ball Valve M1 2W DN80 PVC grey PVCu solvent socket d110 metric PN16 EPDM PTFE pi NO Ag-Ni 15-250V AC single packed	6.37	1.00	124241	1455.59
2-WAY BALL VALVE M1 WITH ADAPTER SET FOR ACTUATOR ISO52	11			
Ball Valve M1 2W DN10 PVC grey PVCu solvent socket ends d16 metric PN16 EPDM PTFE adapterset F04 single packed	0.26	9.00	128826A	104.70
Ball Valve M1 2W DN15 PVC grey, PVCu solvent socket ends d20 metric PN16 EPDM PTFE, adapter set F04 single packed, KIWA NSF/ ANSI/CAN 61 K98073	0.25	1.00	128827A	78.52
Ball Valve M1 2W DN20 PVC grey PVCu solvent socket ends d25 metric PN16 EPDM PTFE adapterset F04 single packed	0.36	8.00	128828A	119.19
Ball Valve M1 2W DN25 PVC grey PVCu solvent socket ends d32 metric PN16 EPDM PTFE adapterset F04 single packed	0.45	8.00	128829A	134.49
Ball Valve M1 2W DN32 PVC grey PVCu solvent socket ends d40 metric PN16 EPDM PTFE adapterset F04 single packed	0.62	8.00	128830A	170.93
Ball Valve M1 2W DN40 PVC grey PVCu solvent socket ends d50 metric PN16 EPDM PTFE adapterset F04 single packed	0.96	6.00	128831A	204.26
Ball Valve M1 2W DN50 PVC grey PVCu solvent socket ends d63 metric PN16 EPDM PTFE adapterset F04 single packed	1.29	4.00	128832A	243.87
Ball Valve M1 2W DN65 PVC grey PVCu solvent socket d75 me- tricPN16 EPDM PTFE adapter set F07 single packed	2.89	1.00	124233	452.48
Ball Valve M1 2W DN80 PVC grey PVCu solvent socket d90 metric PN16 EPDM PTFE adapter set F07 single packed	5.07	1.00	124234	532.96
Ball Valve M1 2W DN80 PVC grey PVCu solvent socket d110 metric	5.16	1.00	124235	661.59





# 2-way ball valve S5 single union special

with male thread and hose connection

Product	G-kg	VE	Prod.No.	Price €
Ball Valve SU 2W DN40 PVC white male thread ends 1 1/2" NPT / hose nozzle 32/38mm	0.48	1.00	7301298	35.44

# Single union cone check valve, on request

dimensions: DN40, d50 and DN50, d63, sealing EPDM, material spring SS302, max. operation pressure 1.5 bar, body white, transparent body available on request min. order quantity: 100 pcs



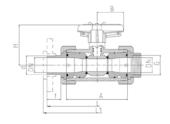
# Double union cone check valve, on request

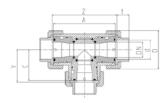
dimensions: DN40, d50 and DN50, d63, sealing EPDM, material spring SS302, max. operation pressure 1.5 bar, body transparent, min. order quantity: 100 pcs





- » Highest safety
- » Safety handle
- L/T ball design »
- **Easy automation**





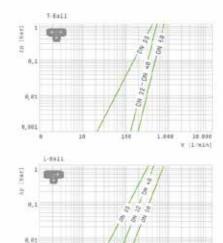
# 3-way ball valve S4

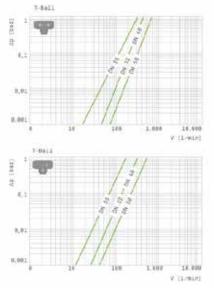
- Operation temperature max. 60 °C
- Safety handle system
   Radial installation and disassembly
- Direction-independent flow
- Full sectional flow area (nominal width)
- Floating ball
  4 PTFE ball seating rings
- L or T ball type avialable
- Easy automation due to valve clamps

#### DIMENSIONS

8,861

d	DN	G	L	L1	Α	D	н	В	Y	С	z	t	PN
16	10	"	152	158	100	53	72	40	52,8	50	105,5	16,5	16
20	15	1⁄2"	162	168	100	53	72	40	52,8	50	105,5	16,5	16
25	20	3⁄4"	191	197	120	70	81,5	51,5	63	60	126	20	16
32	25	1"	200	206	120	70	81,5	51,5	63,5	60	127	22,5	16
40	32	1 1⁄4"	249	255	162	101	107,5	73	84,5	81	169	27,5	16
50	40	1½"	261	267	162	101	107,5	73	85,5	81	171	31,5	16
63	50	2"	296	302	181	121,5	116,5	85	96,5	90,5	193	38,5	50







Product	G-kg	VE	Prod.No.	Price €
L-BALL PTFE/EPDM OR FPM				
Ball Valve S4 3W L-ball DN10 PVC grey PVCu solvent socket d16 metric PN16 EPDM PTFE single packed	0.37	15.00	120626	87.90
Ball Valve S4 3W L-ball DN10 PVC grey PVCu solvent socket d16 metric PN16 FPM PTFE single packed	0.37	15.00	120668	113.21
Ball Valve S4 3W L-ball DN15 PVC grey PVCu solvent socket d20 metric PN16 EPDM PTFE single packed	0.42	15.00	120628	87.90
Ball Valve S4 3W L-ball DN15 PVC grey PVCu solvent socket d20 metric PN16 FPM PTFE single packed	0.37	15.00	120670	113.21
Ball Valve S4 3W L-ball DN20 PVC grey PVCu solvent socket d25 metric PN16 EPDM PTFE single packed	0.85	15.00	121832	89.32
Ball Valve S4 3W L-ball DN20 PVC grey PVCu solvent socket d25 metric PN16 FPM PTFE single packed	0.70	15.00	121834	120.18
Ball Valve S4 3W L-ball DN25 PVC grey PVCu solvent socket d32 metric PN16 EPDM PTFE single packed	0.94	15.00	121833	89.32
Ball Valve S4 3W L-ball DN25 PVC grey PVCu solvent socket d32 metric PN16 FPM PTFE single packed	0.71	15.00	121835	120.18
Ball Valve S4 3W L-ball DN32 PVC grey PVCu solvent socket d40 metric PN16 EPDM PTFE single packed	1.78	5.00	122717	137.14
Ball Valve S4 3W L-ball DN32 PVC grey PVCu solvent socket d40 metric PN16 FPM PTFE single packed	1.79	5.00	120770	181.28
Ball Valve S4 3W L-ball DN40 PVC grey PVCu solvent socket d50 metric PN16 EPDM PTFE single packed	1.82	5.00	122718	138.24
Ball Valve S4 3W L-ball DN40 PVC grey PVCu solvent socket d50 metric PN16 FPM PTFE single packed	1.83	5.00	120771	182.57
Ball Valve S4 3W L-ball DN50 PVC grey PVCu solvent socket d63 metric PN16 EPDM PTFE single packed	2.71	4.00	122719	172.10

10.031

V in/stal



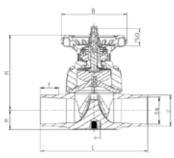
Product	G-kg	VE	Prod.No.	Price €
Ball Valve S4 3W L-ball DN50 PVC grey PVCu solvent socket d63 metric PN16 FPM PTFE single packed	2.80	4.00	120772	224.54
T-BALL PTFE/EPDM OR FPM				
Ball Valve S4 3W T-ball DN10 PVC grey PVCu solvent socket d16 metric PN16 EPDM PTFE single packed	0.44	15.00	120625	87.90
Ball Valve S4 3W T-ball DN10 PVC grey PVCu solvent socket d16 metric PN16 FPM PTFE single packed	0.37	15.00	120667	113.21
Ball Valve S4 3W T-ball DN15 PVC grey PVCu solvent socket d20 metric PN16 EPDM PTFE single packed	0.36	15.00	120627	87.90
Ball Valve S4 3W T-ball DN15 PVC grey PVCu solvent socket d20 metric PN16 FPM PTFE single packed	0.37	15.00	120669	113.21
Ball Valve S4 3W T-ball DN20 PVC grey PVCu solvent socket d25 metric PN16 EPDM PTFE single packed	0.85	15.00	121816	89.32
Ball Valve S4 3W T-ball DN20 PVC grey PVCu solvent socket d25 metric PN16 FPM PTFE single packed	0.70	15.00	121831	120.18
Ball Valve S4 3W T-ball DN25 PVC grey PVCu solvent socket d32 metric PN16 EPDM PTFE single packed	0.90	15.00	121774	89.32
Ball Valve S4 3W T-ball DN25 PVC grey PVCu solvent socket d32 metric PN16 FPM PTFE single packed	0.70	15.00	120307	120.18
Ball Valve S4 3W T-ball DN32 PVC grey PVCu solvent socket d40 metric PN16 EPDM PTFE single packed	1.78	5.00	122714	137.14
Ball Valve S4 3W T-ball DN32 PVC grey PVCu solvent socket d40 metric PN16 FPM PTFE single packed	2.98	5.00	120767	181.28
Ball Valve S4 3W T-ball DN40 PVC grey PVCu solvent socket d50 metric PN16 EPDM PTFE single packed	1.82	5.00	122715	138.24
Ball Valve S4 3W T-ball DN40 PVC grey PVCu solvent socket d50 metric PN16 FPM PTFE single packed	1.82	5.00	120768	182.57
Ball Valve S4 3W T-ball DN50 PVC grey PVCu solvent socket d63 metric PN16 EPDM PTFE single packed	2.68	4.00	122716	172.10
Ball Valve S4 3W T-ball DN50 PVC grey PVCu solvent socket d63 metric PN16 FPM PTFE single packed	2.71	4.00	120769	224.54

» T-ball



#### » Highest safety

- » Visual position indicator
- Lockable handwheel



Dimensions of additional connection types can be found in the datasheet on the Peraqua webshop.



#### **Connection options** Possible connections for the diaphragm valve T7 can be found on the following pages of this chapter.











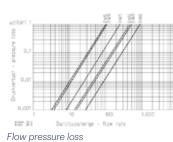


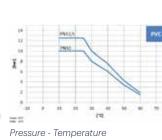


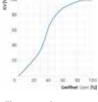
# **Diaphragm valve T7**

- Nominal pressure PN12,5
- Limit Stop prevents the valve against sticking
- Suitable for slurries and abrasive media
- Fixed and sunken nuts
- Optimized diaphragm contour
- Self-outlet marking
  Ergonomic safety hand wheel with locking positions
- Visual position indication
- Pollution repellent design Easy maintenance bayonet connection
- Floating pressure body
- Silicone free
- Dead space freeTorque limitation
- Applications for highly viscous media

DN	(	d	м	н	В	F	Hub	к	L	T	t <sup>1</sup> ks	t ss <sup>1</sup>	PN
15	20	1⁄2"	17	100	86	25	9	M6	124	12	16	28,5	10
20	25	3⁄4″	21	100	86	25	9	M6	144	12	19	36	10
25	32	1"	21	107	86	25	11	M6	154	12	22	36	10
32	40	11⁄4"	33	144	136	45	22	M8	174	15	26	38,5	10
40	50	1½"	33	144	136	45	22	M8	194	15	31	46	10
50	63	2"	40,5	170	136	45	28	M8	224	15	38	46	10







Flow rate characteristic

Product	G-kg	VE	Prod.No.	Price €
PVC-U WITH SOLVENT SOCKET EPDM				
Diaphragm Valve T7 DN15 PVC grey PVCu union-solvent socket ends d20 metric PN12,5 EPDM	0.72	12.00	271200	77.63
Diaphragm Valve T7 DN20 PVC grey PVCu union-solvent socket ends d25 metric PN12,5 EPDM	0.78	12.00	271201	84.33
Diaphragm Valve T7 DN25 PVC grey PVCu union-solvent socket ends d32 metric PN12,5 EPDM	1.02	10.00	271202	105.68
Diaphragm Valve T7 DN32 PVC grey PVCu union-solvent socket ends d40 metric PN12,5 EPDM	2.49	6.00	271203	139.64
Diaphragm Valve T7 DN40 PVC grey PVCu union-solvent socket ends d50 metric PN12,5 EPDM	2.55	6.00	271204	165.43
Diaphragm Valve T7 DN50 PVC grey PVCu union-solvent socket ends d63 metric PN12,5 EPDM	3.50	4.00	271205	204.39
PVC-U WITH SOLVENT SOCKET EPDM				
Diaphragm Valve T7 DN15 PVC grey PVCu union-solvent socket ends d20 metric PN10 FPM	0.73	12.00	271240	104.79
Diaphragm Valve T7 DN20 PVC grey PVCu union-solvent socket ends d25 metric PN10 FPM	0.78	12.00	271241	113.85
Diaphragm Valve T7 DN25 PVC grey PVCu union-solvent socket ends d32 metric PN10 FPM	1.03	10.00	271242	142.69
Diaphragm Valve T7 DN32 PVC grey PVCu union-solvent socket ends d40 metric PN10 FPM	2.53	6.00	271243	188.49
Diaphragm Valve T7 DN40 PVC grey PVCu union-solvent socket ends d50 metric PN10 FPM	2.60	6.00	271244	223.32
Diaphragm Valve T7 DN50 PVC grey PVCu union-solvent socket ends d63 metric PN10 FPM	3.53	4.00	271245	275.94



# 3-Way Gate Valve with solvent socket

with safety handle system

- Safety handle system
- Optical position indication
- Longlasting sealing
- Service-friendlyOptimal mixing function
- Permanently lubricated

Product	G-kg	VE	Prod.No.	Price €
SOLVENT CONNECTION				
Rotary Valve 3W DN40 PVC grey solvent d50 metric	0.70	12.00	71633	53.41
Rotary Valve 3W DN40 PVC grey solvent d50 metric	0.70	12.00	71917	53.41
UNION				
Rotary Valve 3W DN40 PVC grey union/PVCu solvent socket d50 metric	0.81	10.00	72228	90.22
Rotary Valve 3W DN50 PVC grey union/PVCu solvent socket d63 metric	1.08	10.00	72229	99.65





#### » Highest safety

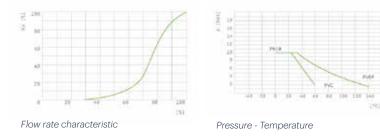
- » Lockable
- » Complete set
- » 1/4", 3/8" external thread

# Laboratory ball valve S4

With connection set

- Operation temperature max. 60 °C
- Lock and dosing ring to avoid unintended opening oft he valve and for fixing the opening
- Valve can be completely opened after removing of the dosing ring
- Compact construction
- Low weight
- Corrosion resistant
- Application: dosing systems, irrigation, filter drain

Product	G-kg	VE	Prod.No.	Price €
PTFE/EPDM OR FPM				
Laboratory Ball Valve DN6 PVC grey female thread/male thread 1/4" - 1/4" BSP PN10 EPDM PTFE with accessories	0.05	10.00	122353A	25.82
Laboratory Ball Valve DN6 PVC grey female thread/male thread 1/4" - 1/4" BSP PN10 FPM PTFE with accessories	0.04	10.00	122354A	32.05
Laboratory Ball Valve DN6 PVC grey female thread/male thread 1/4" - 3/8" BSP PN10 EPDM PTFE with accessories	0.06	10.00	122751A	25.82
Laboratory Ball Valve DN6 PVC grey female thread/male thread 1/4" - 3/8" BSP PN10 FPM PTFE with accessories	0.06	10.00	122757A	32.05
Laboratory Ball Valve DN6 PVC grey female thread/male thread 1/4" - 1/4" NPT PN10 EPDM PTFE with accessories	0.05	10.00	122355A	25.82
Laboratory Ball Valve DN6 PVC grey female thread/male thread 1/4" - 1/4" NPT PN10 FPM PTFE with accessories	0.04	10.00	122356A	32.05
HOSE NOZZLE NPT				
Hose nozzle for laboratory ball valve PVC grey female thread 12-1/4" $\ensuremath{NPT}$	0.01	10.00	140203	4.08
HOSE NOZZLE BSP				
Hose nozzle for laboratory ball valve PVC grey female thread d12-1/4" $\ensuremath{BSP}$	0.01	10.00	141144	4.08

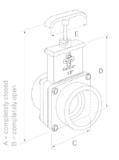




Versions DN25, DN40, DN50 and DN65



Versions DN80 (Prod. No. 71463) and DN100 (Prod. No. 71461) in their highest quality version





DN80 white version, identical to versions up to DN65

# Knife gate valve

- grey, white, special colours and connection types on request
- double O-ring shaft sealing (3" and 4") exchangeable
- full flow rate
- $\ensuremath{\mathcal{V}}\xspace^{\ensuremath{\mathcal{X}}\xspace}$  and thread on shaft for easy handle extension (3" and 4")
- low weight
- $\boldsymbol{\cdot}$  available with metric or ASTM connections
- quick opening and closing
- easy handling and maintenance free
- possibility for pneumatic actuation (3" and 4")
- pressure PN 2.5 (3" and 4" PN 1.0 bar)

MATERIAL: PVC-U body material, TPE lip seals, EPDM O-rings, shaft made of stainless steel (303/A4), handle made of GFK polypropylene

SAFETY CLIP: safety closure system, avoids unintended closure of the valve, optional for 1" and 2", standard for 3" and 4"  $\,$ 

APPLICATION: swimming pools and whirl pools /draining or safety valve, water treatment, agriculture, draining of tanks, fish farming, natural pools

	1½"	2"	2 1⁄2"	3-4"	
А	146,5	168,5	208	390	
В	187	225	282	497	
С	73	85	104	180	
D	126	147	181	300	
E	70	70	94	120	
В	187	225	282	497	
С	73	85	104	180	

Product	G-kg	VE	Prod.No.	Price €
Knife gate valve DN25 PVC grey PVCu solvent socket ends d32 metric MOP 1.0 bar $$	0.24	30.00	71746	15.91
Knife gate valve DN40 PVC grey PVCu solvent socket ends d50 metric MOP 1.0 bar $$	0.30	30.00	70968	17.06
Knife gate valve DN50 PVC grey PVCu solvent socket ends d63 metric MOP 1.0 bar $$	0.42	25.00	70632	18.51
Knife gate valve DN65 PVC grey PVCu solvent socket ends d75 metric MOP 1.0 bar $$	0.73	18.00	71518	35.10
Knife gate valve DN80 PVC grey PVCu solvent socket ends d90 metric MOP 1.0 bar $$	1.99	2.00	71463	77.22
Knife gate valve DN100 PVC grey PVCu solvent socket ends d110 metric MOP 1.0 bar	2.08	2.00	71461	109.20
Knife gate valve DN80 PVC whitePVCu solvent socket d90 metric MOP 1.0 bar, special type from 100 pcs	1.99	100.00	7300580	58.24



# Cone check valve S4 (spring loaded)

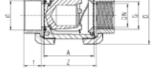
- Operation pressure: 0.06 bar
- Operation temperature max. 60°C
   Corrosion resistant
- Long service life with maintenance-free operation

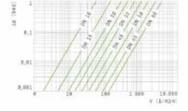
- Compact design
  Radial installation and dismantling
  Quick and precise opening and closure
- Low noise
- V4A spring

# DIMENSIONS

d	D	G	L	L1	А	Z	t	D	PN
16	10	3/8"	114	120	62	67,5	16,5	53	16
20	15	1⁄2"	124	130	62	67,5	16,5	53	16
25	20	3/4"	144	150	70	76,5	19,5	63	16
32	25	1"	154	160	74	81	22,5	70	16
40	32	11⁄4"	174	180	84	90	26,5	85	16
50	40	1½"	194	200	95	104	31,5	101	16
63	50	2"	224	230	109	121	38,5	121,5	16
75	65	2½"	284	290	137	148	45	155	16
90	80	3"	300	310	163	183	55,5	188	10
110	80	4"	340	350	163	176	64	188	6

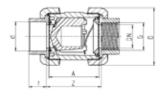
Product	G-kg	VE	Prod.No.	Price €
Cone Check Valve S4 DN10 PVC grey PVCu solvent socket ends d16 metric PN16 EPDM	0.17	20.00	121069	32.00
Cone Check Valve S4 DN10 PVC grey PVCu solvent socket ends d16 metric PN16 FPM	0.17	20.00	121087	55.72
Cone Check Valve S4 DN15 PVC grey PVCu solvent socket ends d20 metric PN16 EPDM	0.16	20.00	121088	33.60
Cone Check Valve S4 DN15 PVC grey PVCu solvent socket ends d20 metric PN16 FPM	0.16	20.00	121089	58.25
Cone Check Valve S4 DN20 PVC grey PVCu solvent socket ends d25 metric PN16 EPDM	0.25	20.00	121090	40.29
Cone Check Valve S4 DN20 PVC grey PVCu solvent socket ends d25 metric PN16 FPM	0.25	20.00	121091	70.06
Cone Check Valve S4 DN25 PVC grey PVCu solvent socket ends d32 metric PN16 EPDM	0.32	15.00	121092	47.61
Cone Check Valve S4 DN25 PVC grey PVCu solvent socket ends d32 metric PN16 FPM	0.33	15.00	121093	83.32
Cone Check Valve S4 DN32 PVC grey PVCu solvent socket ends d40 metric PN16 EPDM	0.55	20.00	121094	58.49
Cone Check Valve S4 DN32 PVC grey PVCu solvent socket ends d40 metric PN16 FPM	0.52	20.00	121095	101.47
Cone Check Valve S4 DN40 PVC grey PVCu solvent socket ends d50 metric PN16 EPDM	0.86	10.00	121041	70.31
Cone Check Valve S4 DN40 PVC grey PVCu solvent socket ends d50 metric PN16 FPM	0.52	10.00	121096	121.24
Cone Check Valve S4 DN50 PVC grey PVCu solvent socket ends d63 metric PN16 EPDM	1.26	8.00	121042	95.53
Cone Check Valve S4 DN50 PVC grey PVCu solvent socket ends d63 metric PN16 FPM	1.28	8.00	121097	160.56
Cone Check Valve S4 DN65 PVC grey PVCu solvent socket ends d75 metric PN16 EPDM	2.63	4.00	121098	199.01
Cone Check Valve S4 DN65 PVC grey PVCu solvent socket ends d75 metric PN16 FPM	2.00	4.00	121099	330.97
Cone Check Valve S4 DN80 PVC grey PVCu solvent socket ends d90 metric PN10 EPDM	4.84	1.00	121043	246.43
Cone Check Valve S4 DN80 PVC grey PVCu solvent socket ends d90 metric PN10 FPM	4.98	1.00	121100	421.55
Cone Check Valve S4 DN80 PVC grey PVCu solvent socket ends d110 metric PN6 EPDM	4.76	1.00	122291	328.22
Cone Check Valve S4 DN80 PVC grey PVCu solvent socket ends d110 metric PN6 FPM	4.90	1.00	122388	558.54

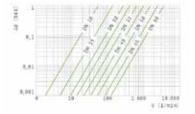




Flow pressure loss







Flow pressure loss

# Cone check valve S4 (spring loaded) V4A PTFE coated (teflon)

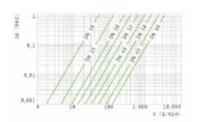
- Recommended for pools with salt chlorinating systems
  Operation pressure: 0.06 bar
  Operation temperature max. 60°C

- Corrosion resistant
- Long service life with maintenance-free operation
- Compact design
   Radial installation and dismantling
- Quick and precise opening and closure
- Low noise
- V4A spring
- DIMENSIONS

MENSIO	113									
d	D	G	L	L1	Α		z	t	D	PN
16	10	3/8"	114	120	62	6	67,5	16,5	53	16
20	15	1⁄2"	124	130	62	6	67,5	16,5	53	16
25	20	3/4"	144	150	70	-	76,5	19,5	63	16
32	25	1"	154	160	74		81	22,5	70	16
40	32	11⁄4"	174	180	84		90	26,5	85	16
50	40	1½"	194	200	95		104	31,5	101	16
63	50	2"	224	230	109		121	38,5	121,5	16
75	65	2½"	284	290	137		148	45	155	16
90	80	3"	300	310	163		183	55,5	188	10
110	80	4"	340	350	163		176	64	188	6
roduct						G-kg	VE	P	rod.No.	Price €
				PVC grey PVC	u	0.17	20.00	1:	21764	35.21
one Check	Valve S4 S	6 metric PN1 pring PTFE-co 6 metric PN1	pated DN10	PVC grey PVC	u	0.17	20.00	1:	22116	42.48
one Check	Valve S4 S		pated DN15	PVC grey PVC	u	0.16	20.00	11	21765	36.93
		pring PTFE-co ) metric PN10		PVC grey PVC	u	0.16	20.00	1:	22117	44.39
		pring PTFE-co 5 metric PN10		PVC grey PVC	u	0.25	20.00	1:	21766	44.39
		pring PTFE-co 5 metric PN10		PVC grey PVC	Cu	0.25	20.00	1:	22118	53.41
olvent sock	et ends d32	2 metric PN1	6 EPDM	PVC grey PVC		0.33	15.00		21767	52.55
olvent sock	et ends d32	2 metric PN1	6 FPM	PVC grey PVC		0.33	15.00		22119	63.49
olvent sock	et ends d40	) metric PN1	6 EPDM	PVC grey PVC		0.53	20.00		21768	64.52
olvent sock	et ends d40	) metric PN1	6 FPM	PVC grey PVC		0.53	15.00		22120	77.36
olvent sock	et ends d50	) metric PN1	6 EPDM	PVC grey PVC		0.62	10.00		21769	77.36
olvent sock	et ends d50	) metric PN1	6 FPM	PVC grey PVC		0.82	10.00	1:	22121	92.21
olvent sock	et ends d63	8 metric PN1	6 EPDM	PVC grey PVC		1.28	8.00	1:	21770	105.03
olvent sock	et ends d63	3 metric PN1	6 FPM	PVC grey PVC		1.28	8.00	1:	22122	121.77
olvent sock	et ends d75	5 metric PN1	6 EPDM	PVC grey PVC		2.68	4.00		21771	218.72
		pring PTFE-co 5 metric PN10		PVC grey PVC	u	2.66	4.00	1:	22123	252.26
olvent sock	et ends d90	) metric PN1	) EPDM	PVC grey PVC		5.24	1.00	13	21772	271.20
olvent sock	et ends d90	) metric PN1	) FPM	PVC grey PVC		4.92	1.00	1:	22124	400.06
	et ends d1′	10 metric PN	6 EPDM	PVC grey PVC		4.87	1.00	11	22721	352.13
		DIE		PVC grey PVC		4.79	1.00	11	22720	400.06







Flow pressure loss





Drain valve not included in delivery



# Cone check valve S6 (swimming pool version)

- Operation pressure 0.03 bar
- Operation temperature max. 60 °C Radial installation and disassembly possible
- Best flow rates Service-friendly
- Transparent body (optional)
  ¾" drain valve (optional)
- Low pressure loss
- Same length as ball valve S6Spring material: V4A

# DIMENSIONS

d	DN	D	G	L1	А	z	t	PN
40	32	101,5	1 1⁄4"	173	77	84	26,5	16
50	40	101,5	1 1⁄2"	182	77	87	31,5	16
63	50	115,5	2"	208	87	99	38,5	16

Product	G-kg	VE	Prod.No.	Price €
CONE CHECK VALVE GREY	URg	VL.	1100.110.	Thee o
Cone Check Valve S6 DN32 PVC grey PVCu solvent socket ends d40 metric PN16 EPDM	0.65	20.00	126358	36.64
Cone Check Valve S6 DN50 PVC grey PVCu solvent socket ends d63 metric PN16 EPDM	0.97	10.00	126360	56.64
Cone Check Valve S6 DN32 PVC grey PVCu solvent socket ends d40 metric PN16 FPM	0.65	20.00	126361	53.18
Cone Check Valve S6 DN40 PVC grey PVCu solvent socket ends d50 metric PN16 EPDM	0.67	20.00	126359	39.98
Cone Check Valve S6 DN40 PVC grey PVCu solvent socket ends d50 metric PN16 FPM	0.70	20.00	126362	63.56
Cone Check Valve S6 DN50 PVC grey PVCu solvent socket ends d63 metric PN16 FPM	0.98	10.00	126363	83.64
CONE CHECK VALVE TRANSPARENT				
Cone Check Valve S6 DN32 PVC transparent PVCu solvent socket ends d40 metric PN16 EPDM	0.60	20.00	126364	50.99
Cone Check Valve S6 DN32 PVC transparent PVCu solvent socket ends d40 metric PN16 FPM	0.68	20.00	126367	58.79
Cone Check Valve S6 DN40 PVC transparent PVCu solvent socket ends d50 metric PN16 EPDM	0.65	20.00	126365	61.27
Cone Check Valve S6 DN40 PVC transparent PVCu solvent socket ends d50 metric PN10 FPM	0.70	20.00	126368	67.60
Cone Check Valve S6 DN50 PVC transparent PVCu solvent socket ends d63 metric PN16 EPDM	0.95	10.00	126366	76.92
Cone Check Valve S6 DN50 PVC transparent PVCu solvent socket ends d63 metric PN16 FPM	1.03	10.00	126369	83.19
CONE CHECK VALVE WITH 3/4" THREAD FOR DRAIN VALVE				
Cone Check Valve S6 with R 3/4" connection, DN32 PVC grey PVCu solvent socket ends d40 metric PN16 EPDM	0.63	20.00	126352	48.73
Cone Check Valve S6 with R 3/4" connection, DN32 PVC grey PVCu solvent socket ends d40 metric PN16 FPM	0.66	20.00	126355	53.90
Cone Check Valve S6 with R 3/4" connection, DN40 PVC grey PVCu solvent socket ends d50 metric PN16 EPDM	0.67	20.00	126353	58.64
Cone Check Valve S6 with R 3/4" connection, DN40 PVC grey PVCu solvent socket ends d50 metric PN16 FPM	0.68	20.00	126356	73.69
Cone Check Valve S6 with R 3/4" connection, DN50 PVC grey PVCu solvent socket ends d63 metric PN16 EPDM	0.89	10.00	126354	65.79
Cone Check Valve S6 with R 3/4" connection, DN50 PVC grey PVCu solvent socket ends d63 metric PN16 FPM	1.03	10.00	126357	80.06
DRAIN VALVE				
Drain valves for Cone Check Valve male thread ends 3/4"	0.03	100.00	73598	11.86
Drain valves for Cone Check Valve Hose nozzle/male thread 3/4"	0.06	1.00	70207	11.86



# Wafer check valve (PVC-C)

- Transparent lid for visual inispection
- Flow optimized
- Lower pressure loss
- Unique sealing technology
- Service-friendly
- Inner diameter d63, outer diameter d75
  Ideal for use with expansion tanks
  EPDM seals

- Maximum operating pressure 3.5 bar
- Spring material: V4A

Product	G-kg	VE	Prod.No.	Price €
Wafer check valve spring-loaded DN50 CPVC grey CPVC EPDM	0.58	12.00	78016	74.18



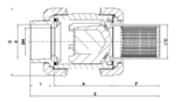
The unique geometry of the integrated flap with a high-quality EPDM seal guarantees the best flow rate values and sealing per-formance during operation.

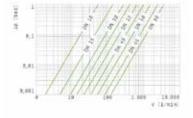
# Spare part set

for wafer check valve 78016

Product	G-kg	VE	Prod.No.	Price €
Transparent lid for PVC-C cone check valve 78016, incl. O-ring, flap and spring	0.20	1.00	73798	69.17







Flow pressure loss

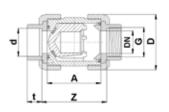
# Foot valve S4

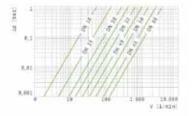
- PVC coated metal cone inside
- Operation pressure 0,025 bar
- Operation temperature max. 60 °C
   Inline strainer material: PP
- Corrosion resistant
- Long service life with maintenance-free operation
- Compact design
- Radial installation and disassembly possible
- Quick and precise opening and closing
- Low-noise

d	DN	А	z	t	D	PN
16	10	62	67,5	16,5	53	16
20	15	62	67,5	16,5	53	16
25	20	70	76,5	19,5	63	16
32	25	74	81	22,5	70	16
40	32	84	90	26,5	85	16
50	40	95	104	31,5	101	16
63	50	109	121	38,5	121,5	16
75	65	137	148	45	155	16
90	80	163	183	55,5	188	10
110	80	163	176	64	188	6

Product	G-kg	VE	Prod.No.	Price €
SOLVENT SOCKET d16-d40 EPDM OR FPM				
Foot valve S4 DN10 PVC grey PVCu solvent socket ends d16 metric PN16 EPDM	0.22	20.00	121323	28.78
Foot valve S4 DN10 PVC grey PVCu solvent socket ends d16 metric PN16 FPM $$	0.21	20.00	121324	53.39
Foot valve S4 DN15 PVC grey PVCu solvent socket ends d20 metric PN16 EPDM $$	0.21	20.00	121329	30.34
Foot valve S4 DN15 PVC grey PVCu solvent socket ends d20 metric PN16 FPM $$	0.21	20.00	121330	55.72
Foot valve S4 DN20 PVC grey PVCu solvent socket ends d25 metric PN16 EPDM	0.30	15.00	121335	35.18
Foot valve S4 DN20 PVC grey PVCu solvent socket ends d25 metric PN16 FPM	0.30	15.00	121336	65.45
Foot valve S4 DN25 PVC grey PVCu solvent socket ends d32 metric PN16 EPDM	0.38	10.00	121341	40.03
Foot valve S4 DN25 PVC grey PVCu solvent socket ends d32 metric PN16 FPM	0.42	10.00	121342	75.11
Foot valve S4 DN32 PVC grey PVCu solvent socket ends d40 metric PN16 EPDM	0.62	15.00	121347	51.13
Foot valve S4 DN32 PVC grey PVCu solvent socket ends d40 metric PN16 FPM	0.70	15.00	121348	94.48
SOLVENT SOCKET d50-d110 EPDM OR FPM				
Foot valve S4 DN40 PVC grey PVCu solvent socket ends d50 metric PN16 EPDM	0.98	10.00	121354	64.57
Foot valve S4 DN40 PVC grey PVCu solvent socket ends d50 metric PN16 FPM $$	1.00	10.00	121355	117.03
Foot valve S4 DN50 PVC grey PVCu solvent socket ends d63 metric PN16 EPDM	1.39	8.00	121361	88.91
Foot valve S4 DN50 PVC grey PVCu solvent socket ends d63 metric PN16 FPM	0.05	8.00	121362	157.07
Foot valve S4 DN65 PVC grey PVCu solvent socket ends d75 metric PN16 EPDM	3.66	4.00	121367	187.47
Foot valve S4 DN65 PVC grey PVCu solvent socket ends d75 metric PN16 FPM	3.88	4.00	121368	328.86
Foot valve S4 DN80 PVC grey PVCu solvent socket ends d90 metric PN10 EPDM	6.58	1.00	121373	230.55
Foot valve S4 DN80 PVC grey PVCu solvent socket ends d90 metric PN10 FPM	6.71	1.00	121374	415.23
Foot valve S4 DN80 PVC grey PVCu solvent socket ends d110 metric PN6 $\ensuremath{EPDM}$	6.62	1.00	122389	306.88
Foot valve S4 DN80 PVC grey PVCu solvent socket ends d110 metric PN6 FPM	6.59	1.00	122390	552.23







Flow pressure loss

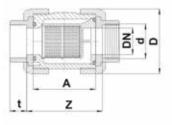
# Aerating and ventilation valve S4

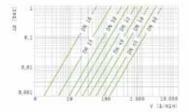
- PVC cone hollow body inside floating on the media
- Operation temperature max. 60 °C
- Corrosion resistant
- Long service life with maintenance-free operation
- Compact design
- Radial installation and disassembly possible
  Quick and precise opening and closure
- Low-noise

d	DN	G	Α	Z	t	D	PN
16	10	3⁄8"	62	67,5	16,5	53	16
20	15	1⁄2"	62	67,5	16,5	53	16
25	20	3/4"	70	76,5	19,5	63	16
32	25	1"	74	81	22,5	70	16
40	32	11⁄4"	84	90	26,5	85	16
50	40	1½"	95	104	31,5	101	16
63	50	2"	109	121	38,5	121,5	16
75	65	2½"	137	148	45	155	16
90	80	3"	163	183	55,5	188	10
110	80	4"	163	176	64	188	6

Product	G-kg	VE	Prod.No.	Price €
Aerating Valve S4 DN10 PVC grey PVCu solvent socket ends d16 metric PN16 EPDM	0.17	20.00	121262	26.15
Aerating Valve S4 DN10 PVC grey PVCu solvent socket ends d16 metric PN16 FPM	0.30	20.00	121263	49.61
Aerating Valve S4 DN15 PVC grey PVCu solvent socket ends d20 metric PN16 EPDM	0.16	20.00	121264	27.85
Aerating Valve S4 DN15 PVC grey PVCu solvent socket ends d20 metric PN16 FPM	0.30	20.00	121265	51.95
Aerating Valve S4 DN20 PVC grey PVCu solvent socket ends d25 metric PN16 EPDM	0.24	20.00	121266	29.76
Aerating Valve S4 DN20 PVC grey PVCu solvent socket ends d25 metric PN16 FPM	0.21	20.00	121267	57.21
Aerating Valve S4 DN25 PVC grey PVCu solvent socket ends d32 metric PN16 EPDM	0.32	15.00	121268	33.80
Aerating Valve S4 DN25 PVC grey PVCu solvent socket ends d32 metric PN16 FPM	0.32	20.00	121269	65.84
Aerating Valve S4 DN32 PVC grey PVCu solvent socket ends d40 metric PN16 EPDM	0.51	20.00	121270	45.74
Aerating Valve S4 DN32 PVC grey PVCu solvent socket ends d40 metric PN16 FPM	0.52	15.00	121271	86.51
Aerating Valve S4 DN40 PVC grey PVCu solvent socket ends d50 metric PN16 EPDM	0.80	10.00	121272	62.55
Aerating Valve S4 DN40 PVC grey PVCu solvent socket ends d50 metric PN16 FPM	0.78	10.00	121273	114.11
Aerating Valve S4 DN50 PVC grey PVCu solvent socket ends d63 metric PN16 EPDM	1.26	8.00	121274	86.98
Aerating Valve S4 DN50 PVC grey PVCu solvent socket ends d63 metric PN16 FPM	1.38	8.00	121275	153.92
Aerating Valve S4 DN65 PVC grey PVCu solvent socket ends d75 metric PN16 EPDM	2.74	4.00	121276	184.71
Aerating Valve S4 DN65 PVC grey PVCu solvent socket ends d75 metric PN16 FPM	2.75	4.00	121277	324.60
Aerating Valve S4 DN80 PVC grey PVCu solvent socket ends d90 metric PN10 EPDM	4.40	1.00	121278	226.35
Aerating Valve S4 DN80 PVC grey PVCu solvent socket ends d90 metric PN10 FPM	4.56	1.00	121279	408.90
Aerating Valve S4 DN80 PVC grey PVCu solvent socket ends d110 metric PN6 EPDM	4.40	1.00	122391	302.73
Aerating Valve S4 DN80 PVC grey PVCu solvent socket ends d110 metric PN6 FPM	4.29	1.00	122392	543.81







Flow pressure loss

# Dirt filter S4 with plastic sieve

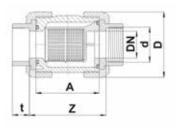
- Operation temperature max. 60 °C
  Plastic insert 1.8 mm (1800 micron)
  Radial installation and disassebly possible
  Transparent body
- Best flow rates
   Service-friendly

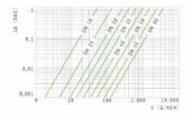
#### DIMENSIONS

d	DN	G	Α	z	t	D	PN
16	10	3/8"	62	67,5	16,5	53	16
20	15	1⁄2"	62	67,5	16,5	53	16
25	20	3/4"	70	76,5	19,5	63	16
32	25	1"	74	81	22,5	70	16
40	32	11⁄4"	84	90	26,5	85	16
50	40	1½"	95	104	31,5	101	16
63	50	2"	109	121	38,5	121,5	16
75	65	2½"	137	148	45	155	16
90	80	3"	163	183	55,5	188	10
110	80	4"	163	176	64	188	6

Product	G-kg	VE	Prod.No.	Price €
Line strainer S4 with plastic sreen mesh size 1,8 mm DN10 PVC trans-	0.16	20.00	121701	32.00
parent PVCu solvent socket ends d16 metric PN16 EPDM				
ine strainer S4 with plastic sreen mesh size 1,8 mm DN10 PVC transparent PVCu solvent socket ends d16 metric PN16 FPM	0.15	20.00	120459	54.87
ine strainer S4 with plastic sreen mesh size 1,8 mm DN15 PVC transparent PVCu solvent socket ends d20 metric PN16 EPDM	0.16	20.00	121702	33.60
ine strainer S4 with plastic sreen mesh size 1,8 mm DN15 PVC transparent PVCu solvent socket ends d20 metric PN16 FPM	0.15	20.00	120460	57.21
ine strainer S4 with plastic sreen mesh size 1,8 mm DN20 PVC transparent PVCu solvent socket ends d25 metric PN16 EPDM	0.24	15.00	121703	40.29
ine strainer S4 with plastic sreen mesh size 1,8 mm DN20 PVC transparent PVCu solvent socket ends d25 metric PN16 FPM	0.23	15.00	120461	70.24
ine strainer S4 with plastic sreen mesh size 1,8 mm DN25 PVC trans- barent PVCu solvent socket ends d32 metric PN16 EPDM	0.32	15.00	121704	47.61
ine strainer S4 with plastic sreen mesh size 1,8 mm DN25 PVC transparent PVCu solvent socket ends d32 metric PN16 FPM	0.30	15.00	120462	83.32
ine strainer S4 with plastic sreen mesh size 1,8 mm DN32 PVC transparent PVCu solvent socket ends d40 metric PN16 EPDM	0.47	20.00	121705	58.49
ine strainer S4 with plastic sreen mesh size 1,8 mm DN32 PVC transparent PVCu solvent socket ends d40 metric PN16 FPM	0.47	20.00	120465	101.48
ine strainer S4 with plastic sreen mesh size 1,8 mm DN40 PVC transparent PVCu solvent socket ends d50 metric PN16 EPDM	0.72	10.00	121706	70.31
ine strainer S4 with plastic sreen mesh size 1,8 mm DN40 PVC transparent PVCu solvent socket ends d50 metric PN16 FPM	0.70	10.00	120466	121.24
ine strainer S4 with plastic sreen mesh size 1,8 mm DN50 PVC transparent PVCu solvent socket ends d63 metric PN16 EPDM	1.29	8.00	121707	95.53
ine strainer S4 with plastic sreen mesh size 1,8 mm DN50 PVC trans- parent PVCu solvent socket ends d63 metric PN16 FPM	1.15	8.00	120467	159.58
ine strainer S4 with plastic sreen mesh size 1,8 mm DN65 PVC trans- parent PVCu solvent socket ends d75 metric PN16 EPDM	2.42	4.00	121708	199.01
ine strainer S4 with plastic sreen mesh size 1,8 mm DN65 PVC trans- barent PVCu solvent socket ends d75 metric PN16 FPM	2.38	4.00	120468	330.97
ine strainer S4 with plastic sreen mesh size 1,8 mm DN80 PVC trans- barent PVCu solvent socket ends d90 metric PN10 EPDM	4.06	1.00	121709	246.43
ine strainer S4 with plastic sreen mesh size 1,8 mm DN80 PVC trans- barent PVCu solvent socket ends d90 metric PN10 FPM	2.50	1.00	120469	421.55
ine strainer S4 with plastic sreen mesh size 1,8 mm DN80 PVC trans- barent PVCu solvent socket ends d110 metric PN6 EPDM	5.20	1.00	121710	326.61
ine strainer S4 with plastic sreen mesh size 1,8 mm DN80 PVC trans- arent PVCu solvent socket ends d110 metric PN6 FPM	3.91	1.00	125407	558.54







Flow pressure loss

### Dirt filter S4 for stainless steel strainer

- Operation temperature max. 60 °C
- Sieve stainless steel SS304: 0.5 mm, 0.75 mm, 1 mm (next page, to order separately)
   Radial installation and disassembly possible
- Transparente body
- Best flow rates
- Service- friendly

#### DIMENSIONS

d	DN	G	Α	z	t	D	PN
16	10	3⁄8"	62	67,5	16,5	53	16
20	15	1⁄2"	62	67,5	16,5	53	16
25	20	3/4"	70	76,5	19,5	63	16
32	25	1"	74	81	22,5	70	16
40	32	11⁄4"	84	90	26,5	85	16
50	40	1½"	95	104	31,5	101	16
63	50	2"	109	121	38,5	121,5	16
75	65	2½"	137	148	45	155	16
90	80	3"	163	183	55,5	188	10
110	80	4"	163	176	64	188	6

Product	G-kg	VE	Prod.No.	Price €
DIRT FILTER S4, d16–d110				
ine strainer S4 for stainless steel screen DN10 PVC transparent PVCu solvent socket ends d16 metric PN16 EPDM for stainless steel screen 0,5-0,75-1,0	0.16	20.00	124707	28.22
ine strainer S4 for stainless steel screen DN10 PVC transparent PVCu solvent socket ends d16 metric PN16 FPM for stainless steel screen 0,5-0,75-1,0	0.15	20.00	127177	49.37
Line strainer S4 for stainless steel screen DN15 PVC transparent PVCu solvent socket ends d20 metric PN16 EPDM for stainless steel screen 0,5-0,75-1,0	0.15	20.00	124708	29.82
Line strainer S4 for stainless steel screen DN15 PVC transparent PVCu solvent socket ends d20 metric PN16 FPM for stainless steel screen 0,5-0,75-1,0	0.15	20.00	127178	51.71
ine strainer S4 for stainless steel screen DN20 PVC transparent PVCu solvent socket ends d25 metric PN16 EPDM for stainless steel screen 0,5-0,75-1,0	0.22	15.00	124709	36.50
ine strainer S4 for stainless steel screen DN20 PVC transparent PVCu solvent socket ends d25 metric PN16 FPM for stainless steel screen 0,5-0,75-1,0	0.22	15.00	127179	64.82
ine strainer S4 for stainless steel screen DN25 PVC transparent PVCu solvent socket ends d32 metric PN16 EPDM for stainless steel screen 0,5-0,75-1,0	0.29	15.00	124710	43.83
ine strainer S4 for stainless steel screen DN25 PVC transparent PVCu solvent socket ends d32 metric PN16 FPM for stainless steel screen 0,5-0,75-1,0	0.29	15.00	127180	77.86
ine strainer S4 for stainless steel screen DN32 PVC transparent PVCu solvent socket ends d40 metric PN16 EPDM for stainless steel screen 0,5-0,75-1,0	0.47	20.00	124711	54.02
ine strainer S4 for stainless steel screen DN32 PVC transparent PVCu solvent socket ends d40 metric PN16 FPM for stainless steel screen 0,5-0,75-1,0	0.46	20.00	127181	94.91
ine strainer S4 for stainless steel screen DN40 PVC transparent PVCu solvent socket ends d50 metric PN16 EPDM for stainless steel screen 0,5-0,75-1,0	0.73	10.00	124712	65.62
ine strainer S4 for stainless steel screen DN40 PVC transparent PVCu solvent socket ends d50 metric PN16 FPM for stainless steel screen 0,5-0,75-1,0	0.78	10.00	127182	114.54
ine strainer S4 for stainless steel screen DN50 PVC transparent PVCu solvent socket ends d63 metric PN16 EPDM for stainless steel screen 0,5-0,75-1,0	1.20	8.00	124713	90.00
ine strainer S4 for stainless steel screen DN50 PVC transparent PVCu solvent socket ends d63 metric PN16 FPM for stainless steel screen 0,5-0,75-1,0	1.22	8.00	127183	151.62
ine strainer S4 for stainless steel screen DN65 PVC transparent PVCu solvent socket ends d75 metric PN16 EPDM for stainless steel screen 0,5-0,75-1,0	2.47	4.00	124714	192.49
ine strainer S4 for stainless steel screen DN65 PVC transparent PVCu solvent socket ends d75 metric PN16 FPM for stainless steel screen 0,5-0,75-1,0	2.47	4.00	127184	321.47
ine strainer S4 for stainless steel screen DN80 PVC transparent PVCu solvent socket ends d90 metric PN10 EPDM for stainless steel screen 0,5-0,75-1,0	3.90	1.00	124715	236.17
ine strainer S4 for stainless steel screen DN80 PVC transparent PVCu solvent socket ends d90 metric PN10 FPM for stainless steel screen 0,5-0,75-1,0	4.00	1.00	127185	406.79

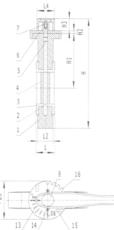


Product	G-kg	VE	Prod.No.	Price €
Line strainer S4 for stainless steel screen DN80 PVC transparent PVCu solvent socket ends d110 metric PN6 EPDM for stainless steel screen 0,5-0,75-1,0	4.23	1.00	124716	318.40
Line strainer S4 for stainless steel screen DN80 PVC transparent PVCu solvent socket ends d110 metric PN6 FPM for stainless steel screen 0,5-0,75-1,0	4.23	1.00	127186	537.54
STAINLESS STEEL STRAINER 0.5 MM (2)				
Stainless steel strainer insert for line strainer Mesh size 0,5 mm DN10/15 Mat. 1.4301 d16/20	0.00	20.00	50606	9.24
Stainless steel strainer insert for line strainer Mesh size 0,5 mm DN20/25 Mat. 1.4301 d25/32	0.01	15.00	50608	11.59
Stainless steel strainer insert for line strainer Mesh size 0,5 mm DN32 Mat. 1.4301 d40	0.01	20.00	50609	13.04
Stainless steel strainer insert for line strainer Mesh size 0,5 mm DN40 Mat. 1.4301 d50	0.01	10.00	50610	15.92
Stainless steel strainer insert for line strainer Mesh size 0,5 mm DN50 Mat. 1.4301 d63	0.02	8.00	50611	18.53
Stainless steel strainer insert for line strainer Mesh size 0,5 mm DN65 Mat. 1.4301 d75	0.03	4.00	50612	28.01
Stainless steel strainer insert for line strainer Mesh size 0,5 mm DN80 Mat. 1.4301 d90	0.04	1.00	50613	34.17
STAINLESS STEEL STRAINER 0.75 MM (2)				
Stainless steel strainer insert for line strainer Mesh size 0,75 mm DN10/15 Mat. 1.4301	0.00	20.00	50614	10.18
Stainless steel strainer insert for line strainer Mesh size 0,75 mm DN20/25 Mat. 1.4301	0.00	15.00	50616	12.78
Stainless steel strainer insert for line strainer Mesh size 0,75 mm DN32 Mat. 1.4301	0.01	20.00	50617	14.37
Stainless steel strainer insert for line strainer Mesh size 0,75 mm DN40 Mat. 1.4301	0.01	10.00	50618	17.53
Stainless steel strainer insert for line strainer Mesh size 0,75 mm DN50 Mat. 1.4301	0.01	8.00	50619	20.34
Stainless steel strainer insert for line strainer Mesh size 0,75 mm DN65 Mat. 1.4301	0.02	4.00	50620	30.85
Stainless steel strainer insert for line strainer Mesh size 0,75 mm DN80 Mat. 1.4301	0.03	1.00	50621	37.62
STAINLESS STEEL STRAINER 1.0 MM (2)				
Stainless steel strainer insert for line strainer Mesh size 1 mm DN10/15 Mat. 1.4301 d16/20	0.00	20.00	50622	9.24
Stainless steel strainer insert for line strainer Mesh size 1 mm DN20/25 Mat. 1.4301 d25/32	0.00	15.00	50624	11.59
Stainless steel strainer insert for line strainer Mesh size 1 mm DN32 Mat. 1.4301 d40	0.01	20.00	50625	13.04
Stainless steel strainer insert for line strainer Mesh size 1 mm DN40 Mat. 1.4301 d50	0.01	10.00	50626	15.92
Stainless steel strainer insert for line strainer Mesh size 1 mm DN50 Mat. 1.4301 d63	0.01	8.00	50627	18.53
Stainless steel strainer insert for line strainer Mesh size 1 mm DN65 Mat. 1.4301 d75	0.02	4.00	50628	28.01
Stainless steel strainer insert for line strainer Mesh size 1 mm DN80 Mat. 1.4301 d90	0.03	1.00	50629	34.17











Multinorm: DIN 2501, ANSI B 16,5 Class 150, JIS 10 K

### **Butterfly valve (PVC-U)**

characteristics: best flow rates, lower pressure loss, corrosion-free, easy handling, radial installation and disassembly possible, reduced torque, compact design for use in hotel pool, natural pool and aquaristic industry - project related minim order quantity of 20 pcs/dimension.

### DIMENSIONS (Part 1)

	ØD		Ø D1		Ød	Ø D3	L1	L1	L2	L3	L4
		DIN	ANSI*	JIS*							
DN80 /3"	196	160	152	150	80	120	240	49	43	20	45
DN100 /4"	228	180	191	175	100	120	240	54	48	20	45
DN125/5"	258	210	216	210	125	160	310	64	58	20	70
DN150/6"	287	240	241	240	150	160	310	70	63	24	70

#### **DIMENSIONS** (Part 2)

	- (	,									
	н	H1	H2	H3		n-Øe		OPR		WGT	TRQ
					DIN	ANSI*	JIS*				
DN80/3"	278	132	8	40	8-18	4-19	8-19	150psi	10 Bar	1,8	<15
DN100/4"	318	156	8	40	8-18	8-19	8-19	150psi	10 Bar	2,4	<22
DN125 /5"	367	195	12	55	8-18	8-22	8-23	150psi	10 Bar	4,2	<40
DN150 /6"	399	188	12	55	8-22	8-22	8-23	150psi	10 Bar	4,75	<45
Product							G-kg	VE	Pr	od.No.	Price €
Butterfly Valve drilling	e ECO DN	180 PVC d	90 - 3" DI	N/ISO PN	10 EPDM	flange	2.08	4.00	78	112	118.90
Butterfly Valve drilling	e ECO DN	1100 PVC	d110 - 4"	DIN/ISO	PN10 EPE	OM flange	2.50	8.00	78	113	139.86
Butterfly Valve drilling	e ECO DN	1125 PVC	d140 - 5"	DIN/ISO	PN10 EPE	DM flange	4.50	5.00	78	114	178.11
Butterfly Valve drilling	e ECO DN	1150 PVC	d160 - 6"	DIN/ISO	PN6 EPDN	vl flange	5.05	4.00	78	115	208.51
Butterfly Valve drilling (max.		1200 PVC	d225 - 8"	DIN/ISO	PN6 EPDN	vl flange	8.00	2.00	78	116	280.02

### Praher Plastics PVC-U fix flange DIN-ANSI-JIS

optimal supplement fort he Praher Plastics K4 butterfly valves and wafer check valves. For professional and safe installation.

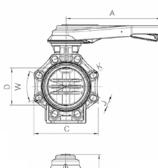
- Comines sealing area
- Conical sealing area
- Multinorm: DIN 2501, ANSI B 16.5 Class 150 JIS 10 K
- Indication of max. torque on the fixflange
- Flat sealing up to PN10
- Profile seal with steel insert up to PN16
   Operation pressure: DN15/d20 DN 150/d160, PN 16

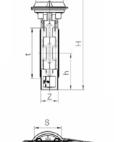
Product	G-kg	VE	Prod.No.	Price €
Fix flange - turned - DN15 PVC grey solvent socket d20 DIN-ANSI-JIS PN16	0.09	1.00	142069	17.84
Fix flange - turned - DN20 PVC grey solvent socket d25 DIN-ANSI-JIS PN16	0.11	1.00	142070	18.27
Fix flange - turned - DN25 PVC grey solvent socket d32 DIN-ANSI-JIS PN16	0.18	1.00	142071	22.15
Fix flange - turned - DN32 PVC grey solvent socket d40 DIN-ANSI-JIS PN16	0.24	1.00	142072	30.26
Fix flange - turned - DN40 PVC grey solvent socket d50 DIN-ANSI-JIS PN16	0.33	1.00	142073	31.74
Fix flange - turned - DN50 PVC grey solvent socket d63 DIN-ANSI-JIS PN16	0.45	1.00	142074	38.69
Fix flange - turned - DN65 PVC grey solvent socket d75 DIN-ANSI-JIS PN16	0.65	1.00	142075	46.47
Fix flange - turned - DN80 PVC grey solvent socket d90 DIN-ANSI-JIS PN16	0.82	1.00	142076	51.86
Fix flange - turned - DN100 PVC grey solvent socket d110 DIN-AN- SI-JIS PN16	1.13	1.00	142077	53.58
Fix flange - turned- DN150 PVC grey solvent socket d160 DIN-ANSIJIS	1.94	1.00	142174	115.12



- » Highest safety
- » Safety handle
- » Easy automation

Full spare parts service









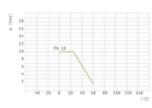
# **Butterfly valve K4**

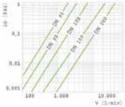
- Operation temperature max. 60 °C
- Safety handle system
  Radial installation and disassembly possible
  Flow-unindependent flow direction
- Full sectional area (nominal width)
- PPGFK locking plate with 10 notches
  Integrated valve fastener
- Stainless steel shaft SS304 (no medium contact)
  Cuff seal (body has no medium contact)

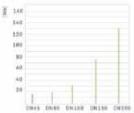
- Double shaft sealing
  Handle with identification plate (available in different colours) • Hand wheel (optional)

### DIMENSIONS

DN	d	G	Δ	р	c	w	1	К	н	h	E	м	7	s	P	D	PN
								ĸ	<u> </u>					<u> </u>	<u> </u>	·	
65	75	2 ½″	230	65	133	90°	19	127 - 145	285	100	98	114	46	55	25	7	10
80	90	3″	230	80	176	45°	19	146 - 160	292	100	116	114	49	70	30	9	10
100	110	4″	300	100	206	45°	19	175 - 190,5	322	115	146	114	56	85	35	9	10
125	140	5″	300	125	234,5	45°	23	209,5 - 216	358	130	170	114	64	100	45	9	10
150	160	6″	386	150	261	45°	23	234,5 - 241,3	396	147,5	196	150	70	110	45	9	10
200	225	8″	386	200	314	45°	23	290 - 298,5	458	175	251	150	71	145	40	9	10







Pressure temperature

Flow pressure loss

Torque (Flap)

Product	G-kg	VE	Prod.No.	Price €
Butterfly valve K4				
Butterfly Valve K4 DN65 PVC grey Flange-connection 75-2 $1/2^{\prime\prime}$ DINANSI-JIS-BS PN10 EPDM	1.87	1.00	125860	253.90
Butterfly Valve K4 DN65 PVC grey Flange-connection 75-2 $1/2^{\prime\prime}$ DINANSI-JIS-BS PN10 FPM	1.94	1.00	125865	374.65
Butterfly Valve K4 DN80 PVC grey Flange-connection 90-3" DIN-AN- SI-JIS-BS PN10 EPDM	1.20	1.00	125861	297.67
Butterfly Valve K4 DN80 PVC grey Flange-connection 90-3" DIN-AN- SI-JIS-BS PN10 FPM	1.61	1.00	125866	463.83
Butterfly Valve K4 DN100 PVC grey Flange-connection 110-4" DIN- ANSI-JIS-BS PN10 EPDM	3.01	1.00	125862	324.83
Butterfly Valve K4 DN100 PVC grey Flange-connection 110-4" DIN- ANSI-JIS-BS PN10 EPDM	2.50	1.00	125867	521.66
Butterfly Valve K4 DN125 PVC grey Flange-connection 140-5" DIN- ANSI-JIS-BS PN10 EPDM	3.74	1.00	128456	437.50
Butterfly Valve K4 DN125 PVC grey Flange-connection 140-5" DIN- ANSI-JIS-BS PN10 FPM	3.93	1.00	128457	769.89
Butterfly Valve K4 DN150 PVC grey Flange-connection 160-6" DIN- ANSI-JIS-BS PN10 EPDM	4.65	1.00	125863A	508.19
Butterfly Valve K4 DN150 PVC grey Flange-connection 160-6" DIN- ANSI-JIS-BS PN10 FPM	4.80	1.00	125868A	863.10
Butterfly Valve K4 DN200 PVC grey Flange-connection 225-8" DIN- ANSI-BS PN10 EPDM	7.10	1.00	125864	715.86
Butterfly Valve K4 DN200 PVC grey Flange-connection 225-8" DIN- ANSI-BS PN10 FPM	7.20	1.00	125869	1163.22
PVC flange set (DIN PN10)				
Flange set for Butterfly Valve K4 DN65 PVC grey 63 - 2" DIN PN10 (screw set zonc coated)	2.44	1.00	142166	91.06
Flange set for Butterfly Valvee K4 DN65 PVC grey 75 - 2 1/2" DIN PN10 (screw set zonc coated)	2.73	1.00	142167	116.96
Flange set for Butterfly Valve K4 DN80 PVC grey 90 - 3" DIN PN10 (screw set zonc coated)	4.70	1.00	142168	191.37
Flange set for Butterfly Valve K4 DN100 PVC grey 110 - 4" DIN PN10 (screw set zonc coated)	4.89	1.00	142169	240.46
Flange set for Butterfly Valve K4 DN125 PVC grey 140 - 5" DIN PN10 (screw set zonc coated)	6.24	1.00	142170	274.82
Flange set for Butterfly Valve K4 DN150 PVC grey 160 - 6" DIN PN10 (screw set zonc coated)	9.49	1.00	142171	451.51
Flange set for Butterfly Valve K4 DN200 PVC grey 225 - 8" DIN PN10 (screw set zonc coated)	11.84	1.00	142172	583.95



#### Dimensions upon request.



Respresentative image



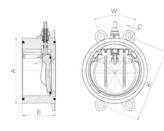
DIN with screws and nuts, suitable for DIN butterfly valve series K4, Eco and wafer check valve series K4 & K6 - project related minim order quantity of 20 pcs/dimension.

Product	G-kg	VE	Prod.No.	Price €
Flange kit PVC-DIN Flange hset ECO d63 with screws and nuts	1.30	20.00	74455	42.85
Flange kit PVC-DIN Flange set ECO d75 with screws and nuts	1.50	15.00	74456	45.78
Flange kit PVC-DIN Flange set ECO d90 with screws and nuts	1.80	15.00	74457	77.98
Flange kit PVC-DIN Flange set ECO d110 with screws and nuts	2.30	12.00	74458	103.64
Flange kit PVC-DIN Flange set ECO d140 with screws and nuts	2.80	6.00	74460	191.50
Flange kit PVC-DIN Flange set ECO d160 with screws and nuts	3.30	4.00	74461	201.52
Flange kit PVC-DIN Flange set ECO d200 with screws and nuts	6.30	2.00	74462	304.46



#### » **Highest safety**

- No media-contacted metal parts »
- Double flap stop »
- **Unique design**

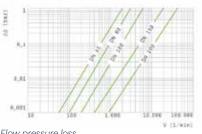


### Wafer check valve K4

- Operation temperature: max. 60 °C
- Simple and robust design
- Service-free
- Optical position indication
- Available with or without indication pin
- Very low pressure loss due to wide opening angle of the flap up to 83°
- Complete flap opening also in PP and PE piping systems guaranteed
- Version with spring set (2 springs PN10, large spring PN7 and small spring Feder PN3) allows adjustment of the valve to pressure ratio in the system
- Simple intermediate flange assembly (DIN; ANSI; JIS)
- O-rings on the front side
- No additional outlet flange necessary
- Higher operation pressure

#### DIMENSIONS

DN	d	G	Α	D	с	w	J	К	н	h	E	м	z	s	R	Р	PN
65	75	2 ½″	230	65	133	90°	19	127 - 145	285	100	98	114	46	55	25	7	10
80	90	3″	230	80	176	45°	19	146 - 160	292	100	116	114	49	70	30	9	10
100	110	4″	300	100	206	45°	19	175 - 190,5	322	115	146	114	56	85	35	9	10
125	140	5″	300	125	234,5	45°	23	209,5 - 216	358	130	170	114	64	100	45	9	10
150	160	6″	386	150	261	45°	23	234,5 - 241,3	396	147,5	196	150	70	110	45	9	10
200	225	8″	386	200	314	45°	23	290 - 298,5	458	175	251	150	71	145	40	9	10







Pressure temperature

	G-kg	VE	Prod.No.	Price €
WITH OPTICAL POSITION INDICATION (SPRING LOADED)	0.05		10500.43	0.40.07
Wafer check valve K4 spring-loaded, visual pos. ind.DN65 PVC grey Flange-connection 75-2 1/2″ DIN-ANSI-JIS PN10 EPDM	0.65	1.00	125804A	343.95
Wafer check valve K4 spring-loaded, visual pos. ind. DN65 PVC grey Flange-connection 75-2 1/2″ DIN-ANSI-JIS PN10 FPM	0.41	1.00	125811A	392.77
Wafer check valve K4 spring-loaded, visual pos. ind. DN80 PVC grey Flange-connection 90-3" DIN-ANSI-JIS PN10 EPDM	0.56	1.00	125805a	368.37
Wafer check valve K4 spring-loaded, visual pos. ind. DN80 PVC grey Flange-connection 90-3" DIN-ANSI-JIS PN10 FPM	0.58	1.00	125812a	613.03
Wafer check valve K4 spring-loaded, visual pos. ind. DN100 PVC grey Flange-connection 110-4" DIN-ANSI-JIS PN10 EPDM	0.85	1.00	125806a	439.35
Wafer check valve K4 spring-loaded, visual pos. ind. DN100 PVC grey Flange-connection 110-4" DIN-ANSI-JIS PN10 FPM	0.90	1.00	125813a	733.55
Wafer check valve K4 spring-loaded, visual pos. ind. DN150 PVC grey Flange-connection 160-6" DIN-ANSI-JIS PN10 EPDM	2.18	1.00	125807a	600.56
Wafer check valve K4 spring-loaded, visual pos. ind. DN150 PVC grey Flange-connection 160-6" DIN-ANSI-JIS PN10 FPM	2.40	1.00	125814a	987.18
Wafer check valve K4 spring-loaded, visual pos. ind. DN200 PVC grey Flange-connection 225-8" DIN-ANSI-JIS PN10 EPDM	4.05	1.00	125808A	1106.41
Wafer check valve K4 spring-loaded, visual pos. ind. DN200 PVC grey Flange-connection 225-8" DIN-ANSI-JIS PN10 FPM	4.11	1.00	125815A	1212.90
Wafer check valve K4 spring-loaded, visual pos. ind. DN250 PVC grey Flange-connection 280-10" DIN-ANSI-JIS PN10 EPDM	6.44	1.00	125809A	1760.71
Wafer check valve K4 spring-loaded, visual pos. ind. DN250 PVC grey Flange-connection 280-10" DIN-ANSI-JIS PN10 FPM	6.59	1.00	125816A	1925.73
WITHOUT POSITION INDICATION, (WITHOUT SPRING)				
Wafer check valve K4 DN65 PVC grey Flange-connection 75-2 1/2" DIN-ANSI-JIS PN10 EPDM	0.38	1.00	125790A	311.06
Wafer check valve K4 DN65 PVC grey Flange-connection 75-2 1/2" DIN-ANSI-JIS PN10 FPM	0.39	1.00	125797A	389.12
Wafer check valve K4 DN80 PVC grey Flange-connection 90-3" DIN- ANSI-JIS PN10 EPDM	0.56	1.00	125791a	287.24
Wafer check valve K4 DN80 PVC grey Flange-connection 90-3" DIN- ANSI-JIS PN10 FPM	0.58	1.00	125798a	472.95
Wafer check valve K4 DN100 PVC grey Flange-connection 110-4" DIN-ANSI-JIS PN10 EPDM	0.83	1.00	125792a	340.26
Wafer check valve K4 DN100 PVC grey Flange-connection 110-4" DIN-ANSI-JIS PN10 FPM	0.86	1.00	125799a	564.61
Wafer check valve K4 DN150 PVC grey Flange-connection 160-6" DIN-ANSI-JIS PN10 EPDM	2.08	1.00	125793a	486.09
Wafer check valve K4 DN150 PVC grey Flange-connection 160-6" DIN-ANSI-JIS PN10 FPM	2.18	1.00	125800a	789.60
Wafer check valve K4 DN200 PVC grey Flange-connection 225-8" DIN-ANSI-JIS PN10 EPDM	4.03	1.00	125794A	1007.52
Wafer check valve K4 DN200 PVC grey Flange-connection 225-8" DIN-ANSI-JIS PN10 FPM	4.09	1.00	125801A	1406.43
Wafer check valve K4 DN250 PVC grey Flange-connection 280-10" DIN-ANSI-JIS PN10 EPDM	6.47	1.00	125795A	2194.99
Wafer check valve K4 DN250 PVC grey Flange-connection 280-10" DIN-ANSI-JIS PN10 FPM	6.57	1.00	125802A	1746.44
DIN-ANSI-JIS PN10 FPM				



### Wafer check valve K6

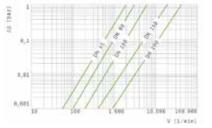
- Operation temperature up to 60°C
- Tight from max. 0.3bar counterpressure
  Cone-shaped sealing area for extreme strain and long lifecycle
- Flushed shaft to avoid deposit
- Cylindrically positioned valve stern for perfect power transmissions
- Screw centering for DIN2501 PN10 and ANSI class150
   Breaking point for later removal
- No exit aids necessary (optimized flap opening and imporved KV values)
- Horizontal and vertical installation possible
  Excellent corrosion resistance
- Spring material 1.4401/AISI 316

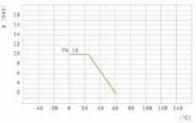
### DIMENSIONS

DN	d	ØA	В	с	LK DIN	ØD	LK ANSI	ØE	ØF
40	50	95	16	141,8	110	18	98,5	15,5	23,5
50	63	109	18	159,5	125	18	120,65	19	33
65	75	130	20	185	145	18	139,7	19	42
80	90	146	20	200,4	160	18	152,4	19	53
100	110	175	23	237,2	180	18	190,5	19	73
125	140	198	25	262,3	210	18	215,9	22,2	93
150	160	223	30	288,8	240	22	241,3	22,2	110
200	225	280	34	348,3	295	22	298,45	22,2	150
300	315	406,4	47	-*	400	22	431,8	25,4	229

### FLAP OPENING

PVC PN10	PVC PN6	PVC schedule40	PVC schedule80	PE100 SDR17
91	93,5	80,5	-	88*
88,5	92,5	79,5	-	85,5*
82	86	72	63	78,5*
84,5	88,5	79,5	72	81,5*
72,5	78	76	69	68,5*
73,5	79	75	68	69,5*
69	75	78,5	71	64,5*
74	79	73	66	70*
66,5	72	75	68,5	62*

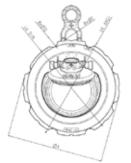


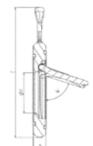


Flow pressure loss



Product	G-kg	VE	Prod.No.	Price €
WITHOUT SPRING				
Wafer check valve K6 DN40 PVC grey Flange-connection 50-1 1/2" DIN/ANSI MOP 10 bar EPDM	0.21	1.00	129078	122.93
Wafer check valve K6 DN40 PVC grey Flange-connection 50-1 $1/2^{\prime\prime}$ DIN/ANSI MOP 10 bar FPM	0.12	1.00	129089	169.77
Wafer check valve K6 DN50 PVC grey Flange-connection 63-2" DIN/ ANSI MOP 10 bar EPDM	0.18	1.00	129079	129.27
Wafer check valve K6 DN50 PVC grey Flange-connection 63-2" DIN/ ANSI MOP 10 bar FPM	0.19	1.00	129090	187.10
Wafer check valve K6 DN65 PVC grey Flange-connection 75-2 1/2" DIN/ANSI MOP 10 bar EPDM	0.25	1.00	129080	140.51
Wafer check valve K6 DN65 PVC grey Flange-connection 75-2 1/2" DIN/ANSI MOP 10 bar FPM	0.25	1.00	129091	212.64
Wafer check valve K6 DN80 PVC grey Flange-connection 90-3" DIN/ ANSI MOP 10 bar EPDM	0.33	1.00	129081	160.17





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		1	2	2	
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Conical sealing surface for maximum stress and long service life

Product	G-kg	VE	Prod.No.	Price €
Wafer check valve K6 DN80 PVC grey Flange-connection 90-3" DIN/ ANSI MOP 10 bar FPM	0.33	1.00	129092	246.20
Wafer check valve K6 DN100 PVC grey Flange-connection 110-4" DIN/ANSI MOP 10 bar EPDM	0.56	1.00	129082	184.93
Wafer check valve K6 DN100 PVC grey Flange-connection 110-4" DIN/ANSI MOP 10 bar FPM	0.58	1.00	129093	287.92
Wafer check valve K6 DN125 PVC grey Flange-connection 140-5" DIN/ANSI MOP 10 bar EPDM	0.70	1.00	129083	243.71
Wafer check valve K6 DN125 PVC grey Flange-connection 140-5" DIN/ANSI MOP 10 bar FPM	0.70	1.00	129094	337.39
Wafer check valve K6 DN150 PVC grey Flange-connection 160-6" DIN/ANSI MOP 10 bar EPDM	1.37	1.00	129084	328.90
Wafer check valve K6 DN150 PVC grey Flange-connection 160-6" DIN/ANSI MOP 10 bar FPM	1.07	1.00	129095	435.27
Wafer check valve K6 DN200 PVC grey Flange-connection 225-8" DIN/ANSI MOP 10 bar EPDM	2.55	1.00	129085	559.21
Wafer check valve K6 DN200 PVC grey Flange-connection 225-8" DIN/ANSI MOP 10 bar FPM	2.55	1.00	129096	678.64
Wafer check valve K6 DN300 PVC grey Flange-connection 315-12" DIN/ANSI MOP 8 bar EPDM	6.28	1.00	129087	1138.94
Vafer check valve K6 DN300 PVC grey Flange-connection 315-12" DIN/ANSI MOP 8 bar FPM	6.38	1.00	129098	1399.55
Wafer check valve K6 DN350 PVC grey Flange- connection 355 - 14" DIN/ANSI MOP 6 bar EPDM	9.11	1.00	129088	4084.27
Vafer check valve K6 DN350 PVC grey Flange-connection 355 - 14" DIN/ANSI MOP 6 bar FPM	9.10	1.00	129099	212.09
SPRING LOADED				
Vafer check valve K6 spring-loaded DN40 PVC grey Flange-connec- ion 50-1 1/2" DIN/ANSI MOP 10 bar EPDM	0.12	1.00	129100	215.81
Vafer check valve K6 spring-loaded DN40 PVC grey Flange-connec- on 50-1 1/2" DIN/ANSI MOP 10 bar FPM	0.12	1.00	129111	271.07
Vafer check valve K6 spring-loaded DN50 PVC grey Flange-connec- on 63-2" DIN/ANSI MOP 10 bar EPDM	0.18	1.00	129101	222.59
Vafer check valve K6 spring-loaded DN50 PVC grey Flange-connec- ion 63-2″ DIN/ANSI MOP 10 bar FPM	0.19	1.00	129112	288.77
Vafer check valve K6 spring-loaded DN65 PVC grey Flange-connec- ion 75-2 1/2″ DIN/ANSI MOP 10 bar EPDM	0.28	1.00	129102	234.56
Vafer check valve K6 spring-loaded DN65 PVC grey Flange-connec- ion 75-2 1/2″ DIN/ANSI MOP 10 bar FPM	0.28	1.00	129113	314.65
Vafer check valve K6 spring-loaded DN80 PVC grey Flange-connec- ion 90-3" DIN/ANSI MOP 10 bar EPDM	0.34	1.00	129103	252.89
Vafer check valve K6 spring-loaded DN80 PVC grey Flange-connec- ion 90-3" DIN/ANSI MOP 10 bar FPM	0.34	1.00	129114	349.17
Vafer check valve K6 spring-loaded DN100 PVC grey Flange-connec- ion 110-4" DIN/ANSI MOP 10 bar EPDM	0.56	1.00	129104	278.84
Vafer check valve K6 spring-loaded DN100 PVC grey Flange-connec- ion 110-4" DIN/ANSI MOP 10 bar FPM	0.58	1.00	129115	392.22
Vafer check valve K6 spring-loaded DN125 PVC grey Flange-connec- ion 140-5″ DIN/ANSI MOP 10 bar EPDM	0.75	1.00	129105	355.60
Vafer check valve K6 spring-loaded DN125 PVC grey Flange-connec- ion 140-5" DIN/ANSI MOP 10 bar FPM	0.75	1.00	129116	449.18
Vafer check valve K6 spring-loaded DN150 PVC grey Flange-connec- ion 160-6" DIN/ANSI MOP 10 bar EPDM	1.38	1.00	129106	465.68
Vafer check valve K6 spring-loaded DN150 PVC grey Flange-connec- ion 160-6" DIN/ANSI MOP 10 bar FPM	1.38	1.00	129117	572.25
Vafer check valve K6 spring-loaded DN200 PVC grey Flange-connec- ion 225-8" DIN/ANSI MOP 10 bar EPDM	2.59	1.00	129107	731.14
Vafer check valve K6 spring-loaded DN200 PVC grey Flange-connec- ion 225-8" DIN/ANSI MOP 10 bar FPM	2.59	1.00	129118	849.54
Vafer check valve K6 spring-loaded DN300 PVC grey Flange-connec- ion 315-12" DIN/ANSI MOP 8 bar EPDM	6.35	1.00	129109	1347.41
	6.44	1.00	129120	1608.07
Vafer check valve K6 spring-loaded DN300 PVC grey Flange-connec- ion 315-12" DIN/ANSI MOP 8 bar FPM				



► FOR USE WITH LIMIT SWITCHES

► FOR USE IN STANDARD APPLICATI-ONS

# Flow meter M123 PVC measuring pipe

### PVC

Product	G-kg	VE	Prod.No.	Price €
PRICES FLOW METER MAGNETIC-METRIC				
Flow meter M123 magnetic indicator tube PVC DN10 PVC grey PVCu solvent socket ends d16 metric I/h 1,5-15 PN10 EPDM	0.08	1.00	74183	163.84
Flow meter M123 magnetic indicator tube PVC DN10 PVC grey PVCu solvent socket ends d16 metric I/h 2,5-25 PN10 EPDM	0.08	1.00	74184	163.84
Flow meter M123 magnetic indicator tube PVC DN10 PVC grey PVCu solvent socket ends d16 metric I/h 5-50 PN10 EPDM	0.08	1.00	74185	163.84
Flow meter M123 magnetic indicator tube PVC DN10 PVC grey PVCu solvent socket ends d16 metric I/h 10-100 PN10 EPDM	0.08	1.00	74186	163.84
Flow meter M123 magnetic indicator tube PVC DN15 PVC grey PVCu solvent socket ends d20 metric I/h 8-80 PN10 EPDM	0.13	1.00	74187	173.89
Flow meter M123 magnetic indicator tube PVC DN15 PVC grey PVCu solvent socket ends d20 metric I/h 15-150 PN10 EPDM	0.13	1.00	74188	173.89
Flow meter M123 magnetic indicator tube PVC DN15 PVC grey PVCu solvent socket ends d20 metric I/h 20-200 PN10 EPDM	0.13	1.00	74189	173.89
Flow meter M123 magnetic indicator tube PVC DN25 PVC grey PVCu solvent socket ends d32 metric I/h 15-150 PN10 EPDM	0.24	1.00	74190	199.51
Flow meter M123 magnetic indicator tube PVC DN25 PVC grey PVCu solvent socket ends d32 metric I/h 30-300 PN10 EPDM	0.24	1.00	74191	199.51
Flow meter M123 magnetic indicator tube PVC DN25 PVC grey PVCu solvent socket ends d32 metric I/h 50-500 PN10 EPDM	0.24	1.00	74192	199.51
Flow meter M123 magnetic indicator tube PVC DN25 PVC grey PVCu solvent socket ends d32 metric I/h 100-1000 PN10 EPDM	0.24	1.00	74193	199.51
FLOW METER METRIC				
Flow meter M123 indicator tube PVC DN10 PVC grey PVCu solvent socket ends d16 metric I/h 1,5-15 PN10 EPDM	0.08	1.00	74161	119.48
Flow meter M123 indicator tube PVC DN10 PVC grey PVCu solvent socket ends d16 metric I/h 2,5-25 PN10 EPDM	0.08	1.00	74162	119.48
Flow meter M123 indicator tube PVC DN10 PVC grey PVCu solvent socket ends d16 metric I/h 5-50 PN10 EPDM	0.08	1.00	74218	119.48
Flow meter M123 indicator tube PVC DN10 PVC grey PVCu solvent socket ends d16 metric I/h 10-100 PN10 EPDM	0.08	1.00	74164	119.48
Flow meter M123 indicator tube PVC DN15 PVC grey PVCu solvent socket ends d20 metric I/h 8-80 PN10 EPDM	0.13	1.00	74165	122.60
Flow meter M123 indicator tube PVC DN15 PVC grey PVCu solvent socket ends d20 metric l/h 15-150 PN10 EPDM	0.13	1.00	74166	122.60
Flow meter M123 indicator tube PVC DN15 PVC grey PVCu solvent socket ends d20 metric I/h 20-200 PN10 EPDM	0.13	1.00	74167	122.60
Flow meter M123 indicator tube PVC DN25 PVC grey PVCu solvent socket ends d32 metric I/h 15-150 PN10 EPDM	0.24	1.00	74168	144.21
Flow meter M123 indicator tube PVC DN25 PVC grey PVCu solvent socket ends d32 metric I/h 30-300 PN10 EPDM	0.24	1.00	74169	144.23
Flow meter M123 indicator tube PVC DN25 PVC grey PVCu solvent socket ends d32 metric I/h 50-500 PN10 EPDM	0.24	1.00	74170	144.21
Flow meter M123 indicator tube PVC DN25 PVC grey PVCu solvent socket ends d32 metric I/h 100-1000 PN10 EPDM	0.24	1.00	74171	144.21

# Flow meter M335 PA measuring pipe

### PVC

Product	G-kg	VE	Prod.No.	Price €
FLOW METER MAGNETIC-METRIC				
Flow meter M335 magnetic indicator tube PA DN25 PVC grey PVCu solvent socket ends d32 metric I/h 50-500 PN10 EPDM	0.52	1.00	77097	442.62
Flow meter M335 magnetic indicator tube PA DN25 PVC grey PVCu solvent socket ends d32 metric I/h 100-1000 PN10 EPDM	0.52	1.00	77098	464.45
Flow meter M335 magnetic indicator tube PA DN32 PVC grey PVCu solvent socket ends d40 metric I/h 150-1500 PN10 EPDM	0.60	1.00	77099	493.23
Flow meter M335 magnetic indicator tube PA DN32 PVC grey PVCu solvent socket ends d40 metric I/h 250-2500 PN10 EPDM	0.60	1.00	77100	519.70
Flow meter M335 magnetic indicator tube PA DN40 PVC grey PVCu solvent socket ends d50 metric I/h 200-2000 PN10 EPDM	1.22	1.00	77101	562.75
Flow meter M335 magnetic indicator tube PA DN40 PVC grey PVCu solvent socket ends d50 metric I/h 300-3000 PN10 EPDM	1.22	1.00	77102	694.89
Flow meter M335 magnetic indicator tube PA DN40 PVC grey PVCu solvent socket ends d50 metric I/h 600-6000 PN10 EPDM	1.22	1.00	77103	485.82
Flow meter M335 magnetic indicator tube PA DN50 PVC grey PVCu solvent socket ends d63 metric I/h 600-6000 PN10 EPDM	1.68	1.00	77104	555.48
Flow meter M335 magnetic indicator tube PA DN50 PVC grey PVCu solvent socket ends d63 metric I/h 1000-10000 PN10 EPDM	1.68	1.00	77105	892.84
Flow meter M335 magnetic indicator tube PA DN50 PVC grey PVCu solvent socket ends d63 metric I/h 1500-15000 PN10 EPDM	1.68	1.00	77106	953.40
Flow meter M335 magnetic indicator tube PA DN65 PVC grey PVCu solvent socket ends d75 metric I/h 2000-20000 PN10 EPDM	2.90	1.00	77107	1470.49
Flow meter M335 magnetic indicator tube PA DN65 PVC grey PVCu solvent socket ends d75 metric l/h 3000-30000 PN10 EPDM	2.90	1.00	77108	976.42
Flow meter M335 magnetic indicator tube PA DN65 PVC grey PVCu solvent socket ends d75 metric I/h 8000-60000 PN10 EPDM	2.90	1.00	77109	1486.35
FLOW METER METRIC				
Flow meter M335 indicator tube PA DN25 PVC grey PVCu solvent socket ends d32 metric I/h 50-500 PN10 EPDM	0.52	1.00	77084	298.62
Flow meter M335 indicator tube PA DN25 PVC grey PVCu solvent socket ends d32 metric I/h 100-1000 PN10 EPDM	0.52	1.00	77085	304.75
Flow meter M335 indicator tube PA DN32 PVC grey PVCu solvent socket ends d40 metric I/h 150-1500 PN10 EPDM	0.60	1.00	77086	344.30
Flow meter M335 indicator tube PA DN32 PVC grey PVCu solvent socket ends d40 metric I/h 250-2500 PN10 EPDM	0.60	1.00	77087	370.75
Flow meter M335 indicator tube PA DN40 PVC grey PVCu solvent socket ends d50 metric I/h 200-2000 PN10 EPDM	1.22	1.00	77088	384.66
Flow meter M335 indicator tube PA DN40 PVC grey PVCu solvent socket ends d50 metric I/h 300-3000 PN10 EPDM	1.22	1.00	77089	518.40
Flow meter M335 indicator tube PA DN40 PVC grey PVCu solvent socket ends d50 metric I/h 600-6000 PN10 EPDM	1.22	1.00	77090	559.46
Flow meter M335 indicator tube PA DN50 PVC grey PVCu solvent socket ends d63 metric I/h 600-6000 PN10 EPDM	1.68	1.00	77091	650.81
Flow meter M335 indicator tube PA DN50 PVC grey PVCu solvent socket ends d63 metric I/h 1000-10000 PN10 EPDM	1.68	1.00	77092	698.48
Flow meter M335 indicator tube PA DN50 PVC grey PVCu solvent socket ends d63 metric I/h 1500-15000 PN10 EPDM	1.68	1.00	77093	768.01
Flow meter M335 indicator tube PA DN65 PVC grey PVCu solvent socket ends d75 metric I/h 2000-20000 PN10 EPDM	2.90	1.00	77094	856.85
Flow meter M335 indicator tube PA DN65 PVC grey PVCu solvent socket ends d75 metric I/h 3000-30000 PN10 EPDM	2.90	1.00	77095	856.85
Flow meter M335 indicator tube PA DN65 PVC grey PVCu solvent socket ends d75 metric I/h 8000-60000 PN10 EPDM	2.20	1.00	77096	1298.35



► FOR USE WITH LIMIT SWITCHES

#### FOR USE IN STANDARD APPLICATI-ONS



### Flow meter M335 with PSU measuring pipe

PVC

Product	G-kg	VE	Prod.No.	Price €
FLOW METER MAGNETIC-METRIC				
Flow meter M335 magnetic indicator tube PSU DN25 PVC grey PVCu solvent socket ends d32 metric l/h 50-500 PN10 EPDM	0.52	1.00	77175	500.19
Flow meter M335 magnetic indicator tube PSU DN25 PVC grey PVCu solvent socket ends d32 metric l/h 100-1000 PN10 EPDM	0.52	1.00	77176	522.70
Flow meter M335 magnetic indicator tube PSU DN32 PVC grey PVCu solvent socket ends d40 metric l/h 150-1500 PN10 EPDM	0.60	1.00	77177	559.46
Flow meter M335 magnetic indicator tube PSU DN32 PVC grey PVCu solvent socket ends d40 metric I/h 250-2500 PN10 EPDM	0.60	1.00	77178	595.88
Flow meter M335 magnetic indicator tube PSU DN40 PVC grey PVCu solvent socket ends d50 metric l/h 200-2000 PN10 EPDM	1.22	1.00	77179	634.61
Flow meter M335 magnetic indicator tube PSU DN40 PVC grey PVCu solvent socket ends d50 metric l/h 300-3000 PN10 EPDM	1.22	1.00	77180	790.54
Flow meter M335 magnetic indicator tube PSU DN40 PVC grey PVCu solvent socket ends d50 metric I/h 600-6000 PN10 EPDM	1.22	1.00	77181	840.81
Flow meter M335 magnetic indicator tube PSU DN50 PVC grey PVCu solvent socket ends d63 metric I/h 600-6000 PN10 EPDM	1.68	1.00	77182	960.67
Flow meter M335 magnetic indicator tube PSU DN50 PVC grey PVCu solvent socket ends d63 metric l/h 1000-10000 PN10 EPDM	1.68	1.00	77183	1036.5
Flow meter M335 magnetic indicator tube PSU DN50 PVC grey PVCu solvent socket ends d63 metric I/h 1500-15000 PN10 EPDM	1.68	1.00	77184	1105.6
Flow meter M335 magnetic indicator tube PSU DN65 PVC grey PVCu solvent socket ends d75 metric I/h 2000-20000 PN10 EPDM	2.90	1.00	77185	1728.3
Flow meter M335 magnetic indicator tube PSU DN65 PVC grey PVCu solvent socket ends d75 metric I/h 3000-30000 PN10 EPDM	2.90	1.00	77186	1728.3
Flow meter M335 magnetic indicator tube PSU DN65 PVC grey PVCu solvent socket ends d75 metric I/h 8000-60000 PN10 EPDM	2.90	1.00	77187	1751.1
FLOW METER METRIC				
Flow meter M335 indicator tube PSU DN25 PVC grey PVCu solvent socket ends d32 metric I/h 50-500 PN10 EPDM	0.52	1.00	77162	358.87
Flow meter M335 indicator tube PSU DN25 PVC grey PVCu solvent socket ends d32 metric I/h 100-1000 PN10 EPDM	0.52	1.00	77163	366.82
Flow meter M335 indicator tube PSU DN32 PVC grey PVCu solvent socket ends d40 metric I/h 150-1500 PN10 EPDM	0.60	1.00	77164	413.14
Flow meter M335 indicator tube PSU DN32 PVC grey PVCu solvent socket ends d40 metric I/h 250-2500 PN10 EPDM	0.60	1.00	77165	445.24
Flow meter M335 indicator tube PSU DN40 PVC grey PVCu solvent socket ends d50 metric I/h 200-2000 PN10 EPDM	1.22	1.00	77166	458.52
Flow meter M335 indicator tube PSU DN40 PVC grey PVCu solvent socket ends d50 metric I/h 300-3000 PN10 EPDM	1.22	1.00	77167	602.49
Flow meter M335 indicator tube PSU DN40 PVC grey PVCu solvent socket ends d50 metric 1/h 600-6000 PN10 EPDM	1.22	1.00	77168	671.56
Flow meter M335 indicator tube PSU DN50 PVC grey PVCu solvent socket ends d63 metric I/h 600-6000 PN10 EPDM	1.68	1.00	77169	538.39
Flow meter M335 indicator tube PSU DN50 PVC grey PVCu solvent socket ends d63 metric I/h 1000-10000 PN10 EPDM	1.68	1.00	77170	573.42
Flow meter M335 indicator tube PSU DN50 PVC grey PVCu solvent socket ends d63 metric I/h 1500-15000 PN10 EPDM	1.68	1.00	77171	637.94
Flow meter M335 indicator tube PSU DN65 PVC grey PVCu solvent socket ends d75 metric I/h 2000-20000 PN10 EPDM	2.90	1.00	77172	1550.94
Flow meter M335 indicator tube PSU DN65 PVC grey PVCu solvent socket ends d75 metric I/h 3000-30000 PN10 EPDM	2.90	1.00	77173	1550.9
Flow meter M335 indicator tube PSU DN65 PVC grey PVCu solvent socket ends d75 metric I/h 8000-60000 PN10 EPDM	2.90	1.00	77174	1566.8
LIMIT VALUE CONTACT FOR FLOW METER M123/M335/M350				
Limit contact for flow meter M123 / M335 / M350 Z40 min.	0.03	1.00	77287	186.35
Limit contact for flow meter M123 / M335 / M350 Z42 max.	0.03	1.00	77288	278.49
VALUE SENSOR FOR FLOW METER M335/M350				
Measuring sensor for flow meter M335 / M350 Z60	0.15	1.00	77463	1746.89

#### ► FOR USE IN STANDARD APPLICATI-ONS

► FOR USE WITH LIMIT SWITCHES



# IBG® PIPES AND FITTINGS

FOR SOPHISTICATED AND PRECISELY PIPING SYSTEMS

### PERFECTLY COORDINATED

The globally known and respected IBG<sup>®</sup> pipes and pipe fittings are ideally coordinated with the smallest possible tolerances. The perfectly processed plastic material PVC-U (unplasticized polyvinyl chloride) is particularly well-suited for demanding and precise piping systems. Peraqua works exclusively with raw materials from certified manufacturers, which are continuously subjected to independent internal and external tests.

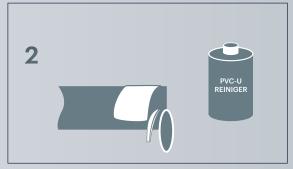
IBG® pipes made of PVC-U offer many advantages:

- » Excellent chemical resistance, easy installation (also due to the low material weight)
- » Easy assembly using special pipe clamps (Types A, B, and C)
- » Various connection techniques available (gluing, threaded female/male connections)
- » Available in many shapes and sizes
- » Durable and secure connections guaranteed (average service life up to 50 years)
- » Optimal price-performance ratio
- » To reduce processing time, Praher PVC piping systems, valves, and fittings are perfectly coordinated with each other.



# INSTRUCTIONS FOR THE CORRECT INSTALLATION OF IBG® PVC-U PIPING SYSTEMS





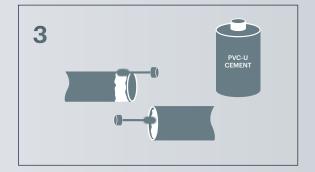
#### PREPARATION

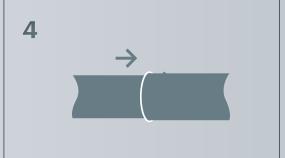
The pipe end is deburred and chamfered using a chamfering tool.

Bonding should only be carried out at temperatures above 8°C. At temperatures around 8°C, the pipe end and the socket may need to be tempered to handwarm conditions.

### **CLEANING**

For optimum adhesion, the surfaces to be bonded must be dry and free of dirt. Additionally treat the outside of the pipe end and the inside of the socket with fleece paper and cleaner.





### **APPLY THE ADHESIVE**

Stir and soak the brush generously with adhesive. Apply a thin coat of adhesive to the inside of the socket axially (from the inside to the outside) in the longitudinal direction. Apply a thick coat of adhesive to the pipe end, also axially, applying strong pressure with the brush. The open time of the adhesive depends on the ambient temperature and film thickness (4 min./20°C to <1 min./40°C).

### CONNECTING

Push the pipe and socket together (without twisting/tilting) up to the stop or to the full depth of the socket. Fix the connection briefly until the adhesive has set. From pipe size DN 150, use a suitable device to facilitate pushing together. Excess adhesive can be removed with fleece paper.



Attention! Allow time for drying

Do not move the pipes for at least 5 minutes after bonding. At temperatures below +10° C, this time is extended to at least 15 minutes. The bonded pipes are lowered after 10 to 12 hours. The pipes should only be filled and pressure tested up to the test pressure of 1.5 x PN 24 hours after the last bonding. If the pipe is to be loaded with the operating pressure (repair case), the rule of thumb is: 1 hour waiting time per 1 bar operating pressure. Pipes that are not put into operation immediately should be rinsed thoroughly and left to stand, possibly filled with water.

# **Pipes**





### IBG® PVC-u pipe, grey WITHOUT socket, 2m, PN10

DxS	РМ	G-kg	VE	Prod.No.	Price €
50×2,4	430	0.11	2.00	77769	5.54
63×3,0	300	0.88	2.00	73526	8.87

# IBG® PVC-u pipe, grey with socket, 3m, PN10

DxS	РМ	G-kg	VE	Prod.No.	Price €
2 x 1,6	1347	0.23	3.00	77006	2.48
40x1,9	825	0.36	3.00	77007	3.41
50x2,4	582	0.56	3.00	77008	3.99
63x3,0	369	0.90	3.00	77009	6.45
75x3,6	261	1.25	3.00	77010	12.85
90x4,3	396	1.79	3.00	77011	16.79
110x4,2	258	2.15	3.00	77012	21.99

### IBG® PVC-u pipe, transparent without socket, 5m, PN16/10

DxS	PN	PM	G-kg	VE	Prod.No.	Price €
20x1,5	16	25	0.14	5.00	75828	9.09
25x1,9	16	25	0.21	5.00	73714	13.38
32x2,4	16	20	0.34	5.00	73715	17.07
40x3	16	20	0.53	5.00	73716	28.00
50x3,7	16	20	0.81	5.00	73717	52.20
63x4,7	16	15	1.29	5.00	73718	87.07
50x2,4	10	20	0.90	5.00	74261	0.00
63x3,0	10	15	1.22	5.00	74262	28.66
75×3,6	10	15	1.80	5.00	76211	98.60
90×4,3	10	10	1.75	5.00	76212	126.93
110×5,3	10	5	2.90	5.00	76213	177.87



### IBG® PVC-u pipe, black with socket, 5m, PN10

For use as supply and waste pipe in solar systems, conditional UV-resistance

DxS	РМ	G-kg	VE	Prod.No.	Price €
50×2,4	1075	0.56	5.00	74260	0.00

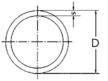


Applies to all pipes:

Price per m

PM = pallet quantity Standard norm EN 1452-2

Dimensions D x S





# IBG® PVC-u pipe, grey with socket, 5m, PN6

DxS	РМ	G-kg	VE	Prod.No.	Price €
40x1,5	690	0.28	5.00	76909	3.41
50x1,6	430	0.38	5.00	76910	3.84
63x2,0	720	0.57	5.00	76911	6.12
75x2,3	340	0.81	5.00	76912	9.14
90x2,8	275	1.19	5.00	76913	13.65
110x2,7	360	1.41	5.00	76914	17.37
125x3,1	240	1.84	5.00	76915	22.46
140x3,5	265	2.33	5.00	76916	30.74
160x4,0	150	3.04	5.00	76917	37.19
180x4,4	140	3.76	5.00	76918	49.37
200x4,9	100	4.65	5.00	76919	59.36
225x5,5	90	5.88	5.00	76920	77.70
250x6,2	60	7.36	5.00	76921	96.56
280x6,9	55	9.17	5.00	76922	113.97
315x7,7	45	11.52	5.00	76923	142.96
355x8,7	5	14.67	5.00	76924	182.30
400x9,8	5	18.62	5.00	76925	228.63

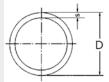


# IBG® PVC-u pipe, grey with socket 5m, PN10

DxS	PM	G-kg	VE	Prod.No.	Price €
32x1,6	1440	0.24	5.00	76926	2.30
40x1,9	895	0.35	5.00	76927	3.15
50x2,4	970	0.56	5.00	76928	3.83
63x3,0	615	0.88	5.00	76929	5.94
75x3,6	340	1.25	5.00	76930	9.23
90x4,3	275	1.79	5.00	76931	15.84
110x4,2	360	2.16	5.00	76932	15.77
125x4,8	340	2.81	5.00	76933	24.92
140x5,4	265	3.54	5.00	76934	26.88
160x6,2	165	4.64	5.00	76935	33.80
180x6,9	140	5.82	5.00	76936	55.20
200x7,7	100	7.21	5.00	76937	71.82
225x8,6	90	9.06	5.00	76938	66.10
250x9,6	60	11.24	5.00	76939	103.64
280x10,7	55	14.03	5.00	76940	121.67
315x12,1	45	17.84	5.00	76941	133.67
355x13,6	5	22.61	5.00	76942	221.36
400x15,3	5	28.66	5.00	76943	292.98



Applies to all pipes: • Price per m • PM = pallet quantity • Standard norm EN 1452-2 • Dimensions D x S





# IBG® PVC-u pipe, grey with socket, 5m, PN16

90x6,72752.725.007695119.68110x6,63603.325.007695223.74125x7,43404.245.007695335.29140x8,32655.325.007695438.91160x9,51656.965.007695553.90180x10,71408.825.007695689.75200x11,910010.905.0076957104.7225x13,49013.815.0076959167.9280x16,65521.295.0076960207.3	DxS	PM	G-kg	VE	Prod.No.	Price €
32x2,4         1440         0.35         5.00         76946         3.20           40x3,0         895         0.54         5.00         76947         4.66           50x3,7         970         0.83         5.00         76948         5.56           63x4,7         615         1.33         5.00         76949         8.92           75x5,6         340         1.89         5.00         76950         13.83           90x6,7         275         2.72         5.00         76951         19.68           110x6,6         360         3.32         5.00         76952         2.3.74           125x7,4         340         4.24         5.00         76953         35.29           140x8,3         265         5.32         5.00         76953         35.90           160x9,5         165         6.96         5.00         76955         53.90           180x10,7         140         8.82         5.00         76956         89.75           200x11,9         100         10.90         5.00         76958         109.4           25x13,4         90         13.81         5.00         76958         109.4           250x14,8	20x1,5	4380	0.14	5.00	76944	1.36
40x3,08950.545.00769474.6650x3,79700.835.00769485.5663x4,76151.335.00769498.9275x5,63401.895.007695013.8390x6,72752.725.007695119.68110x6,63603.325.00769522.3.74125x7,43404.245.007695335.29140x8,32655.325.007695353.90160x9,51656.965.007695553.90180x10,71408.825.007695689.75200x11,910010.905.0076957104.7225x13,49013.815.0076958109.4250x14,86016.955.0076959167.9280x16,65521.295.007695020.3	25x1,9	2230	0.21	5.00	76945	2.09
50x3,79700.835.00769485.5663x4,76151.335.00769498.9275x5,63401.895.007695013.8390x6,72752.725.007695119.68110x6,63603.325.007695223.74125x7,43404.245.007695335.29140x8,32655.325.007695438.91160x9,51656.965.007695553.90180x10,71408.825.007695689.75200x11,910010.905.0076958109.425x13,49013.815.0076958109.4280x16,65521.295.007696020.73	32x2,4	1440	0.35	5.00	76946	3.20
63x4,76151.335.00769498.9275x5,63401.895.007695013.8390x6,72752.725.007695119.68110x6,63603.325.007695223.74125x7,43404.245.007695335.29140x8,32655.325.007695438.91160x9,51656.965.007695553.90180x10,71408.825.0076957104.7225x13,49013.815.0076958109.4250x14,86016.955.0076959167.928x16,65521.295.007696020.73	40x3,0	895	0.54	5.00	76947	4.66
75x5,63401.895.007695013.8390x6,72752.725.007695119.68110x6,63603.325.007695223.74125x7,43404.245.007695335.29140x8,32655.325.007695438.91160x9,51656.965.007695689.75200x11,910010.905.0076957104.7225x13,49013.815.0076959167.9280x16,65525.2021.295.007696020.73	50x3,7	970	0.83	5.00	76948	5.56
90x6,72752.725.007695119.68110x6,63603.325.007695223.74125x7,43404.245.007695335.29140x8,32655.325.007695438.91160x9,51656.965.007695553.90180x10,71408.825.007695689.75200x11,910010.905.0076957104.7225x13,49013.815.0076959167.9280x16,65521.295.007696020.3	63x4,7	615	1.33	5.00	76949	8.92
110x6,63603.325.007695223.74125x7,43404.245.007695335.29140x8,32655.325.007695438.91160x9,51656.965.007695553.90180x10,71408.825.007695689.75200x11,910010.905.0076957104.7225x13,49013.815.0076958109.4250x14,86016.955.0076959167.9280x16,65521.295.0076960207.3	75x5,6	340	1.89	5.00	76950	13.83
125x7,43404.245.007695335.29140x8,32655.325.007695438.91160x9,51656.965.007695553.90180x10,71408.825.007695689.75200x11,910010.905.0076957104.7225x13,49013.815.0076958109.4250x14,86016.955.0076959167.9280x16,65521.295.0076960207.3	90x6,7	275	2.72	5.00	76951	19.68
140x8,32655.325.007695438.91160x9,51656.965.007695553.90180x10,71408.825.007695689.75200x11,910010.905.0076957104.7225x13,49013.815.0076958109.4250x14,86016.955.0076959167.9280x16,65521.295.0076960207.3	110x6,6	360	3.32	5.00	76952	23.74
160x9,51656.965.007695553.90180x10,71408.825.007695689.75200x11,910010.905.0076957104.7225x13,49013.815.0076958109.4250x14,86016.955.0076959167.9280x16,65521.295.0076960207.3	125x7,4	340	4.24	5.00	76953	35.29
180x10,71408.825.007695689.75200x11,910010.905.0076957104.7225x13,49013.815.0076958109.4250x14,86016.955.0076959167.9280x16,65521.295.0076960207.3	140x8,3	265	5.32	5.00	76954	38.91
200x11,9       100       10.90       5.00       76957       104.7         225x13,4       90       13.81       5.00       76958       109.4         250x14,8       60       16.95       5.00       76959       167.9         280x16,6       55       21.29       5.00       76960       207.3	160x9,5	165	6.96	5.00	76955	53.90
225x13,49013.815.0076958109.4250x14,86016.955.0076959167.9280x16,65521.295.0076960207.3	180x10,7	140	8.82	5.00	76956	89.75
250x14,8         60         16.95         5.00         76959         167.9           280x16,6         55         21.29         5.00         76960         207.3	200x11,9	100	10.90	5.00	76957	104.74
280x16,6 55 21.29 5.00 76960 207.3	225x13,4	90	13.81	5.00	76958	109.48
	250x14,8	60	16.95	5.00	76959	167.99
315x18,7 45 26.98 5.00 76961 274.0	280x16,6	55	21.29	5.00	76960	207.30
	315x18,7	45	26.98	5.00	76961	274.05



### IBG® PVC-u pipe, grey WITHOUT socket, 5m, PN20

DxS	G-kg	VE	Prod.No.	Price €
16 x 1,5	0.06	5.00	70969	1.69



# IBG® pipe clip for plastic pipe Type AA

d	G-kg	VE	Prod.No.	Price €
10	0.00	800.00	70238	0.32
12	0.00	800.00	70239	0.32



# IBG® pipe clip for plastic pipe Type A

d	G-kg	VE	Prod.No.	Price €
160x	0.00	500.00	71065	0.61
20	0.01	400.00	71066	0.65
25	0.01	300.00	71067	0.79
32	0.01	200.00	71068	0.94



# IBG® pipe clip for plastic pipe Type B

d	D	E	F	G	1	G-kg	VE	Prod.No.	Price €
16 - 19mm	4,3	11	3,5	х	х	0.01	100.00	150149	1.34
20 - 23mm	6,5	11	3,5	41	6,5	0.01	500.00	150271	1.43
25 - 28mm	6,5	11	3,5	46	6,5	0.01	500.00	150272	1.51
31 - 35mm	6,5	11	3,5	52	6,5	0.02	500.00	150240	1.64
39 - 43mm	6,5	11	3,5	64	6,5	0.03	500.00	150293	1.76
47 - 51mm	6,5	11	3,5	70	6,5	0.03	500.00	150238A	1.56
60 - 65mm	6,5	11	3,5	80	6,5	0.05	300.00	150239	2.25
72 - 80mm	8,5	14	4,3	106	8,5	0.07	200.00	150291	6.32
87 - 95mm	8,5	14	4,3	117	8,5	0.10	150.00	150292	8.21

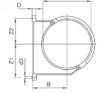
# IBG® pipe clip for plastic pipe Type C (d25-d90)

d	Z	Z1	G	Breite mm	G-kg	VE	Prod.No.	Price €
25	35	41	27,5	15,5	0.00	250.00	71069	1.01
32	44,5	50,5	30,5	15,5	0.02	150.00	71070	1.17
40	55,5	61,5	34,5	19,5	0.02	250.00	71071	1.41
50	68,5	74,5	41,5	22,5	0.04	100.00	71072	1.65
63	85	94	50	23,5	0.06	80.00	71073	2.03
75	101	110	58	25,5	0.07	60.00	71074	3.84
90	120	129	68	25,5	0.11	60.00	71075	5.10

# IBG<sup>®</sup> pipe clip for plastic pipe Type C (d110-d225)

d	d1	z	G	G1	Breite mm	G-kg	VE	Prod.No.	Price €
125	167	189	80	17	26,6	0.21	60.00	70185	9.70
110	185	207	105	35	28	0.15	80.00	70184	6.67
140	204	226	114	35	28,5	0.25	30.00	70186	10.20
160	228	250	124	35	30	0.32	30.00	70187	12.25
200	287	311	158	48	34	0.64	20.00	70188	20.91
225	325	344	170,5	48	34	0.72	15.00	70189	23.47

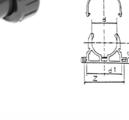




# IBG® pipe clip for plastic pipe Type D

d	d3	Z1	Z2	В	D	Breite mm	G-kg	VE	Prod.No.	Price €
90	9	89	71	105	15	33	0.19	60.00	72170	8.69
110	9	94	79,5	115	15	33	0.20	40.00	72171	10.20
125	11	115,5	91	130	20	35	0.33	40.00	72172	13.80
140	11	120,5	97,5	130	20	35	0.34	40.00	72173	16.83
160	11	130,5	106,5	147,5	20	35	0.39	20.00	72174	19.42
200	13	151,5	119,5	175	25	35	0.66	10.00	72175	23.98
225	13	164,5	131,5	175	25	40	0.68	10.00	72176	28.06
250	13	182,5	142,5	200	25	40	0.79	10.00	71076	35.20
280	13	197,5	155,5	200	25	40	0.83	2.00	71077	41.32
315	13	218,5	171,5	225	25	40	0.96	10.00	71078	45.37
355	17	275	208,5	257,5	30	50	1.47	10.00	72177	67.28
400	17	300	228	287,5	30	50	1.70	10.00	72178	72.36







### **DIMENSIONS MATERIAL: PP**





Type A: d10 – d32

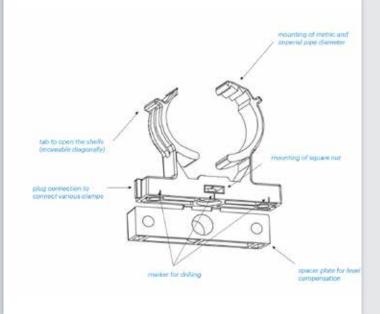
Type B: d16 -d19 to d39-43 ANSI / ASTM / DIN / JIS / SCH80 pipes



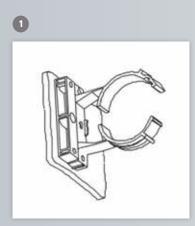
Type C: d25 - d225



Type D: d90 – d400



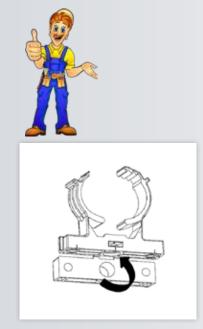
# **INSTALLATION INSTRUCTIONS TYPE B**



Fix the pipe clamp to the wall with a dowel and a screw.



Press the pipe against the wall. Done!



FITTING A BALL VALVE

Fold over the spacer and fasten both parts with a screw (10 mm longer). Install before and after each ball valve.



### PIPE CLAMP SPACING FOR HORIZONTALLY LAID PN 10 AND PN 16 PIPES

d mm	20 °C	30 °C	40 °C	50 °C	60 °C
16	80	70	50	-	-
20	90	80	60	-	-
25	95	85	65	55	40
32	105	90	70	60	45
40	120	110	90	70	55
50	140	130	110	85	65
63	150	140	120	95	70
75	165	155	135	110	80
90	180	170	150	125	95
110	200	190	170	145	115
125	210	200	185	160	125
140	225	215	195	170	140
160	240	230	210	185	155
200	255	240	225	200	170
225	270	260	240	215	185

Distance in cm

The recommended pipe clamp distances refer to a maximum deflection of the pipe between pipe clamps of 2.5 mm at a density of the flow medium of 1 g/cm<sup>3</sup>.

The distance between the pipe clamps is determined by the following factors: Pipe material, pipe wall diameter, pipe wall thickness, average pipe wall temperature, density of the flow medium.

The pipe clamp spacing for vertically laid pipes can be increased by 30%. For flow media with a density of more than  $1 \text{ g/cm}^3$ , the pipe clamp spacing must be shortened according to the following specifications.





IBG®	elbow	90° so	lvent s	ocket,	grey	
d	DN	DN		7	E	0.1.

d	PN	DN	1	z	E	G-kg	VE	Prod.No.	Price €
10	16	6	18	6	14	0.01	250.00	70650	1.79
12	16	8	17	7,6	19	0.01	150.00	70651	1.63
16	16	10	23	9	23	0.01	250.00	70652	1.01
20	16	15	28	11	28	0.02	140.00	70653	1.13
25	16	20	33	13,5	34,5	0.03	100.00	70654	1.82
32	16	25	39	17	42,5	0.05	100.00	70655	2.49
40	16	32	47	21	50,5	0.09	50.00	70656	3.56
50	16	40	57	26	62	0.16	40.00	70506	2.20
63	16	50	71,5	32,5	76	0.25	35.00	70507	4.72
75	16	65	82,5	38,5	92	0.50	30.00	70659	11.19
90	16	80	97	46	110	0.80	10.00	70574	12.89
110	16	100	117	56	136	1.29	8.00	70575	29.88
125	16	110	132	64	151	1.85	6.00	71398	59.16
140	16	125	147	71	168	2.47	4.00	70578	75.40
160	16	150	167	81	192	3.63	4.00	70579	96.81
200	10	175	213	106	230	5.73	1.00	70664	243.19
225	10	200	238	118	258	7.80	1.00	70577	297.81
250	10	250	264	133	283	10.39	1.00	71032	501.34
280	10	250	357	210	321	16.90	1.00	70576	764.02
315	10	250	357	210	321	22.69	1.00	71035	936.88
400	6	370	521	300	442	37.95	1.00	72057	1555.88



# IBG® elbow 90° solvent socket, black (for solar systems), PN10

d	PN	DN	1	z	E	G-kg	VE	Prod.No.	Price €
50	10	40	57	26	60	0.13	40.00	70129	4.08



# IBG® reduced elbow 90° solvent socket / solvent spigot, grey, PN10

d	PN	DN	L	Z	L1	Е	н	G-kg	VE	Prod.No.	Price €
50-50/40	10	40	62	29	67,5	62	88	0.13	40.00	71317	2.92
63-63/50	10	50	74	37,5	82	77	104	0.28	35.00	71318	6.80



# $IBG^{\scriptscriptstyle \otimes}$ reduced elbow 90° solvent socket / solvent spigot, black (for solar systems), PN16

d	PN	DN	L	z	L1	Е	н	G-kg	VE	Prod.No.	Price €
50-50/40	16	40	62	29	67,5	62	88	0.13	40.00	74264	5.39



## IBG® elbow 90° solvent socket / female thread, reinforced, PN10

d	PN	DN	L	L1	z	Е	G-kg	VE	Prod.No.	Price €
16 - 3/8″	23	10	12	9	25	16	0.02	50.00	70816	5.03
20 - 1/2″	28	10	12	12	30	16	0.03	140.00	70817	4.91
25 - 3/4″	33	10	16	15	34,5	16	0.04	100.00	70818	5.10
32 - 1″	39	10	19,1	17	42	16	0.07	100.00	70819	7.15
40 - 1 1/4"	47	10	22	22,4	50,6	16	0.11	50.00	70820	8.69
50 - 1 1/2"	57	10	21,4	26	62	16	0.19	40.00	70821	11.75
63 - 2″	71,5	10	25,7	32	77	16	0.31	35.00	70822	15.84
75 - 2 1/2″	83	10	36	39	88	10	0.53	30.00	70823	38.53
90 - 3″	97	10	39	46	105	10	0.87	10.00	70824	58.60
110 - 4″	117	10	39	56	130	10	1.40	8.00	70825	79.81

### IBG<sup>®</sup> elbow 90° solvent socket / female thread, PN10, grey



d	PN	DN	L	L1	Z	E	G-kg	VE	Prod.No.	Price €
10-1/4"	10	6	9	9	7	14	0.01	150.00	72225	3.06
12-1/4"	10	8	9	9	7	16	0.01	150.00	72226	3.06
16-3/8"	10	10	14	14	11	23	0.01	200.00	71132	3.42
20-1/2"	10	15	14	14	11	28	0.02	140.00	71133A	2.95
25-3/4"	10	20	18	18	15	34,5	0.03	100.00	71134A	4.06
32-1"	10	25	22	19,1	17	42	0.15	40.00	71135	4.48
40-11/4″	10	32	26	21,4	22,3	50,6	0.14	20.00	71136	5.64
50-1 1/2"	10	40	31	21,4	26	62	0.17	20.00	71137	7.68
63-2"	10	50	38	25,7	32	77	0.29	35.00	71138	12.77



# $IBG^{\circledast}$ elbow 90° solvent socket / male thread, PN10, grey

d	PN	DN	D	1	L	z	Е	G-kg	VE	Prod.No.	Price €
32 - 1 1/4"	10	25	32	42	19,1	17	40,2	0.05	15.00	71221	2.46
50 - 1 1/2"	10	32	31,8	47	21,4	21	50	0.11	40.00	70883	4.04
40 - 1 1/4"	10	40	31,8	57	21,4	26	62	0.07	50.00	71222	2.95
50 - 1 1/4"	10	40	38	57	21,4	26	62	0.12	40.00	71223	3.88
50 - 2"	10	40	49,5	57	24,5	26	62	0.14	40.00	71224	4.56



# IBG® elbow 45° solvent socket, grey

d	PN	DN	1	z	E	G-kg	VE	Prod.No.	Price €
10	16	6	12	3	16	0.01	150.00	70666	2.44
12	16	8	12	3,9	18	0.01	160.00	70667	1.22
16	16	10	14	4,5	23	0.01	140.00	70668	1.48
20	16	15	16	5	27,5	0.02	180.00	70669	1.58
25	16	20	18,5	6	34	0.03	120.00	70670	2.12
32	16	25	22	7,5	43	0.05	130.00	70671	2.27
40	16	32	26	9,5	52,5	0.09	80.00	70672	3.30
50	16	40	31	11,5	62	0.13	50.00	70673	2.87
63	16	50	37,5	14	77	0.23	45.00	70674	4.27
75	16	65	43,5	16,5	90,5	0.35	40.00	70675	10.76
90	16	80	51	19,5	110,5	0.64	20.00	70676	15.38
110	16	100	61	23,5	131	0.96	9.00	70677	24.01
125	16	110	69	26,5	151	1.46	6.00	71037	62.47
140	16	125	76	30	174	1.73	6.00	70678	65.27
160	16	150	86	34	188	3.15	4.00	70679	71.88
200	10	175	107	49	230	4.42	1.00	70680	209.15
225	10	200	120	54	260	6.10	1.00	70580	228.66
250	10	250	132	58	286	7.97	1.00	71038	447.28
280	10	250	147	62	321	11.39	1.00	71039	607.86
315	10	300	165	66	360	15.53	1.00	71041	803.05
400	6	370	208	93,5	442	25.06	1.00	72058	1416.50



# IBG® elbow 45° solvent socket, black (for solar systems), PN10

d	PN	DN	1	Z	Е	G-kg	VE	Prod.No.	Price €
50	16	40	31	11,5	62	0.10	50.00	70130	4.01



# $IBG^{\circledast}$ reduced elbow 45° solvent socket, grey, PN10

d	PN	DN	L	Z	L1	Е	н	G-kg	VE	Prod.No.	Price €
50-50/40	10	40	44	29	47	62	94	0.11	40.00	71315	4.84
63-63/50	10	50	51,5	37,5	58	77	115	0.20	40.00	71316	6.98



# IBG® bend 90° solvent socket, PN16, grey

d	PN	DN	1	Z	Е	G-kg	VE	Prod.No.	Price €
16	16	10	46	32	23	0.01	50.00	71030	4.42
20	16	15	56	40	27	0.03	120.00	70984	4.48
25	16	20	69	50	35	0.04	100.00	70985	5.90
32	16	25	86	64	40	0.08	50.00	70986	7.15
40	16	32	106	80	49	0.14	30.00	70978	10.49
50	16	40	131	100	62	0.27	60.00	70979	10.76
63	16	50	164	126	76	0.49	30.00	70980	14.79
75	16	65	190	149	94	0.50	14.00	70981	41.32
90	16	80	231	180	112	0.80	5.00	70982	49.44
110	16	100	283	222	137	2.75	4.00	70983	74.94
160	16	125	355	280	167	7.60	2.00	70987	240.46



# IBG<sup>®</sup> bend 90° made of PVC pipe, grey

d	PN	DN	В	Z	G-kg	VE	Prod.No.	Price €
125	16	25	25	60	2.03	1.00	71326	64.21
140	16	32	30	76	3.24	1.00	71327	101.92
200	16	40	35	92	7.73	1.00	71329	242.51
225	16	50	43	102	9.93	1.00	71330	320.94
250	16	65	51	118	13.63	1.00	71331	402.43
280	16	80	58	142	18.91	1.00	71332	636.81
315	10	100	70	175	31.23	1.00	71333	860.94
400	10	110	79	200	35.00	1.00	71334	1782.91

# IBG® bend 45° solvent socket, made of PVC pipe, grey



d	PN	DN	В	Z	G-kg	VE	Prod.No.	Price €
32	16	25	25	26	0.05	30.00	71335	4.48
40	16	32	30	36	0.09	20.00	71336	5.03
50	16	40	35	40	0.16	20.00	71337	7.68
63	16	50	43	46	0.28	10.00	71338	12.25
75	16	63	51	54	0.41	10.00	71339	15.84
90	16	80	58	63	0.74	10.00	71340	31.08
110	10	100	70	80	0.96	5.00	71341	40.76
125	10	110	79	89	1.50	1.00	71342	55.04
140	10	125	87	98	2.29	1.00	71343	90.70
160	10	140	99	119	3.33	1.00	71344	105.99
200	10	175	122	143	5.62	1.00	71345	194.64
225	10	200	137	166	7.27	1.00	71346	253.72
250	10	250	150	170	10.08	1.00	71347	323.00
280	10	250	168	214	13.65	1.00	71348	467.17
315	6	300	188	236	19.61	1.00	71349	610.28
400	6	370	250	550	35.00	1.00	71350	1088.62

# IBG® Tee 90°, grey





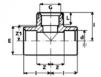
d	PN	DN	I.	z	Е	G-kg	VE	Prod.No.	Price €
10	16	6	18	6	14	0.01	250.00	70689	1.58
12	16	8	19,6	7,6	18	0.01	250.00	70690	1.63
16	16	10	24	9	23,2	0.02	140.00	70691	1.63
20	16	15	27,5	11	28	0.03	100.00	70692	1.66
25	16	20	32,9	13,5	34,6	0.04	70.00	70693	2.43
32	16	25	40,5	17	42	0.08	100.00	70694	2.63
40	16	32	48,9	21,6	51	0.12	50.00	70695	2.26
50	16	40	59,3	26	62,4	0.22	30.00	70022	2.54
63	16	50	71	32,5	78	0.38	30.00	72632	5.70
75	16	65	83,5	38,5	93	0.65	25.00	70696	16.24
90	16	80	99	46	112	1.14	18.00	70697	23.84
110	16	100	117	56	132	1.62	10.00	70581	33.92
125	16	110	133	63	150	2.39	4.00	71043	86.13
140	16	125	147	71	171	3.65	5.00	70642	115.15
160	16	150	167	81	192	5.03	4.00	70583	126.89
200	10	175	213	106	232	8.00	1.00	70700	248.11
225	10	200	284	118	258	5.50	1.00	70584	291.43
250	10	250	261	132	284	14.28	1.00	71044	491.59
280	10	250	291	144	320	19.89	1.00	71045	824.21
315	10	300	327	162	355	27.18	1.00	71047	951.06
400	6	370	421	213	442	41.91	1.00	72059	1604.11



# IBG® Tee 90°, black (for solar systems), PN10

d	PN	DN	I	z	E	G-kg	VE	Prod.No.	Price €
50	10	40	59,3	26	60	0.16	30.00	70893	4.91

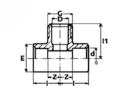




# IBG® Tee 90° solvent socket / female thread, reinforced, grey

d	PN	DN	1	L	z	Z1	Е	G-kg	VE	Prod.No.	Price €
16-3/8″	16	10	23	12	9	12	23	0.02	50.00	70826	5.39
20-1/2″	16	15	28	15	12	14	30	0.04	100.00	70827	5.64
25-3/4″	16	20	33	16,3	15	16,7	35	0.06	70.00	70828	6.67
32-1"	16	25	40,5	19,1	17	21,5	41,8	0.09	100.00	70829	8.21
40-1 1/4"	16	32	48,3	21,4	21,6	26,9	50,7	0.14	50.00	70830	11.75
50-1 1/2"	16	40	59,3	21,4	27,8	33,6	61,7	0.26	30.00	70831	15.84
63 - 2"	16	50	71,8	25,7	33,3	45,8	77,2	0.00	30.00	70832A	16.32
75-2 1/2"	10	65	82,5	34	38,5	48,5	88	0.70	18.00	70833	49.44
90- 3″	10	80	97	41	46	56	105	1.20	10.00	70834	71.88
110-4"	10	100	117	41	56	77	130	1.89	7.00	70835	95.30





# IBG® Tee 90° solvent socket / pipe male thread, PN10, grey

d	PN	DN	1	L	z	Z1	Е	G-kg	VE	Prod.No.	Price €
32 - 1"	10	25	25	40,5	39	17	41	0.07	15.00	71225	2.53
32 -1 1/4"	10	25	32	47,8	48	24	41	0.08	10.00	71226	2.53
40 - 1"	10	32	25	48,3	47,5	21	51	0.09	50.00	71227	3.06
40 - 1 1/4"	10	32	32	48,3	47,5	21	51	0.10	140.00	71228A	2.81
50 - 1"	10	40	25	58,9	58,5	28	62	0.15	30.00	71229	4.19
50 - 1 1/4"	10	40	32	59,8	59	27	62	0.16	90.00	71230A	3.92
50 - 1 1/2"	10	40	37	58,9	57	27	62	0.16	90.00	71231A	5.30
63 - 1"	10	50	24	71,8	70,3	33	77	0.34	50.00	71232A	8.05
63 - 1 1/4"	10	50	30	71,8	70,3	32	77	0.35	45.00	71233A	8.05
63 - 1 1/2"	10	50	35	71,8	70,3	33	77	0.34	40.00	71234A	8.05
63 - 2″	10	50	45	71,8	70,3	33	77	0.36	40.00	71235A	9.41





d	PN	DN	1	z	Z1	Е	E1	G-kg	VE	Prod.No.	Price €
25-20	16	20-15	33,3	13,6	13,4	33,4	29,5	0.04	70.00	70702	2.20
32-20	16	25-15	39,8	17	16,8	41,8	29,7	0.07	100.00	70703	2.76
32-25	16	25-20	39,8	17	16,8	41,8	34,3	0.07	100.00	70704	2.76
40-20	16	32-15	47,7	21	20,7	50,4	31,4	0.11	50.00	70705	4.01
40-25	16	32-20	47,7	21	20,6	50,4	35,5	0.11	50.00	70452	4.01
40-32	16	32-25	47,7	21	20,7	50,4	42,5	0.12	50.00	71049	4.01
50-20	16	40-15	57,6	25,9	25,3	61,8	31,8	0.18	60.00	70706	4.42
50-25	16	40-20	57,6	25,9	25,4	61,8	36,8	0.18	50.00	70707	4.42
50-32	16	40-25	57,6	25,9	26,3	61,8	43,8	0.19	50.00	70708	4.42
50-40	16	40-32	57,6	25,9	25,5	61,6	51,8	0.19	50.00	70709	4.42
63-25	16	50-20	71,2	32,4	32,1	76,7	38,7	0.32	30.00	70710	9.70
63-32	16	50-25	71,2	33,4	32,1	76,7	45,8	0.33	30.00	70711	9.70
63-40	16	50-32	71,2	33,4	32,1	76,7	53,8	0.33	30.00	70712	9.70
63-50	16	50-40	71,2	33,4	32,1	76,7	63,8	0.34	30.00	70023	9.70
75-32	16	65-25	82,5	38,5	38,5	92	42	0.55	30.00	70960	16.32
75-40	16	65-32	82,5	38,5	38,5	92	51	0.57	30.00	71050	16.32
75-50	16	65-40	82,5	38,5	38,5	92	61	0.58	28.00	71051	16.32
90-32	16	80-25	97	46	46	110	42,5	0.92	8.00	71052	28.06
90-50	16	80-40	97	46	46	110	62,5	0.96	8.00	71053	28.06
90-63	16	80-50	97	46	46	110	77	0.98	10.00	70958	28.06
90-75	16	80-65	97	46	46	110	92,5	1.03	14.00	70959	28.06
110-32	16	100-25	117	61	61	132	42,5	1.54	9.00	71054	44.35
110-50	16	100-40	117	61	61	133	62,5	1.56	9.00	70961	44.35
110-90	16	100-80	117	61	61	133	110	1.74	8.00	70962	44.35

#### IBG® Tee 90° solvent socket / reduced, PN16, grey

### IBG® Tee 45° solvent socket, grey

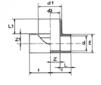




### IBG® Tee 90° solvent socket (for whirlpools), grey

d	G-kg	VE	Prod.No.	Price €
32-50-32	0.07	100.00	73863	3.30
50-50-50	0.20	100.00	73865	4.91







# IBG® cross solvent socket, grey

d	PN	DN	I	Z	E	G-kg	VE	Prod.No.	Price €
10	16	6	14	6,5	16	0.01	150.00	70453	3.66
12	16	8	12	7,5	18	0.01	150.00	70454	3.66
16	16	10	16	9,5	23	0.02	150.00	70455	3.88
20	16	15	16	11	28	0.04	100.00	70723	4.19
25	16	20	20,6	13,5	31,4	0.05	150.00	70724	6.18
32	16	25	23	17	42	0.10	150.00	70725	8.46
40	16	32	33	21	51	0.15	90.00	70726	11.75
50	16	40	32	26	63	0.24	54.00	70727	12.25
63	16	50	38,5	32,5	77	0.42	25.00	70728	16.32
75	10	65	41,4	38,5	92	0.78	16.00	70729	36.21
90	10	80	52,5	46	106	1.31	5.00	70730	64.73
110	10	100	61	56	133	2.30	5.00	70731	99.89

# IBG® socket solvent socket, grey

d	PN	DN	1	z	E	G-kg	VE	Prod.No.	Price €
10	16	6	27	3	16	0.01	300.00	70732	1.01
12	16	8	27	3	18	0.01	250.00	70733	1.01
16	16	10	32	3	22,5	0.01	200.00	70734	1.13
20	16	15	35,8	3	27,3	0.01	200.00	70735	1.22
25	16	20	41,5	3	31	0.02	200.00	70736	1.35
32	16	25	47,4	3	39	0.03	100.00	70737	1.58
40	16	32	55	3	48,1	0.04	150.00	70738	2.32
50	16	40	65,8	3	60	0.07	60.00	70739	1.67
63	16	50	80	3	75,1	0.14	50.00	70740	2.65
75	16	65	93	4	90	0.23	50.00	70741	5.84
90	16	80	106	5	105,5	0.38	30.00	70742	8.32
110	16	100	145	7	145	0.64	20.00	70743	12.28
125	16	110	145	7	145	0.95	12.00	71056	37.25
140	16	125	160	8	163	1.44	8.00	70744	46.91
160	16	150	181,5	8	189	2.07	6.00	70745	67.28
200	10	175	222	12	232	3.30	1.00	70746	104.45
225	10	200	249	11	262	4.00	1.00	70747	117.70
250	10	250	270	8	286	5.81	1.00	71057	186.97
280	10	250	304	10	320	8.70	1.00	71058	222.15
315	10	300	342	12	355	10.78	1.00	71060	247.63







# IBG® socket solvent socket, black (for solar systems), PN16

d	PN	DN	I.	z	E	G-kg	VE	Prod.No.	Price €
50	16	40	65,8	3	60	0.08	60.00	70887	2.61



Product	PN	DNxDN1	1	Z	Тур	G-kg	VE	Prod.No.	Price €
	16	10-8	14	2	А	0.01	300.00	70748	0.57
20-16	16	15-10	16	2	А	0.01	300.00	70749	0.74
25-12	16	20-8	19	2	В	0.01	10.00	71564	1.08
25-16	16	20-10	19	4,5	А	0.01	200.00	70750	1.08
25-20	16	20-15	19	2,5	А	0.01	200.00	70751	1.08
32-16	16	25-10	22	8	В	0.02	250.00	70752	1.48
32-20	16	25-15	22	6	В	0.01	200.00	70753	1.48
32-25	16	25-20	22	3,5	А	0.01	200.00	70754	1.48
40-16	16	32-10	26	12	В	0.02	150.00	70755	1.52
40-20	16	32-15	26	10	В	0.02	150.00	70756	1.52
40-25	16	40-20	26	7	А	0.02	150.00	70757	1.52
40-32	16	32-25	26	4	А	0.02	150.00	70758	1.52
50-20	16	40-15	31	15	В	0.04	170.00	70499	1.82
50-25	16	40-20	31	12,5	В	0.04	170.00	70498	1.82
50-32	16	40-25	31	9	В	0.04	170.00	70497	1.82
50-40	16	40-32	31	5	А	0.03	170.00	70496	1.82
63-25	16	50-20	38	19	В	0.05	140.00	70503	2.89
63-32	16	50-25	38	15,5	В	0.06	140.00	70502	2.89
63-40	16	50-32	38	11,5	В	0.06	140.00	70501	2.89
63-50	16	50-40	38	6,5	А	0.06	140.00	70500	2.89
75-32	16	65-25	44	21,5	В	0.09	80.00	70759	4.52
75-40	16	65-32	44	19	В	0.08	80.00	70760	4.52
75-50	16	65-40	44	12,5	В	0.09	80.00	70761	4.52
75-63	16	75-50	44	8	А	0.18	80.00	70762	4.53
90-40	16	80-32	51	25	В	0.16	40.00	70763	9.21
90-50	16	80-40	51	20	В	0.18	40.00	70764	9.21
90-63	16	80-50	51	13,5	В	0.16	40.00	70765	9.21
90-75	16	80-65	51	7,5	А	0.14	40.00	70766	9.21
110-50	16	100-40	61	30	В	0.27	30.00	70767	16.32
110-63	16	100-50	61	23,5	В	0.29	30.00	70768	16.32
110-75	16	100-65	61	17,5	В	0.30	30.00	70769	16.32
110-90	16	100-80	61	10	А	0.26	30.00	70770	16.32
125-75	16	110-61	69	25	В	0.41	24.00	72063	32.96
125-90	16	110-80	69	18	В	0.42	24.00	71079	32.96
125-110	16	110-100	69	8	А	0.29	24.00	71080	32.96
140-75	16	125-65	76	32	В	0.58	15.00	70771	30.72
140-90	16	125-80	76	25	В	0.63	15.00	70590	28.06
140-110	16	125-100	76	15	А	0.62	15.00	70772	26.99
140-125	16	125-110	76	15	А	0.34	15.00	70451	28.06
160-90	16	150-80	86	35	В	0.88	10.00	70592	43.31
160-110	16	150-100	86	25	В	0.84	10.00	70591	43.31
160-125	10	150-110	86	17	В	0.99	2.00	71957	47.41
160-140	10	150-125	86	10	А	0.56	10.00	70773	43.31
200-110	10	175-100	106	46	В	2.11	10.00	70774	80.90
200-125	10	175-110	106	36	В	2.14	10.00	70775	80.90
200-140	10	175-125	106	29	В	2.04	10.00	70776	80.90
200-160	10	175-150	106	31	В	1.76	10.00	70777	80.90
225-110	10	200-100	106	59	В	2.70	3.00	70778	114.90
225-125	10	200-110	119	50	В	2.78	3.00	72064	114.90
225-140	10	200-125	108	40,5	В	2.81	3.00	70779	114.90
225-160	10	200-150	118	32,5	В	2.75	3.00	70780	114.90
225-200	10	200-175	118	12	А	1.57	3.00	70636	114.90
250-125	10	250-110	131	62	В	3.46	3.00	72065	166.78
250-140	10	250-125	131	55	В	3.39	3.00	72066	166.78
250-160	10	250-150	131	46	В	3.58	3.00	71081	166.78
250-200	10	250-175	131	26	А	3.42	3.00	71082	166.78
	10	250-200	131	12		1.89	3.00	71083	166.78
250-225	10	200 200	101	12	A	1.00	0.00	/1003	100.70

# IBG® reductions, short, solvent spigot / solvent socket, grey

Product	PN	DNxDN1	1	z	Тур	G-kg	VE	Prod.No.	Price €
280-225	10	250-200	146	27	В	4.66	1.00	71085	198.60
280-250	10	250-250	146	15	А	2.77	1.00	71086	198.60
315-160	6	300-150	163	86	В	5.52	1.00	72067	215.86
315-200	6	300-175	163	57	В	5.77	1.00	71087	215.86
315-225	6	300-200	163	44	В	5.95	1.00	71088	215.86
315-250	6	300-250	163	32	В	6.79	1.00	71089	215.86
315-280	6	300-250	163	17	А	3.98	1.00	71090	215.86
355-315	6	315-300	184	20	В	5.77	1.00	72086	274.94
400-250	6	350-250	206	75	В	11.54	1.00	72069	284.44
400-315	6	370-300	206	42	В	13.67	1.00	71091	284.44
400-355	6	370-300	206	21	А	7.98	1.00	71092	284.44

# IBG® reductions, short, solvent d50/d63 female thread

Product	G-kg	VE	Prod.No.	Price €
Reduction short PVC grey solvent D/female thread d50 - 1/2"	0.06	25.00	170032	8.58
Reduction short PVC grey solvent D/female thread - d50-3/4"	0.06	100.00	170033	8.58
Reduction short PVC grey solvent D/female thread d63 - 1/2"	0.09	30.00	170030	9.71
Reduction short PVC grey solvent D/female thread - d63-3/4"	0.10	30.00	170031	9.71



# Drain valve

Product	G-kg	VE	Prod.No.	Price €
Drain Valve for cone check valve, male thread 3/4"	0.03	100.00	73598	11.86
Drain Valve for cone check valve, hose connection/ male thread 3/4"	0.06	1.00	70207	11.86





# **Teflon strip**

Product	G-kg	VE	Prod.No.	Price €
Teflon tape 12 x 0,075 x 12 mm	0.01	1.00	71940	2.14





Product	PN	DN	1	11	Туре	Sw	G-kg	VE	Prod.No.	Price €
16 - 1/4"	10	10	22	14	В	19	0.00	250.00	71247	2.69
20 - 1/4"	10	15	24	16	В	22	0.01	250.00	71256	2.77
20 - 3/8″	10	15	24	16	В	22	0.01	250.00	71257	2.77
25 - 3/8″	10	20	27	19	В	27	0.01	250.00	71258	3.57
25 - 1/2"	10	20	27	19	В	27	0.01	250.00	70970	3.57
32 - 1/2"	10	25	30	22	В	36	0.03	250.00	71259	4.39
32 - 3/4"	10	25	30	22	В	36	0.02	250.00	71260	4.39
40 - 1/2"	10	32	37	26	В	46	0.04	200.00	71261	4.99
40 - 3/4"	10	32	37	26	В	46	0.04	100.00	71262	4.99
40 - 1"	10	32	37	26	В	46	0.03	100.00	71263	4.99
50 - 1/2"	10	40	43	31	В	55	0.07	100.00	71264	6.18
50 - 3/4"	10	40	43	31	В	55	0.07	100.00	71265	6.18
50 - 1"	10	40	43	31	В	55	0.07	100.00	71266	6.18
50 - 11/4"	10	40	43	31	В	55	0.05	100.00	71267	6.18
50/40 - 11/2"	10	40	81	26	А	×	0.13	100.00	71268	6.67
63 - 11/4"	10	51	51	38	В	65	0.11	100.00	71269	10.08
63 - 11/2″	10	50	51	38	В	65	0.10	100.00	71270	10.08
63 /50 - 2″	10	50	98	32	С	80	0.32	50.00	71271	11.25
75 - 11/4″	10	63	57	44	В	80	0.17	50.00	71272	13.98
75 - 11/2"	10	65	57	44	В	80	0.16	50.00	71273	13.98
75 - 2"	10	65	57	44	В	80	0.15	50.00	71274	13.98
75 /63 - 21/2"	10	65	83	38	А	×	0.38	25.00	71275	15.84
90/75 - 2"	10	80	71	51	В	95	0.28	25.00	71276	17.87
90/75 - 3"	10	80	97	51	А	×	0.31	25.00	71277	28.48
110/90 - 2"	10	100	93	61	В	115	0.52	25.00	71278	40.19
110/90 - 21/2"	10	100	93	61	В	115	0.48	25.00	71279	40.19
110 - 3″	10	100	83	61	В	115	0.45	25.00	71280	42.96
125 - 3"	10	110	94	69	В	138	0.65	5.00	71281	55.27
125 - 4"	10	110	94	69	В	138	0.45	5.00	71282	55.27

# IBG<sup>®</sup> reductions, short, solvent spigot / female thread, PN10

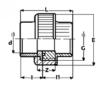




d	PN	DN	1	Z	Е	G-kg	VE	Prod.No.	Price €
10-8-6	16	6-5-5	26	14	10	0.00	250.00	70781	1.66
12-10-8	16	8-5-6	26	14	12	0.00	250.00	70782	1.66
16-12-8	16	10-8-5	32	18	11	0.00	250.00	70783	1.73
16-12-10	16	10-8-6	32	18	14	0.00	250.00	70784	1.73
20-16-10	16	15-10-6	32	18	14	0.01	100.00	70785	1.79
20-16-12	16	15-10-8	33	21	19	0.01	100.00	70786	1.79
25-20-16	16	20-15-10	39	25	23	0.01	100.00	70787	1.66
25-20-20	16	20-15-15	42	25	25	0.01	100.00	70789	1.66
32-25-16	16	25-20-10	44	30	23	0.02	100.00	70459	1.72
32-25-20	16	25-20-15	45	30	28	0.02	100.00	70790	1.72
32-25-25	16	25-20-20	49	30	32	0.02	100.00	70791	1.72
40-32-16	16	32-25-10	50	36	28	0.02	110.00	70792	1.77
40-32-20	16	32-25-15	52	36	28	0.03	110.00	70793	1.77
40-32-25	16	32-25-20	55	36	33	0.03	110.00	70794	1.77
40-32-32	16	32-25-25	58	36	40	0.04	110.00	70795	1.77
50-40-20	16	40-32-15	60	44	28	0.05	50.00	70796	2.32
50-40-25	16	40-32-20	63	44	33	0.05	50.00	70458	2.32
50-40-32	16	40-32-25	66	44	42	0.07	50.00	70797	2.32
50-40-40	16	40-32-32	70	44	50	0.07	50.00	70798	2.32
63-50-25	16	50-40-20	74	54	33	0.09	50.00	70799	3.38
63-50-32	16	50-40-25	73	54	42	0.10	50.00	70800	3.38
63-50-40	16	50-40-32	81	54	51,5	0.11	40.00	70801	3.38
63-50-50	16	50-40-40	81	54	65,1	0.14	50.00	70802	3.38
75-63-32	16	65-50-25	84	62	42	0.13	50.00	70803	5.64
75-63-40	16	65-50-32	92	62	52,4	0.14	50.00	70804	5.64
75-63-50	16	65-50-50	93	62	63,5	0.16	50.00	70805	5.64
75-63-63	16	65-50-50	100	62	75	0.19	50.00	70806	5.64
90-75-40	16	80-65-32	100	74	51,5	0.22	20.00	70807	6.67
90-75-50	16	80-65-40	105	74	63,5	0.24	20.00	70808	6.67
90-75-63	16	80-65-50	112	74	76,5	0.27	20.00	70809	6.67
90-75-75	16	80-65-65	118	74	90	0.32	10.00	70810	6.67
110-90-50	16	100-80-40	112	81	60	0.44	30.00	70811	20.69
110-90-63	16	100-80-50	112	74	75	0.44	30.00	70639	20.69
110-90-75	16	100-80-65	112	68	92	0.46	12.00	70812	20.69
125-110-63	16	110-100-50	131	93	77	0.46	5.00	70813	24.01
125-110-75	16	110-100-65	131	87	92	0.51	5.00	70814	24.01
125-110-90	16	110-100-80	131	80	106	0.53	5.00	70815	24.01
140-125-75	16	125-110-65	146	102	92	0.63	5.00	70640	31.81
140-125-90	16	125-110-80	146	95	106	0.65	5.00	70788	31.81
140-125-110	16	125-110-100	146	85	92	0.71	5.00	70641	31.81

# $\mathsf{IBG}^{\circledast}$ reductions, long, solvent socket / solvent spigot / solvent socket, PN16, grey





IBG® adapter union solvent socket , grey	

12       16       8       29       %*       38       15       22       13       0.02       200.00       71116       4.         16       16       10       34       ¾*       41       17       24       13       0.03       100.00       70682       4.         20       16       15       42       1*       45       19       26       13       0.04       100.00       70513       4.         20       16       20       53       1¼*       51       22       29       13       0.06       100.00       70513       4.         25       16       20       53       1¼*       51       22       29       13       0.06       100.00       70513       4.         25       16       20       53       1¼*       51       22       29       13       0.06       100.00       70513       5.         32       16       25       58       1½*       58       25       33       13       0.09       100.00       70514       7.         40       16       32       73       2*       67       29       38       15       0.15	d	PN	DN	Е	G	L	1	11	z	G-kg	VE	Prod.No.	Price €
16         16         10         34         ¾"         41         17         24         13         0.03         100.00         70682         4.           20         16         15         42         1"         45         19         26         13         0.04         100.00         70682         4.           20         16         15         42         1"         45         19         26         13         0.04         100.00         70583         4.           25         16         20         53         1¼"         51         22         29         13         0.06         100.00         70583         5.           32         16         25         58         1½"         58         25         33         13         0.09         100.00         70513         7.           40         16         32         73         2"         67         29         38         15         0.15         60.00         70515         7.           50         16         40         83         2¼"         80         34         45         17         0.19         32.00         70684         8.           63 <td>10</td> <td>16</td> <td>6</td> <td>31</td> <td>5⁄8"</td> <td>37</td> <td>15</td> <td>22</td> <td>13</td> <td>0.03</td> <td>200.00</td> <td>72114</td> <td>4.79</td>	10	16	6	31	5⁄8"	37	15	22	13	0.03	200.00	72114	4.79
20         16         15         42         1"         45         19         26         13         0.04         100.00         70513         4.           25         16         20         53         1¼"         51         22         29         13         0.06         100.00         70513         4.           25         16         25         58         1¼"         51         22         29         13         0.06         100.00         70513         5.           32         16         25         58         1¼"         58         25         33         13         0.09         100.00         70513         7.           40         16         32         73         2"         67         29         38         15         0.15         60.00         70515         7.           50         16         40         83         2¼"         80         34         45         17         0.19         32.00         70684         8.           63         16         50         103         2¼"         99         42         56         21         0.36         20.00         70685         13           75 </td <td>12</td> <td>16</td> <td>8</td> <td>29</td> <td>5⁄8"</td> <td>38</td> <td>15</td> <td>22</td> <td>13</td> <td>0.02</td> <td>200.00</td> <td>71116</td> <td>4.79</td>	12	16	8	29	5⁄8"	38	15	22	13	0.02	200.00	71116	4.79
25         16         20         53         1¼"         51         22         29         13         0.06         100.00         70683         5.           32         16         25         58         1½"         58         25         33         13         0.09         100.00         70683         5.           32         16         25         58         1½"         58         25         33         13         0.09         100.00         70514         7.           40         16         32         73         2"         67         29         38         15         0.15         60.00         70515         7.           50         16         40         83         2¼"         80         34         45         17         0.19         32.00         70684         8.           63         16         50         103         2¾"         99         42         56         21         0.36         20.00         70685         13           75         10         65         118         3½"         108         47         62         20         0.60         20.00         70686         56           90	16	16	10	34	3⁄4"	41	17	24	13	0.03	100.00	70682	4.92
32         16         25         58         1½"         58         25         33         13         0.09         100.00         70514         7.           40         16         32         73         2"         67         29         38         15         0.15         60.00         70514         7.           50         16         40         83         2¼"         80         34         45         17         0.19         32.00         70684         8.           63         16         50         103         2¼"         99         42         56         21         0.36         20.00         70684         8.           63         16         50         103         2¼"         99         42         56         21         0.36         20.00         70685         13           75         10         65         118         3½"         108         47         62         20         0.60         20.00         70686         56           90         10         80         135         4"         124         56         68         22         0.75         20.00         70687         77	20	16	15	42	1"	45	19	26	13	0.04	100.00	70513	4.62
40         16         32         73         2"         67         29         38         15         0.15         60.00         70515         7.           50         16         40         83         2¼"         80         34         45         17         0.19         32.00         70684         8.           63         16         50         103         2¼"         99         42         56         21         0.36         20.00         70685         13           75         10         65         118         3½"         108         47         62         20         0.60         20.00         70686         56           90         10         80         135         4"         124         56         68         22         0.75         20.00         70686         56	25	16	20	53	1¼"	51	22	29	13	0.06	100.00	70683	5.52
50         16         40         83         2¼"         80         34         45         17         0.19         32.00         70684         8.           63         16         50         103         2¼"         99         42         56         21         0.36         20.00         70685         13           75         10         65         118         3¼"         108         47         62         20         0.60         20.00         70686         56           90         10         80         135         4"         124         56         68         22         0.75         20.00         70687         77	32	16	25	58	1½"	58	25	33	13	0.09	100.00	70514	7.68
63       16       50       103       2¾"       99       42       56       21       0.36       20.00       70685       13         75       10       65       118       3½"       108       47       62       20       0.60       20.00       70685       56         90       10       80       135       4"       124       56       68       22       0.75       20.00       70687       77	40	16	32	73	2"	67	29	38	15	0.15	60.00	70515	7.46
75         10         65         118         3½"         108         47         62         20         0.60         20.00         70686         56           90         10         80         135         4"         124         56         68         22         0.75         20.00         70687         77	50	16	40	83	21⁄4"	80	34	45	17	0.19	32.00	70684	8.01
90 10 80 135 4" 124 56 68 22 0.75 20.00 70687 77	63	16	50	103	2¾"	99	42	56	21	0.36	20.00	70685	13.34
	75	10	65	118	3½"	108	47	62	20	0.60	20.00	70686	56.72
110 10 100 163 5" 138 66 72 16 1.16 6.00 70688 93	90	10	80	135	4"	124	56	68	22	0.75	20.00	70687	77.16
	110	10	100	163	5"	138	66	72	16	1.16	6.00	70688	93.22

# Ocean adapter union, PNO6, grey

Product	G-kg	VE	Prod.No.	Price €
Ocean adapter union solfent socket/solvent socket				
Adapter union Ocean PVC grey PVCu solvent socket d50 metric EPDM	0.10	10.00	170397	6.40
Adapter union Ocean PVC grey PVCu solvent socket d63 metric EPDM	0.18	10.00	170403	8.03
Adapter union Ocean PVC grey PVCu solvent socket d90 metric EPDM	1.11	10.00	170082	37.18

# $\ensuremath{\mathsf{IBG}}\xspace^{\ensuremath{\mathsf{\$G}}\xspace}$ adapter union solvent socket for transition ISO/ASTM pipe to metric pipe, grey

d	PN	DN	Е	G	L	1	11	z	G-kg	VE	Prod.No.	Price €
1/2" ISO/ASTM- 20 mm	16	15	42	1"	45	19	26	13	0.09	10.00	72115	7.15
3/4" ISO-25 mm	16	20	53	1¼"	51	22	29	13	0.08	10.00	72116	7.92
1" ISO-32 mm	16	25	58	1½"	58	25	33	13	0.10	18.00	72118	9.21
11/4" ISO-40 mm	16	32	73	2"	67	29	38	14	0.17	10.00	72120	10.76
11/2" ASTM/ ISO- 50 mm	16	40	83	2¼"	80	34	45	17	0.20	32.00	72122	12.25
2" ASTM/ISO-63 mm	16	50	103	2¾"	99	42	56	21	0.37	20.00	72123	20.91

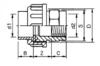


# $\mathsf{IBG}^{\circledast}$ adapter union reducing pipe solvent socket / solvent socket/solvent spigot, PN16, grey

d	PN	DN	G	L	1	L1	L2	G-kg	VE	Prod.No.	Price €
50 - 40/50	16	40	2 1⁄4"	86	34	х	х	0.21	90.00	71313	8.69
63 - 50/63	16	50	2 ¾"	112	42	37	85	0.38	90.00	71314	13.30







# IBG® adapter union solvent socket / female thread, type 1

d	PN	DN	L	G1	1	11	z	Е	G-kg	VE	Prod.No.	Price €
12 - 1/4"	10	6	46	5⁄8"	12	24	13	35	0.02	10.00	72601	5.90
16 - 3/8"	10	10	42	3⁄4"	18	24	13	37	0.03	20.00	71214	6.18
20 - 1/2"	10	15	46	1"	19	26	13	43	0.04	60.00	71215	5.90
25 - 3/4"	10	20	51	1¼"	22	29	13	53	0.06	90.00	71216	6.18
32 - 1"	10	25	58	1½"	25	33	13	60	0.09	100.00	71217	6.94
40 - 11/4"	10	32	67	2"	29	38	15	74	0.15	60.00	71218	7.68
50 - 11/2"	10	40	80	2¼"	34	45	17	83	0.21	32.00	71219	9.70
63 - 2"	10	50	98	2¾"	41	56	21	103	0.39	20.00	71220	15.30

IBG® adapter union solvent socket / male thread, type B, grey

d	PN	DN	L	G1	1	11	z	Е	G-kg	VE	Prod.No.	Price €
12 - 1/4"	10	6	5⁄8"	12	9	5	33		0.03	50.00	72169	5.90
16 - 3/8″	10	10	3⁄4"	17	9	5	35		0.04	50.00	71240	6.18
20 - 1/2"	10	15	1"	19	10	5	43		0.04	100.00	71241	6.40
25 - 3/4″	10	20	1¼"	22	11	6	53		0.08	50.00	71242	9.21
32 - 1"	10	25	1½"	25	12	6	60		0.10	80.00	71243	10.20
40 - 1 1/4"	10	32	2"	29	14	7	74		0.18	50.00	71244	11.25
50 - 1 1/2"	10	40	2¼"	34	16	7	83		0.19	40.00	71245	13.80
63 - 2"	10	50	2¾"	41	18	8	103		0.38	20.00	71246	16.32



# $\text{IBG}^{\circledast}$ adapter union solvent socket / male thread with O-ring sealing on thread, grey, PN10

d	PN	DN	G1	L	Z1	Z2	G-kg	VE	Prod.No.	Price €
50 - 11/2"	10	40	21/4"	48	58	83	0.22	60.00	71973	10.94
50 - 2"	10	40	21/4"	60	70	83	0.20	40.00	71975	12.54
63 - 2"	10	50	23/4″	60	70	103	0.40	35.00	71977	14.59



# $\text{IBG}^{\circledast}$ adapter union solvent socket / male thread with O-ring sealing on thread, white, PN10

d	PN	DN	G1	L	Z1	Z2	G-kg	VE	Prod.No.	Price €
50 - 1 1/2"	10	40	21/4"	48	58	83	0.22	60.00	71974	15.17
50 - 2"	10	40	21/4"	60	70	83	0.22	40.00	71976	15.86



# Adapter union Ocean PVC grey, white or black solvent socket, PN6

Product	G-kg	VE	Prod.No.	Price €
Adapter union Ocean PVC grey solvent socket d/male thread d50-1 $1/2^{\prime\prime}$ BSP EPDM	0.13	1.00	170396	7.83
Adapter union extra long PVC white solvent socket d/male thread 90 - 3" EPDM	1.76	1.00	170185	105.19
Adapter union Ocean PVC grey solven tsocket d/male thread d90-3" BSP EPDM with add. O-ring	1.11	1.00	170085	46.75
Adapter union Ocean PVC white solvent socket d/male thread d50-1 $1/2^{\prime\prime}$ BSP EPDM	0.13	1.00	170380	9.81
Adapter union Ocean PVC black solvent socket d/male thread d50-1 $1/2^{\prime\prime}$ BSP EPDM	0.19	10.00	170355	7.83
Adapter union Ocean PVC grey solvent socket d/male thread d63-2" BSP EPDM	0.23	40.00	170402	9.97
Adapter union Ocean PVC white solvent socket d/male thread d63-2" BSP EPDM	0.23	40.00	170386	11.79

# IBG<sup>®</sup> union end for unions, spare part union





d	PN	DN	L	Z	D	E	G-kg	VE	Prod.No.	Price €
16	16	10	17	5	22	24	0.01	50.00	71142	1.44
20	16	15	19	5	27,5	30,1	0.01	280.00	70560	0.99
25	16	20	22	6	36	38,8	0.01	200.00	70561	1.03
32	16	25	25	6	41,5	44,7	0.02	300.00	70562	1.33
40	16	32	29	7	53	56,5	0.04	250.00	70563	2.04
50	16	40	34	7	59	62,6	0.04	250.00	70564	2.77
63	16	50	41	8	74	78,4	0.07	100.00	70565	4.39
75	16	65	44	9	92,5	97,2	0.17	25.00	71117	9.52
90	16	80	51	10	105	110	0.23	5.00	71118	13.98
110	10	100	61	12	129	134,4	0.32	5.00	71119	22.89

### **IBG®** union bush for unions

d	PN	DN	G	L	z	E	G-kg	VE	Prod.No.	Price €
16	16	10	3/4	14	10	22	0.02	50.00	71120	2.20
20	16	15	1	16	15	26	0.01	100.00	71121	1.37
25	16	20	11/4	19	20	33,3	0.02	50.00	71122	1.62
32	16	25	11/2	22	25	41,5	0.03	80.00	70991	1.82
40	16	32	2	28	32	51	0.05	20.00	71123	2.04
50	16	40	21/4	33	40	61	0.06	45.00	71124	2.41
63	16	50	23/4	42	50	76,5	0.13	35.00	71125	4.56
75	10	65	31/2	44	31	96	0.22	10.00	71126	22.44
90	10	80	4	51	35	109	0.39	10.00	71127	28.54
110	10	100	5	61	41	133	0.61	10.00	71128	29.59





# IBG® union nut for unions

3/4"-16 1	16			E	G-kg	VE	Prod.No.	Price €
	10	10	21	35	0.02	200.00	70462	1.79
1"-20 1	16	15	23	43	0.02	150.00	70566	1.72
1 1/4"-25 1	16	20	25	53	0.03	100.00	70567	2.03
1 1/2"-32 1	16	25	27	60	0.04	120.00	70568	2.53
2"-40 1	16	32	30	74	0.06	75.00	70569	3.30
2 1/4"-50 1	16	40	32	83	0.08	60.00	70570	3.84
2 3/4"-63 1	16	50	37,5	103	0.15	50.00	70571	5.64
3 1/2"-75 1	16	65	43	120	0.20	25.00	71129	20.91
4"-90 1	16	80	45	135	0.36	6.00	71130	32.96
5"-110 1	10	100	51	160	0.39	2.00	71131	38.53



### IBG® O-ring for union bushes, EPDM

d	DN	D	d1	S	G-kg	VE	Prod.No.	Price €
16	10	20,84	15,6	2,62	0.00	100.00	71428	0.90
20	15	27,36	20,3	3,53	0.00	100.00	50484	0.90
25	20	35,26	28,2	3,53	0.00	1.00	50008	3.03
32	25	40,06	33	3,53	0.00	1.00	50009	3.12
40	32	51,36	40,7	5,34	0.01	1.00	50487	2.80
50	40	57,76	47,1	5,34	0.01	1.00	50216	3.35
63	50	70,46	59,8	5,34	0.01	100.00	50272	1.74
75	65	86,23	75,57	5,33	0.01	1.00	50298a	6.79
90	80	98,93	88,27	5,33	0.09	50.00	71432	3.84
110	100	124,33	113,67	5,33	0.01	50.00	71433	4.62



# IBG® flange adapter grooved

d	PN	DN	I.	z	d1	h	E	D	G-kg	VE	Prod.No.	Price €
16									0.01	100.00	70150A	2.19
63	16	50	41	3	57	9	76	90	0.10	60.00	71098	7.68
75	16	65	47	3	69	10	90	106	0.16	60.00	70148	9.21
90	10	80	56	5	82	11	108	125	0.27	50.00	71099	18.37
110	10	100	66	5	102	12	131	150	0.43	30.00	71100	23.47
125	10	110	72	5	120	18	147	170	0.64	10.00	70633	34.67
140	10	125	80	5	132	14	165	188	0.77	15.00	71101	35.20
160	10	150	91	5	152	16	188	213	1.11	12.00	71102	42.86
200	10	175	112	6	193	18	228	248	1.15	3.00	70637	87.13
225	10	200	119	6	217	25	248	274	1.97	4.00	71103	94.82

### IBG® flange adapter flat









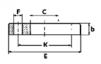


d	PN	DN	b	С	E	к	F	AL	G-kg	VE	Prod.No.	Price €
16	10	10	10	23	90	60	14	4	0.06	50.00	70139	6.22
20	10	15	11	28	95	65	14	4	0.08	50.00	70140	6.18
25	10	20	12	34	105	75	14	4	0.09	40.00	70141	7.15
32	10	25	14	42	115	85	14	4	0.12	45.00	70142	7.68
40	10	32	15	51	140	100	18	4	0.20	30.00	70143	8.69
50	10	40	16	62	150	110	18	4	0.24	30.00	70144	10.20
63	10	50	18	78	165	125	18	4	0.36	30.00	70136	11.75
75	10	65	19	92	185	145	18	4	0.42	25.00	70145	15.30
90	10	80	20	110	200	160	18	8	0.47	20.00	70146	17.31
110	10	100	22	132	219	180	18	8	0.56	20.00	70166	22.94
125	10	110	26	149	235	190	18	8	0.71	15.00	70634	27.04
140	10	125	27	165	247	210	18	8	0.77	25.00	70167	30.11
160	10	150	28	190	280	240	21	8	1.07	14.00	70168	33.14
200	10	200	31	234	335	295	21	8	1.40	12.00	70638	55.59
225	10	200	31	250	341	295	22	8	1.31	8.00	70169	59.12
250	6	250	33	285	395	350	22	12	1.40	10.00	71108	122.28
280	6	250	32	307	399	350	22	12	1.79	1.00	70170	139.10
315	6	300	34	345	450	400	22	12	2.45	1.00	70171	164.57
355	6	350	34	388	511	460	22	12	3.43	1.00	71109	223.66
400	6	400	34	438	572	515	25	16	4.45	1.00	71110	242.51
450	4	х	32	488	614	565	25	20	5.40	1.00	71111	297.52
500	4	х	29	542	655	600	20	20	5.77	1.00	70611	335.23

# IBG® flange adapter connection dimensions DIN/ISO, PVC-U

### IBG® flange adapter connection dimensions DIN/ISO, GFK, black





d	PN	DN	b	С	Е	к	F	AL	G-kg	VE	Prod.No.	Price €
25	16	20	12	34	105	75	14	4	0.10	5.00	70547	8.21
32	16	25	14	42	115	85	14	4	0.12	5.00	70548	8.69
40	16	32	15	51	140	100	18	4	0.19	5.00	70549	12.25
50	16	40	16	62	150	110	18	4	0.23	5.00	70550	14.79
63	16	50	17	78	165	125	18	4	0.36	5.00	70551	19.42
75	16	65	19	92	185	145	18	4	0.40	5.00	70552	22.94
90	16	80	20	110	200	160	18	8	0.49	5.00	70553	29.06
110	16	100	22	132	219	180	18	8	0.54	5.00	70554	35.20
125	16	110	26	149	235	190	18	8	0.22	1.00	70555	41.32
140	16	125	27	167	247	210	18	8	0.73	15.00	70556	47.44
160	16	150	28	190	280	240	21	8	1.04	14.00	70557	58.13
200	10	175	31	220	331	295	21	8	1.40	12.00	70558	88.15
225	10	200	31	250	341	295	22	8	1.26	5.00	70559	97.36



# PRAHER PLASTICS PVC-u fix flange DIN-ANSI-JIS, PN10

Product	G-kg	VE	Prod.No.	Price €
Fix flange - turned - DN15 PVC grey solvent socket d20 DIN-ANSI-JIS PN16	0.09	1.00	142069	17.84
Fix flange - turned - DN20 PVC grey solvent socket d25 DIN-ANSI-JIS PN16	0.11	1.00	142070	18.27
Fix flange - turned - DN25 PVC grey solvent socket d32 DIN-ANSI-JIS PN16	0.18	1.00	142071	22.15
Fix flange - turned - DN32 PVC grey solvent socket d40 DIN-ANSI-JIS PN16	0.24	1.00	142072	30.26
Fix flange - turned - DN40 PVC grey solvent socket d50 DIN-ANSI-JIS PN16	0.33	1.00	142073	31.74
Fix flange - turned - DN50 PVC grey solvent socket d63 DIN-ANSI-JIS PN16	0.45	1.00	142074	38.69
Fix flange - turned - DN65 PVC grey solvent socket d75 DIN-ANSI-JIS PN16	0.65	1.00	142075	46.47
Fix flange - turned - DN80 PVC grey solvent socket d90 DIN-ANSI-JIS PN16	0.82	1.00	142076	51.86
Fix flange - turned - DN100 PVC grey solvent socket d110 DIN-AN- SI-JIS PN16	1.13	1.00	142077	53.58

Price €

11.25

11.25

12.25

14.32

16.32

17.85

18.37

24.51

26.51

30.61

44.35

45.37

51.50

81.55

113.66

162.04

174.23

191.58

285.32

303.62

Prod.No.





		•								
d	PN	DN	d2	d3	d4	z	в	NxD	G-kg	VE
16	10	10	60	29	90	10	13,5	4x14	0.07	10.00
20	10	15	60,5/63	34	95	11	14,5	4x16	0.08	10.00
25	10	20	70/73	41	105	12	16	4x16	0.10	10.00
32	10	25	79/83	50	115	14	19	4x16	0.12	10.00
40	10	32	91/100	61	140	15	20	4x18	0.23	5.00
50	10	40	101/110	74	150	16	22	4x18	0.30	5.00
63	10	50	120,5/125	91	165	18	24,5	4x18	0.40	5.00
75	10	65	139,5/144	106	185	19	26,5	4x19	0.54	5.00

565 42

34,5

38,5 8x18

8x19

8x19

8x23

8x22

8x22

8x22

12x22

12x22

16x22

16x26 8.94

43,5 8x24

0.71

0.90

1.17

1.35

1.83

2.46

2.89

4.60

3.79

4.87

6.92

5.00

2.00

2.00

2.00

2.00

5.00

1.00

1.00

1.00

1.00

1.00

1.00

### IBG® flange DIN/ISO, PN10

152,5/159

181/190,5 150

### IBG® flat gasket for flange adapter, Dutral (EPDM)

d	DN	D	d1	S	G-kg	VE	Prod.No.	Price €
16	10	27	16	2	0.00	10.00	70158	0.35
315	15	32	20	2	0.23	1.00	70183	15.30
500	20	39	25	2	0.01	1.00	70612	89.18
20	25	48	32	2	0.00	50.00	70159	0.35
25	32	59	40	3	0.00	50.00	70160	0.40
32	40	71	50	3	0.00	50.00	70161	0.47
40	50	88	63	3	0.01	50.00	70162	0.61
50	65	104	75	3	0.01	50.00	70163	0.61
63	80	123	90	3	0.01	50.00	70138	1.31
75	100	148	110	4	0.02	20.00	70164	2.07
90	110	166	125	3	0.01	20.00	70165	2.19
110	125	186	140	4	0.05	20.00	70178	3.88
125	150	211	160	4	0.10	10.00	70635	4.08
140	175	245	200	3	0.05	10.00	70179	4.60
160	200	284	215,5	4	0.07	25.00	70180	6.18
200	250	328	250	3	0.06	10.00	70643	9.21
225	250	327	280	3	0.13	10.00	70181	10.76
250	300	378	315	3	0.19	1.00	71112	12.25
280	310	413	355	3	0.20	1.00	70182	13.30
355	370	483	400	3	0.37	1.00	71113	33.14
400	400	537	450	3	0.30	1.00	71114	25.03
450	×	574	500	3	0.23	1.00	71115	80.52



s	10000		12,426
		d1	
	-	D	





### IBG® flat gasket for flange adapter, with 2 screw holes (EPDM)

a.	DN	D	.14	-10	0	0.1	VE	Due d Ma	Duine 0
d	DN	D	d1	d2	S	G-kg	VE	Prod.No.	Price €
63	50	90	63	92	3	0.03	10.00	72068	3.93
75	65	104	75	105	3	0.02	10.00	70267	4.27
90	80	123	90	115	3	0.02	10.00	70268	4.85
110	100	148	110	130	3	0.03	10.00	70269	6.18
125	110	166	125	135	3	0.05	10.00	70270	6.67
140	125	186	140	150	3	0.05	10.00	70271	8.21
160	150	211	160	170	3	0.01	10.00	70272	11.25
200	175	245	200	210	3	0.01	1.00	70273	14.79
225	200	268	220	210	3	0.07	1.00	70274	15.84
250	250	329	280	350	3	0.12	1.00	72110	27.53
280	250	327	280	х	3	0.00	1.00	72111	30.11
315	300	378	315	400	3	0.20	1.00	72112	33.14
400	370	483	400	515	3	0.19	1.00	72113	41.32

### IBG<sup>®</sup> caps female thread, PN10, grey

1/8″	10				G-kg	VE	Prod.No.	Price €
1/0	10	14	20	17	0.01	100.00	72163	3.13
1/4″	10	16	26	22	0.01	100.00	72164	3.32
3/8″	10	19	31	27	0.01	100.00	71204	3.50
1/2″	10	21	37	32	0.02	100.00	70967	4.42
3/4″	10	24	43	36	0.02	150.00	70463	5.18
1″	10	26	52	46	0.04	90.00	71205	5.58
1 1/4″	10	29	62	55	0.06	80.00	71206	6.76
1 1/2″	10	31	66	60	0.07	50.00	71207	8.99
2″	10	36	82	75	0.12	25.00	71208	10.08

### IBG® caps solvent socket, grey

d	PN	DN	L	1	E	G-kg	VE	Prod.No.	Price €
12	16	8	12	15	16,5	0.00	200.00	70860	1.24
16	16	10	14	20	23,5	0.01	200.00	70861	1.24
20	16	15	16	23	27	0.01	200.00	70862	1.24
25	16	20	19	30	33,3	0.02	200.00	70863	1.73
32	16	25	22	33,5	41	0.02	180.00	70864	1.88
40	16	32	26	40	49,5	0.04	150.00	70865	2.44
50	16	40	31	46,5	60,4	0.06	150.00	70866	3.42
63	16	50	38	56	75,7	0.12	80.00	70867	4.91
75	16	65	44	66	89,6	0.18	50.00	70868	8.40
90	16	80	51	77,2	107,6	0.31	50.00	70869	11.17
110	16	100	61	93	130	0.54	30.00	70870	18.95
125	10	110	69	112	151	0.80	15.00	71400	42.96
140	10	125	76	121	161	1.38	15.00	70871	63.64
160	10	150	86	136	185	1.81	8.00	70872	84.81
200	10	175	55	х	х	1.20	5.00	71392	141.72
225	10	200	60	х	х	3.36	1.00	71393	252.68
250	10	250	60	х	х	2.50	1.00	71394	277.75
280	10	250	60	х	х	2.70	1.00	71395	432.79
315	10	300	65	х	х	3.60	1.00	71396	476.06
400	4	370	70	х	х	5.70	1.00	71397	677.57







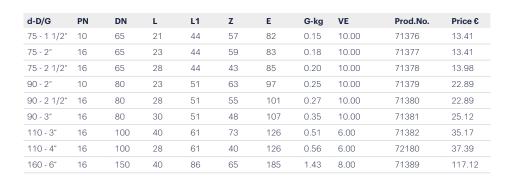




### IBG® adapter bush, solvent socket / male thread, PN16, grey

d-D/G	PN	DN	1	Z	SW	G-kg	VE	Prod.No.	Price €
12/16 - 1/4"	16	8	34,5	11,5	28	0.01	300.00	72187	1.52
12/16 - 3/8"	16	8	34,5	11,5	28	0.01	100.00	71290	1.52
16 - 3/8"	16	10	34,5	11,5	28	0.01	100.00	70853	1.63
16/20 - 3/8"	16	10	40,2	22	32	0.01	200.00	71291	1.72
16/20 - 1/2"	16	10	40,2	22	32	0.02	180.00	71292	1.72
20 - 1/2"	16	15	40,2	27	32	0.02	150.00	70854	1.86
20/25 - 1/2"	16	15	48	29	36	0.02	150.00	70963	2.03
25/32 - 3/4"	16	20	44	28	36	0.02	250.00	70964	2.12
25/32 - 1"	16	20	48	29,5	36	0.02	230.00	70856	2.12
32/40 - 1"	16	25	50,4	33	46	0.04	250.00	70582	2.76
32/40 - 1 1/4"	16	25	53,4	30,3	46	0.04	200.00	71293	2.76
40/50 - 1 1/4"	16	32	57	35	55	0.06	120.00	70857	3.48
40/50 - 1 1/2"	16	32	60	33,6	55	0.06	120.00	71294	3.49
50 - 1 1/4"	16	40	65	34	65	0.09	100.00	71295	3.61
50 - 1 1/2"	16	40	65	34	65	0.09	120.00	70508	3.61
50 - 2"	16	40	65	34	65	0.10	50.00	71296	3.61
50/63 - 1 1/2"	16	40	65	34	65	0.10	120.00	71297	5.03
50/63 - 2"	16	40	78	43	80	0.15	50.00	71298	5.03
63/75 - 1 1/4"	16	50	84	43	x1)	0.13	100.00	71299	9.21
63/75 - 1 1/2"	16	50	84	43	x1)	0.13	90.00	71300	9.21
63/75 - 2"	16	50	84	43	x1)	0.15	90.00	70509	9.21
63/75 - 2 1/2"	16	50	84	41,5	x1)	0.16	80.00	71302	9.21
63/75 - 2"	16	50	75,5	42	80	0.15	100.00	71301	9.21
75/90 - 2"	16	65	96	51,5	95	0.31	48.00	71303	14.56
75/90 - 2 1/2"	16	65	100	56	95	0.34	24.00	71304	14.56
75/90 - 3"	16	65	104	60	95	0.37	45.00	71305	14.56
90/110 - 2 1/2"	16	80	110	59	115	0.57	27.00	71306	32.40
90/110 - 3"	16	80	115	61,5	115	0.59	21.00	71307	32.40
90/110 - 4"	16	80	122	71	115	0.60	5.00	71308	32.40
110 - 3"	16	100	106	45	133	0.81	5.00	71309	35.74
110 - 4"	16	100	125	64	138	0.80	5.00	71310	35.74

### IBG® adapter bush, solvent socket / male thread, grey









### IBG® adapter bush, NPT, PN16, grey

d	PN	DN	1	z	SW	G-kg	VE	Prod.No.	Price €
50 - 1 1/2"	16	40	65	34	65	0.09	170.00	71311	3.61
50 - 2"	16	40	65	34	65	0.09	100.00	71312	3.61
63 - 2"	16	40	65	34	65	0.14	50.00	71289	5.08

### IBG® adapter socket, solvent socket - female thread, reinforced, grey





d-G	PN	DN	I.	Z	SW	E	G-kg	VE	Prod.No.	Price €
16-3/8"	16	10	31	5	27	25	0.02	100.00	70836	4.31
75-2 1/2"	16	15	32	5	30	29	0.33	40.00	70843	36.28
63-2″	16	20	40	5	40	35	0.21	90.00	70842	14.32
20- 1/2"	16	25	46,1	5	46	45	0.02	150.00	70837	4.73
25-3/4″	16	32	52,4	5	54	52	0.04	140.00	70838	5.64
32-1"	16	40	59,4	7	65	64	0.06	150.00	70839	6.67
40-1 1/4"	16	50	71	7	80	76	0.08	120.00	70840	8.21
50-1 1/2"	10	65	80	3	94	90	0.13	110.00	70841	10.76
90-3"	10	80	90	3	114	110	0.53	24.00	70844	42.40
110-4"	10	100	106	5	137	130	0.81	15.00	70845	63.02





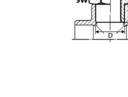
### IBG® adapter socket, solvent socket - female thread, PN10, grey

d-G	PN	DN	L	z	SW	Е	G-kg	VE	Prod.No.	Price €
10 - 1/4"	10	6	11,5	4	22	15	0.04	150.00	72185	3.84
12 - 1/4"	10	8	11,5	4	22	17	0.01	100.00	72186	3.84
32 - 1"	10	25	22	5	46	42	0.05	60.00	71236	4.34
40 - 1 1/4"	10	32	26	5	55	52	0.07	50.00	71237	4.48
50 - 1 1/2"	10	40	31	7	65	62	0.11	100.00	71238	6.67
63 - 2"	10	50	38	7	80	78	0.19	90.00	71239	8.69



### IBG® adapter nipple, solvent spigot - male thread, PN16, grey

d-G	PN	DN	I	SW	G-kg	VE	Prod.No.	Price €
16 - 3/8"	16	10	35	27	0.01	200.00	70846	1.41
20 - 1/2"	16	15	42	32	0.02	180.00	70847	1.41
25 - 3/4"	16	20	47	36	0.03	100.00	70848	2.03
32 - 3/4"	16	25	54	46	0.04	100.00	71283	1.72
32 - 1"	16	25	54	46	0.04	150.00	70849	1.72
40 - 1"	16	32	60	55	0.06	100.00	71284	2.32
40 - 1 1/4"	16	32	60	55	0.06	100.00	70850	2.32
50 - 1 1/4"	16	40	66	65	0.09	80.00	71285	3.35
50 - 1 1/2"	16	40	66	65	0.09	90.00	70851	3.35
63 - 1 1/4"	16	50	78	80	0.14	35.00	71286	4.42
63 - 1 1/2"	16	50	78	80	0.14	50.00	71287	4.42
63 - 2"	16	50	78	80	0.16	45.00	70852	4.42





### IBG® double nipple, male thread, PN10, grey

G	PN	DN	1	SW	G-kg	VE	Prod.No.	Price €
1/4"	10	6	32	19	0.01	100.00	72162	1.72
1"- 3/4"	10	10	34	22	0.03	50.00	71200	2.99
3/8″	10	15	42	24	0.01	100.00	71193	1.82
1/2"	10	20	47	30	0.01	100.00	70966	1.93
3/4"	10	25	53	36	0.02	100.00	70930	2.12
1"	10	32	56	46	0.03	100.00	71194	2.70
1 1/4"	10	40	57	55	0.07	100.00	71195	3.30
1 1/2"	10	50	68	65	0.07	100.00	71196	4.73
2"	10	х	36	24	0.11	100.00	71197	6.18
3/8"- 1/4"	10	х	39	27	0.01	50.00	71198	2.20
1/2"	10	х	46	32	0.01	50.00	71199	2.23
3/4"	10	х	49	36	0.02	50.00	70965	2.61
1 1/4"- 1"	10	Х	53	46	0.05	25.00	71201	3.77
1 1/2"- 1 1/4"	10	х	57	55	0.07	25.00	71202	5.64
2"- 1 1/2"	10	х	62	65	0.10	25.00	71203	7.15

### IBG® hose nozzle, spigot - male thread, PN10, grey

d-d1-G	PN	DN	1	SW	G-kg	VE	Prod.No.	Price €
14-12- 1/4"	10	8	53	15	0.01	100.00	71146	2.03
18-16- 3/8"	10	12	58	19	0.01	100.00	71147	2.08
22-20- 1/2"	10	15	76	24	0.02	100.00	71148	2.53
28-25- 3/4"	10	20	78	30	0.04	100.00	70931	3.13
34-31-1"	10	25	90	35	0.05	100.00	71150	3.88
43-40-1 1/4"	10	32	96	46	0.09	100.00	71151	4.73
53-50-11/2"	10	40	115	55	0.14	100.00	71152	6.67
66-60-2″	10	50	132	70	0.24	50.00	71153	9.21







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### IBG® hose nozzle, spigot - adhesive socket, PN16, grey

D-d	PN	DN	L	I	G-kg	VE	Prod.No.	Price €
10-8	16	6	12	51	0.20	100.00	71062	1.66
12-12	16	8	12	51	0.01	200.00	71063	1.72
16-16	16	10	14	57,2	0.01	200.00	70971	1.77
20-20	16	15	16	73	0.01	180.00	70972	1.97
25-25	16	20	19	79	0.02	140.00	70973	2.53
32-30	16	25	22	89	0.04	120.00	70974	2.99
40-40	16	32	26	91	0.06	120.00	70975	3.88
50-50	16	40	31	105	0.10	70.00	70976	5.10
63-60	16	50	38	116	0.14	50.00	70977	6.67





### IBG® plug, with cone shaped male thread, PN10, grey

G	PN	I.	sw	G-kg	VE	Prod.No.	Price €
1/4″	10	18	17	0.01	100.00	72600	2.00
3/8″	10	21	27	0.01	100.00	71209	2.04
1/2″	10	27	24	0.01	100.00	70465	2.04
3/4″	10	29	30	0.06	100.00	70464	2.41
1″	10	32	36	0.02	100.00	71210	3.16
1 1/4″	10	36	46	0.07	100.00	71211	4.24
1 1/2″	10	37	55	0.05	100.00	71212	5.50
2″	10	42	65	0.11	100.00	71213	6.76
2 1/2″	10	41	94	0.24	10.00	72165	11.78
3 ″	10	43	114	0.36	10.00	72166	17.87
4″	10	46	138	0.59	10.00	72167	31.81

### IBG® reducing bush, solvent socket / female thread, reinforced, PN16, grey

d-G	PN	DN	1	Z	SW	Е	G-kg	VE	Prod.No.	Price €
20-3/8"	16	15	35	24	27	25	0.02	150.00	71143a	4.03
25-1/2"	16	20	43	27	32	20	0.03	130.00	70886	4.59
32-3/4″	16	25	48	32	36	35	0.05	150.00	70885	5.64
40-1"	16	32	56	38	46	45	0.06	100.00	70884	7.68
50-1 1/4"	16	40	66	46	55	55	0.11	50.00	71144	10.20
63-1 1/2"	16	50	77	55	65	65	0.18	40.00	71145	13.80

## IBG® adapter, solvent socket/solvent spigot – female thread, reinforced, PN10, grey

d1-d-G	PN	DN	z	Z1	1	D	G-kg	VE	Prod.No.	Price €
16/12 - 3/8"	10	10 - 8	12	15,5	33	24	0.02	50.00	71250	5.64
20/16 - 1/2"	10	15 - 10	15	20	34	28	0.02	100.00	71251	7.68
25/20 - 3/4"	10	20 - 15	16,3	21,9	38	34,6	0.03	100.00	71252	8.69
32/25 - 1"	10	25 - 20	19,1	26,4	45,5	44	0.10	50.00	71253	10.76
40/32 - 1 1/4"	10	32 - 25	21,4	31,4	54	55	0.08	40.00	71254	14.79
50/40 - 1 1/2"	10	40 - 32	21,4	32,2	59,5	63	0.12	30.00	71255	19.91
63/50 - 2"	10	50 - 40	25,7	39,2	71,5	77,5	0.50	30.00	70035	27.04



### IBG® tank adapter, male-/female thread, ring - CSM, grey

d1	G1	L	G2	L1	D2	G-kg	VE	Prod.No.	Price €
16	3/8″	35	3/4″	13	32	0.03	50.00	71155	30.11
25	1/2″	36	1″	15	41	0.14	50.00	70920	35.20
20	3/4″	36	1″	15	41	0.07	50.00	71156	32.65
20	1″	50	11/4"	18	55	0.10	50.00	71157	32.65
40	11/2″	64	2″	20	80	0.27	25.00	71158	65.74
63-2"	2″	68	23/4″	23	100	0.43	25.00	71159	117.96







d	G1	L	G2	L1	D2	G-kg	VE	Prod.No.	Price €
16	3/8″	35	3/4″	13	32	0.03	5.00	71160	38.24
20	1/2″	36	1″	15	41	0.06	5.00	71161	39.78
20	3/4″	36	1″	15	41	0.10	5.00	71162	39.78
25	1″	50	11/4″	18	55	0.11	5.00	71163	46.38
40 - 1 1/2"	11/2″	64	2″	20	80	0.25	5.00	71164	57.07
63	2″	68	23/4″	23	100	0.43	5.00	71165	155.79

## $\mathsf{IBG}^{\circledast}$ tank adapter solvent socket/solvent spigot - BSP male thread sealing rings EPDM and polyamide, grea

d1	d2	d3	Z1	С	D	G-kg	VE	Prod.No.	Price €
20	25	3/4″	13	19	42	0.04	50.00	73413	15.84
25	32	1″	15	22	45	0.07	50.00	73414	16.83
32	40	11/4″	17	26	47	0.12	50.00	73415	18.90
40	50	13/4″	19	31	48	0.21	50.00	73416	22.44
50	63	2″	21	38	52	0.26	45.00	73417	25.51
50	63	21/4″	21	38	52	0.34	45.00	73418	25.51
63	75	21/2″	23	44	53	0.38	24.00	73419	35.60
75	90	3″	36	51	56	0.58	21.00	73420	62.70
90	110	M113	32	61	62	1.14	10.00	73421	82.57
110	125	M133	36	69	66	1.55	10.00	73422	100.91

## $\mathsf{IBG}^{\circledast}$ tank adapter solvent socket - BSP male/female thread, sealing rings EPDM and polyamide, grey

d1	d2	d3	Z1	с	D	G-kg	VE	Prod.No.	Price €
20	3/4"	3/4"	13	17	42	0.05	10.00	73404	16.32
25	1"	1"	15	21	45	0.07	10.00	73405	17.85
32	11/4"	11/4"	17	23	47	0.13	10.00	73406	19.42
40	11/2"	13/4"	19	23	48	0.20	10.00	73407	23.47
50	2"	21/4"	21	27	52	0.31	10.00	73409	26.51
63	21/2"	21/2"	23	31	53	0.38	10.00	73410	52.49
75	3"	3"	36	34	56	0.56	10.00	73411	64.21
90	4"	M113	32	40	62	1.03	10.00	73412	86.13

## $\text{IBG}^{\circledast}$ adapter union, PVC/GTW galvanized, solvent socket – female thread, PN16

d-G	PN	DN	G1	11	12	Z2	S1	S2	G-kg	VE	Prod.No.	Price €
20 - 1/2"	16	15	1"	19	20	5	37	27	0.09	40.00	71167	10.20
25 - 3/4"	16	20	1 1/4"	22	25	6	46	32	0.23	10.00	71168	11.25
32 - 1"	16	25	1 1/2"	25	28	6	52	38	0.30	10.00	71169	12.77
40 - 1 1/4"	16	32	2"	29	31	7	64	47	0.53	10.00	71170	16.83
50 - 1 1/2"	16	40	2 1/4"	34	34	7	72	53	0.54	10.00	71171	22.94
63 - 2"	16	50	2 3/4"	41	38	8	89	65	0.87	10.00	71172	34.67





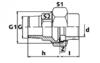












## $\text{IBG}^{\circledast}$ adapter union, PVC/GTW galvanized, solvent socket – male thread, PN16

d-G	PN	DN	G1	h	1	z	S1	S2	G-kg	VE	Prod.No.	Price €
20 - 1/2"	16	15	1 "	40	19	5	37	23	0.15	10.00	71174	11.75
25 - 3/4"	16	20	1 1/4"	40	22	6	46	27	0.29	10.00	71175	13.80
32 - 1"	16	25	11/2"	50	25	6	52	38	0.33	10.00	71176	15.84
40 - 1 1/4"	16	32	2"	50	29	7	64	44	0.66	10.00	71177	27.53
50 - 1 1/2"	16	40	2 1/4"	65	34	7	72	53	0.72	10.00	71178	29.06
63 - 2"	16	50	2 3/4"	61	41	8	89	62	1.19	10.00	71179	41.85

## $IBG^{\scriptscriptstyle \otimes}$ adapter union, PVC/gun metal (rg5), solvent socket – male thread, PN16

d-G	PN	DN	G1	h	1	z	S1	S2	G-kg	VE	Prod.No.	Price €
16 - 3/8″	16	10	3/4"	22	17	5	30	28	0.11	10.00	71187	13.80
20 - 1/2"	16	15	1"	25	19	5	37	38	0.13	40.00	71188	15.84
25 - 3/4"	16	20	11/4"	27	22	6	46	44	0.20	25.00	71189	19.91
32 - 1"	16	25	11/2"	54	25	6	52	53	0.31	10.00	71190	31.08
40 - 11/4"	16	32	2"	54	29	7	64	62	0.50	10.00	71191	45.87
50 - 1 1/2"	16	40	21/4"	62	34	7	72	80	0.64	10.00	70990	51.98
63 - 2″	16	50	23/4"	69	41	8	89	61	1.07	10.00	71192	76.97





### IBG® adapter union, PVC/gun metal (rg5), solvent socket - female thread

d-G	PN	DN	G1	11	12	Z1	Z2	S1	S2	G-kg	VE	Prod.No.	Price €
16 - 3/8"	16	10	3/4"	17	22	5	7	30	22	0.01	40.00	71180	10.76
20 - 1/2"	16	15	1"	19	22	5	7	37	26	0.15	40.00	71181	15.84
25 - 3/4"	16	20	11/4"	22	27	6	8	46	30	0.18	25.00	71182	19.91
32 - 1"	16	25	11/2"	25	29,5	6	9	52	40	0.25	18.00	71183	32.65
40 - 1 1/4"	16	32	2"	29	33	7	9	64	50	0.41	10.00	71184	46.91
50 - 1 1/2"	16	40	21/4"	34	36	7	10	72	53	0.53	18.00	71185	55.04
63 - 2"	16	52	23/4"	41	42	8	10	89	65	0.83	12.00	71186	81.55



### Adapter union PVC/stainless steel, solvent socket - female thread, PN16

d-G	PN	DN	G1	11	12	Z1	Z2	S1	S2	G-kg	VE	Prod.No.	Price €
20-1/2″	16	10	3/4"	17	22	5	7	30	22	0.00	10.00	73529	34.41
25-3/4"	16	15	1"	19	22	5	7	37	26	0.23	10.00	73530	53.38
32-1"	16	20	11/4"	22	27	6	8	46	30	0.29	10.00	73531	61.41
40-1 1/4"	16	25	11/2"	25	29,5	6	9	52	40	0.47	10.00	73532	85.41
50-1 1/2"	16	32	2"	29	33	7	9	64	50	0.52	10.00	73533	108.17
63-2"	16	40	21/4"	34	36	7	10	72	53	0.94	10.00	73534	135.86
75-2 1/2"	16	52	23/4"	41	42	8	10	89	65	1.60	10.00	73535	307.73
90-3″	16	15	1"	19	22	5	7	37	26	2.10	10.00	73536	439.04
110-4″	16	20	11/4"	22	27	6	8	46	30	3.39	10.00	73537	562.12



### Adapter union PVC/stainless steel, solvent socket - male thread, PN16

d-G	PN	DN	G1	h	1	z	S1	S2	G-kg	VE	Prod.No.	Price €
20-1/2″	16	10	3/4"	22	17	5	30	28	0.16	10.00	73538	36.21
25-3/4″	16	15	1"	25	19	5	37	38	0.26	10.00	73539	51.76
32-1"	16	20	11/4"	27	22	6	46	44	0.30	10.00	73540	58.72
40-1 1/4"	16	25	11/2"	54	25	6	52	53	0.58	10.00	73541	82.94
50-1 1/2"	16	32	2"	54	29	7	64	62	0.52	10.00	73542	96.48
63-2"	16	40	21/4"	62	34	7	72	80	1.10	10.00	73543	172.27
75-2 1/2"	16	50	23/4"	69	41	8	89	61	1.91	10.00	73544	359.05
90-3"	16	15	1"	25	19	5	37	38	2.43	10.00	73545	508.79
110-4"	16	20	11/4"	27	22	6	46	44	4.26	10.00	73546	670.85

### IBG® clamp saddle type A, pipe female thread with stainless steel ring

d1-d2	d3	z	С	D	Е	G-kg	VE	Prod.No.	Price €
20 - 1/2″	10	16	18	2	2	0.11	100.00	73423	5.47
25 - 1/2″	12	19	18	2	2	0.12	100.00	73424	6.00
32 - 1/2″	14	23	18	2	2	0.15	100.00	73425	6.45
32 - 3/4″	18	23	19	2	2	0.16	100.00	73426	6.45
32 - 1″	23	23	22	2	2	0.17	100.00	73427	6.45
40 - 1/2″	14	27	18	4	4	0.22	80.00	73428	7.44
40 - 3/4″	18	27	19	4	4	0.22	80.00	73429	7.44
40 - 1″	23	27	22	4	4	0.23	80.00	73430	7.44
50 - 1/2″	14	32	18	4	4	0.25	60.00	73431	7.96
50 - 3/4″	18	32	19	4	4	0.25	60.00	73432	7.96
50 - 1″	23	32	22	4	4	0.26	60.00	73433	7.96
50 - 1 1/4″	26	32	24	4	4	0.28	60.00	73434	7.96







d1-d2	d3	Z	С	D	E	G-kg	VE	Prod.No.	Price €
63 - 1/2″	14	39	18	4	4	0.29	40.00	71950	9.44
90 - 1 1/2"	18	39	19	4	4	0.49	25.00	70915	12.92
63 - 3/4″	23	39	22	4	4	0.30	40.00	73436	9.44
63 - 1″	26	39	24	4	4	0.30	40.00	73437	9.44
63 - 1 1/4″	33	39	24	4	4	0.33	30.00	73438	9.44
63 - 1 1/2″	14	46	18	6	4	0.33	30.00	73439	9.44
75 - 1/2″	18	46	19	6	4	0.41	25.00	73440	10.93
75 - 3/4″	23	46	22	6	4	0.42	25.00	73441	10.93
75 - 1″	26	46	24	6	4	0.42	25.00	73442	10.93
75 - 1 1/4‴	33	46	24	6	4	0.44	25.00	73443	10.93
75 - 1 1/2″	14	53	18	6	4	0.45	25.00	73444	10.93
90 - 1/2″	18	53	19	6	4	0.46	25.00	73445	12.92
90 - 3/4″	23	53	22	6	4	0.46	25.00	73447	12.92
90 - 1″	26	53	24	6	4	0.47	25.00	73448	12.92
90 - 1 1/4″	33	53	28	6	4	0.48	25.00	73449	12.92
90 - 2″	42	53	22	6	4	0.52	25.00	73451	12.92
110 - 1″	23	64	22	6	4	0.58	20.00	73452	17.38
110 - 1 1/4″	26	64	24	6	4	0.59	20.00	73453	17.38
110 - 1 1/2″	33	64	24	6	4	0.60	20.00	73454	17.38
110 - 2″	42	64	28	6	4	0.63	20.00	73455	17.38
110 - 2 1/2″	60	64	33	6	4	0.67	20.00	73456	17.38
125 - 1″	23	71	22	6	4	0.64	15.00	73457	22.82
125 - 1 1/4″	26	71	24	6	4	0.65	15.00	73458	22.82
125 - 1 1/2″	33	71	24	6	4	0.66	15.00	73459	22.82
125 - 2″	42	71	28	6	4	0.70	15.00	73460	22.82
125 - 2 1/2″	60	71	33	6	4	0.72	15.00	73461	22.82

### IBG® clamp saddle type B, pipe female thread with stainless steel ring

### IBG® clamp saddle type C, pipe female thread with stainless steel ring

d-s2	d4	Z	С	D	Е	G-kg	VE	Prod.No.	Price €
140 - 1 1/4″	26	80	24	6	6	0.87	10.00	75826	29.27
140 - 2″	42	80	28	6	6	0.91	10.00	73463	29.27
140 - 2 1/2″	60	80	33	6	6	0.94	10.00	73464	29.27
160 - 1″	23	90	33	6	6	1.00	10.00	73465	42.11
160 - 1 1/4″	26	90	24	6	6	1.01	10.00	73466	42.11
160 - 1 1/2″	33	90	24	6	6	1.01	10.00	73467	42.11
160 - 2″	42	90	28	6	6	1.03	10.00	73468	42.11
160 - 2 1/2″	60	94	33	6	6	1.07	10.00	73469	42.11
160 - 3″	76	94	36	6	6	1.16	10.00	73470	42.11









### Tangit<sup>®</sup> PVC-U special adhesive

Product	G-kg	VE	Prod.No.	Price €
Tangit® PVC-U special adhesive 125g	0.16	12.00	20012	11.94
Tangit®PVC-U special adhesive 250g	0.30	12.00	20018	15.01
Tangit®PVC-U special adhesive 500g	0.57	12.00	20019	29.48
Tangit®PVC-U special adhesive 1000g	0.95	6.00	20009	50.24

### Tangit® PVC-U special adhesive with brush

Product	G-kg	VE	Prod.No.	Price €
Tangit® PVC-U special adhesive with brush 500g	0.57	12.00	20208	32.12
Tangit® PVC-U special adhesive with brush 250g	0.30	12.00	20200	20.00
Tangit® PVC-U special adhesive with brush 1000g	0.95	12.00	20207	53.98

### Griffon® XT 100 adhesive with special brush

only use for PVC-u pipes, not for PVC flex hoses; PVC solvent without THF. Tolerance für PVC-u <400 mm, max. PN16, max. 0,6 mm gap, max 0,2 mm press fit.

Product	G-kg	VE	Prod.No.	Price €
Griffon® UNI-100 XT adhesive 250 ml	0.27	24.00	20237	18.84
Griffon® UNI-100 XT adhesive 500 ml	0.54	12.00	20238	28.35
Griffon® UNI-100 XT adhesive 1000 ml	1.04	8.00	20239	47.60
Griffon® UNI-100 XT adhesive 5000 ml	0.00	1.00	20241	237.72



### Griffon® WDF-05 adhesive with brush

for PVC flex hose, also for pipes, gick-dry for use in wet rooms, glue with bluish tint.

Product	G-kg	VE	Prod.No.	Price €
Griffon® WDF-05 adhesive 125 ml	0.12	10.00	20233	11.48
Griffon® WDF-05 adhesive 250 ml	0.25	12.00	20224	16.58
Griffon® WDF-05 adhesive 500ml	0.50	12.00	20223	29.48



### Griffon® UNI-100 adhesive in tube

Product	G-kg	VE	Prod.No.	Price €
Griffon® UNI-100 adhesive 125ml tube	0.12	30.00	20218	18.71





quick-dry PVC glue for PVC-u <315 mm, max. PN16, tolerance max. 0,8 mm gap.

Product	G-kg	VE	Prod.No.	Price €
Griffon® UNI-100 adhesive 125ml	0.13	10.00	75168	13.45
Griffon® UNI-100 adhesive 250ml	0.25	24.00	20023	17.07
Griffon® UNI-100 adhesive 500ml	0.57	12.00	20024	29.94
Griffon® UNI-100 adhesive 1000ml	1.07	8.00	20025	50.10



### Griffon<sup>®</sup> UNI-100 GT adhesive

for gluing with small and large glue gap (gap filling), ideal for large dimensions/diameters <800 mm, long processing time.

Product	G-kg	VE	Prod.No.	Price €
Griffon® UNI-100 GT adhesive 1000ml	1.00	8.00	20027	76.30



### Griffon® AQUA MAX - water resistant, solvent free adhesive

Product	G-kg	VE	Prod.No.	Price €
Griffon® AQUA MAX white - water-resistant, solvent-free assembly adhesive and sealant based on SMP-Polymer, cartridge 425 g	0.50	12.00	78582	27.93
Griffon® AQUA MAX grey - water-resistant, solvent-free assembly ad- hesive and sealant based on SMP-Polymer, cartridge 425 g	0.50	12.00	740134	32.10



### Teflon tape

Product	G-kg	VE	Prod.No.	Price €
Teflon tape white 12m, 0,08 x 12 mm	0.01	1.00	71940	2.14



### Kolmat® FIBRE SEAL sealing tape

For sealing conical and cylindrical metal and plastic threaded connections.

Product	G-kg	VE	Prod.No.	Price €
Kolmat® FIBRE SEAL sealing tape 14 mm x 15m, roll	0.03	30.00	79248	10.86





### Griffon® SFT-101 REPAIR sealing and repair tape

Suitable for fast and easy sealing and repair of leaks in conduits, pipes, fittings, traps and hoses.

Product	G-kg	VE	Prod.No.	Price €
Griffon® SFT-101 REPAIR sealing sealing and repair tape, black 3m roll	0.05	1.00	75151	26.62



### Tangit<sup>®</sup> PVC-U/C ABS cleaner

Product	G-kg	VE	Prod.No.	Price €
Tangit® PVC-U/C ABS cleaner 125ml	0.15	20.00	20017	10.42
Tangit® PVC-U/C ABS cleaner 1000ml	1.13	12.00	20010	33.55



### Griffon® PVC, PVC-C & ABS cleaner

Product	G-kg	VE	Prod.No.	Price €
Griffon® PVC, PVC-C & ABS cleaner 125ml	0.13	20.00	20041	9.94
Griffon® PVC, PVC-C & ABS cleaner 250ml	0.25	12.00	20077	14.21
Griffon® PVC, PVC-C & ABS cleaner 500ml	0.49	12.00	20206	20.00
Griffon® PVC, PVC-C & ABS cleaner 1000ml	0.95	6.00	20031	31.55



### Griffon® cleansing tissues 100 pcs

lint-free and dry, for cleaning hands and all surfaces

Product	G-kg	VE	Prod.No.	Price €
Griffon® cleansing tissues 100 pcs	0.62	6.00	78560	44.29

### PERAQUA M





Suitable for removing adhesive, dirt, grease, oil, tar, soot, paint, ink, highlighter and others.

Product	G-kg	VE	Prod.No.	Price €
Griffon® Hand cleaner 500ml	0.42	12.00	740133	21.50



### **Griffon® Silicone grease**

For metals and synthetics. Rust and corrosion resistant, water repellant, water resistant

Product	G-kg	VE	Prod.No.	Price €
Griffon® Silicone grease tube 15g	0.15	20.00	740135	9.77
Griffon® Silicone grease tube 125g	0.16	12.00	7301550	28.84



### **REMS** pipe cutter

Product	G-kg	VE	Prod.No.	Price €
REMS Pipe cutter P 10 - 63 wall thickness s = 7 mm	0.68	1.00	74250	389.54
REMS Pipe cutter 50 - 110 wall thickness s = 11mm	1.30	1.00	74251	632.46
REMS Pipe cutter P 110 - 160 Wall thickness s = 16mm	1.74	1.00	74252	643.26



### Griffon® cable saw for pipes

Product	G-kg	VE	Prod.No.	Price €
Griffon® cable saw for pipes	0.03	6.00	78557	25.93



### Griffon® pipe deburrer

Product	G-kg	VE	Prod.No.	Price €
Griffon® pipe deburrer blue	0.80	6.00	74254	301.76





Product	DN	L	D	L1	L2	E	G-kg	VE	Prod.No.	Price €
50 × 50	40	104,5	42	31,5	69	89	0.22	30.00	71736A	8.99
50 × 11/2"	40	104,5	42	31,5	69	89	0.22	30.00	76488A	9.52
63 × 63	50	121,5	55	38,5	79	108	0.38	25.00	71905A	13.98
2"	50	121,5	55	38,5	79	108	0.38	25.00	76338A	14.44

### IBG® FlexFit® adapter unions, clamp – solvent socket

d-d1	DN	L	D	L1	L2	Е	G-kg	VE	Prod.No.	Price €
50 × 50	40	103,5	58	31,5	69	89	0.22	24.00	71737A	9.52
50 × 11/2"	40	103,5	58	31,5	69	89	0.23	24.00	76489A	10.08
63 × 63	50	120,5	71,6	38,5	79	108	0.37	25.00	71906A	14.56
63 × 2"	50	120,5	71,6	38,5	79	108	0.38	24.00	76339A	15.11





### IBG® FlexFit® adapter unions, BSP, clamp – female thread

d-d1	DN	L	Е	L1	L2	E1	G-kg	VE	Prod.No.	Price €
50 × 11/2"	40	103,5	58	31,5	69	89	0.24	24.00	71740A	11.78
63 × 2"	50	120,5	72	27,5	79	108	0.40	25.00	71911A	16.74



### IBG® FlexFit® adapter unions, BSP, clamp - male thread + O-ring

d-G	Тур	DN	d1	L	Е	L1	L2	z	Z1	G-kg	VE	Prod.No.	Price €
$50 \times 11/2$ "	А	40	39	90,8	89	18	69	48	58	0.22	25.00	71739A	11.17
50 × 2"	В	40	49	189,4	108	23	69	60	69	0.28	24.00	71904A	12.86
63 × 2"	А	50	49	109,4	89	23	79	60	69	0.37	36.00	71910A	15.11



### IBG® FlexFit® adapter unions, NPT

d-G	Тур	DN	d1	L	Е	L1	L2	z	Z1	G-kg	VE	Prod.No.	Price €
50 × 11/2"	А	40	39	90,8	89	18	69	48	58	0.22	25.00	76492A	11.49

### IBG® FlexFit® double union, clamp - clamp

d-d1	DN	L	E	L1	G-kg	VE	Prod.No.	Price €
50 × 50	40	142	89	69	0.40	20.00	71738A	16.19
63 × 63	50	162,5	108	79	0.65	20.00	71907A	26.83





### IBG® FlexFit® adapter elbow 90°, clamp – solvent socket

d-d1	DN	1	L	Е	L1	E1	z	G-kg	VE	Prod.No.	Price €
50 × 50	40	57,5	97	56	69	89	26	0.25	25.00	71741A	9.52
50 × 11/2"	40	57,5	97	56	69	89	26	0.25	25.00	76493A	10.08
63 × 63	50	71	119	72	79	108	32,5	0.48	25.00	71908A	16.74
63 × 2"	50	71	119	72	79	108	32,5	0.45	25.00	76340A	17.34





### IBG® FlexFit® adapter elbow 90°, clamp - female thread

d-G	DN	1	L	Е	L1	E1	z	G-kg	VE	Prod.No.	Price €
50 × 11/2" IG	40	57,5	97	56	69	89	26	0.26	25.00	76496A	12.56
63 × 2" IG	50	71	119	72	79	108	32,5	0.46	25.00	76343A	18.43



### IBG® FlexFit® adapter elbow 90°, BSP, clamp – male thread

d-G	DN	d1	L	Е	L1	L2	L3	G-kg	VE	Prod.No.	Price €
$50 \times 11/2''$	40	36	94,5	89	85	63	69	0.28	25.00	71903A	10.08
63 × 2"	50	48	119	108	85	56,3	79	0.66	25.00	76600A	12.86



### IBG® FlexFit® adapter elbow 45°, BSP, clamp – solvent socket

d-d1	DN	1	L	Е	L1	E1	z	G-kg	VE	Prod.No.	Price €
50 × 50	40	46,5	84	56,3	69	89	15	0.25	25.00	73506A	10.62
50 × 11/2"	40	46,5	84	56,3	69	89	15	0.25	25.00	76644	11.17





### $IBG^{\ensuremath{\$}}$ FlexFit $\ensuremath{\$}$ elbow 90° , clamp – clamp

d-d1	DN	1	L	E	G-kg	VE	Prod.No.	Price €
50 × 50	40	105,5	69	89	0.43	10.00	71742A	16.19
63 × 63	50	124	79	108	0.73	10.00	71909A	26.83





Product	DN	1	L	Е	L1	E1	z	G-kg	VE	Prod.No.	Price €
50 × 50 × 50	40	57,5	9,7	56	69	89	26	0.27	18.00	71743A	10.08
11/2" × 50 × 11/2"	40	57,5	9,7	56	69	89	26	0.29	18.00	73402A	10.62
63 × 63 × 63	50	71	119	71,6	79	108	32	0.57	16.00	71912A	16.74
2" × 63 × 2"	50	71	119	71,6	79	108	32	0.03	18.00	73403	17.34

### IBG® FlexFit® adapter tee 90°, clamp - clamp

d1-d2-d3	DN	1	L	E	G-kg	VE	Prod.No.	Price €
50 × 50 × 50	40	105,5	69	89	0.64	8.00	71744A	24.56
63× 63 × 63	50	124	79	108	1.08	10.00	71913A	37.39
50 × 63 × 50	40/50	105,5	69	89	0.79	8.00	76787A	30.14



### IBG® FlexFit® adapter tee 90°, clamp – solvent socket

Product	DN	1	L	Е	L1	E1	z	G-kg	VE	Prod.No.	Price €
50 × 63 × 50	40/50	105,5	69	89	79,8	71,6	41,3	0.63	8.00	76788A	19.54





For optimal sealing and connection of IBG® FlexFit® fittings and hoses, in DN40 and DN50, made of GFK

Product	G-kg	VE	Prod.No.	Price €
40	0.07	40.00	71635	2.95
50	0.06	10.00	71634	3.28





Produc		G-kg	VE	Prod.No.	Price €
50	C	0.82	10.00	121422	65.00
63	1	1.65	10.00	121423	77.64

### Brass ring d50 and d63

to be used with IBG® FlexFit® fitting system and rigid - PVC piping system, only for NEW IBG flex fittings with production date from 03/2015 onwards. Project related minimum order quantity of 100 pieces assorted.

Product	G-kg	VE	Prod.No.	Price €
Ring for unions FlexFit brass d50 single packed	0.09	1.00	142428	51.19
Ring for unions FlexFit brass d63 single packed	0.14	1.00	142429	51.19



## **FLEXFIT FITTINGE**

KLEBSTOFFLOSE VERBINDUNG

### ENVIRONMENTALLY FRIENDLY AND ADHESIVE-FREE FLEXFIT® PVC FITTINGS

The easily manufactured Flex-Fit connections for flexible hoses, PVC pipes, and PE 100 pipes are high-quality plastic precision parts with many advantages.

Notable benefits include the short assembly time and the independence from temperature and humidity when constructing ponds, pool filtration systems, and irrigation systems.

Up to 25 meters in length (50 meters upon request) without connecting fittings means fewer glued joints, reduced risk of leaks, and faster, secure installation. The entire piping system is 100% leak-proof and immediately load-bearing (max. 4 bar) after proper installation.

A small detail: Just as easy as the installation, the disassembly of the removable connections is also straightforward.







### **TECHNICAL DETAILS**

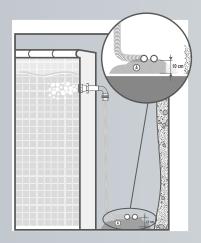
••••••
PVC-U
EPDM
DN40 / DN50
clamp - clamp clamp - solvent socket clamp - solvent spigot clamp - male thread clamp - female thread
hose to hose pipe to hose hose to thread
PVC hose DN40 / DN50: PN4 (fittings!)
PE pipe: DN40: MOP8 DN50: MOP6
PVC pipe: DN40: MOP8 DN50: MOP6



1. Pipe (PVC)

- 2. Union nut (PVC)
- 3. Clamping sleeve (PVC)
- 4. Brass ring (brass)
- 5. Clamping ring (POM) 6. O-ring (EPDM)
- 7. Connection (PVC)

### **BEHAVIOR IN CASE OF FROST**



To prevent pipe bursts in the event of frost, the following applies to all pipe systems: Drain the pipe completely! In practice, however, some of the medium often remains in the pipe. In most cases, this is not a problem if the air can escape through an open valve. If it cannot, a pipe burst is almost inevitable.

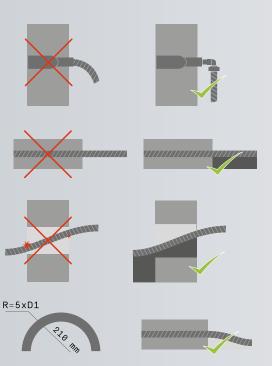
If the medium freezes in a flexible PVC hose, the flexibility of the hose is usually sufficient to prevent the pipe from bursting. However, the best solution is to drain the pipe in good time!

### BEHAVIOR OF SCREW CONNECTIONS IN CASE OF UNDERGROUND INSTALLATION

With FlexFit, the "sealing" and "clamping" functions are separate. This means that the secure sealing function remains unaffected by alternating tensile loads, even underground, while the clamping effect is reinforced.

### RECOMMENDATIONS FOR THE CORRECT INSTALLATION OF PRAHER/IBG FLEX FITTING AND FLEX HOSE

- » Avoid extreme tension on the pipe (select the smallest possible bending radius)
- » D50 FlexFit<sup>®</sup> hose, minimum bending radius R = 5 x D1
- » Lay the hose in a sand bed or protective pipe
- » Avoid contact with sharp edges, hose can move under pressure
- » Max. pressure: 4 bar (20° C water)
- » Max. Temperature: + 60° C water





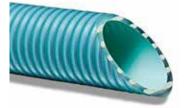
### FlexFit® flexible PVC pressure hose, grey, 25 m roll

Product	PN	G-kg	VE	Prod.No.	Price €
d 20 mm	7	0.16	25.00	71708	3.19
d 25 mm	7	0.25	25.00	71709	3.68
d 32 mm	5	0.31	25.00	71710	3.84
d 40 mm	5	0.47	25.00	71711	5.20
d 50 mm	5	0.73	25.00	71712	5.23
d 63 mm	5	0.95	25.00	71713	7.72
d 75 mm	4	1.40	25.00	73507	13.46
d 90 mm	4	1.29	25.00	74043	18.57





Product	PN	G-kg	VE	Prod.No.	Price €
d50 mm	5	0.73	12.00	73760	5.23



### FlexFit® flexible PVC pressure hose B-active, turquoise, 25 m roll

Chlorine resistant, resistant to squeezing and deforming, reinforced, turquoise

Product	G-kg	VE	Prod.No.	Price €
FlexFit® flexible PVC pressure hose B-active d50 PN6 50-42, I=25m	0.75	25.00	740129	9.72
FlexFit® flexible PVC pressure hose B-active d63 PN4 63-55, I=25m	0.96	25.00	740130	12.20



The special CDS film (Chlorine Defense System) offers increased protection against chlorinated water



The spiral with the D-Shape area offers high resistance to crushing (up to 34 kN/m2). The cladding of the rigid spiral serves as a barrier and prevents premature embrittlement



### **PVC flex hose STRONG**

white, I=25m roll, PVC hose with larger wall thickness for concrete installation.

Product	G-kg	VE	Prod.No.	Price €
50-40 PN6	23.80	25.00	7301191	9.91
63-51 PN5	36.67	25.00	7301192	12.91
75-65 PN4	36.92	25.00	7301193	14.90



A CONTRACT	+R
25	100
32	100
40	130
50	165
63	220

### INSTALLATION AND STORAGE RECOMMENDATIONS

### **PRAHER/IBG FLEX HOSE**

PRAHER/IBG flex hoses meet the highest quality standards. Production according to EN ISO 3994 is continuously monitored to ensure that the corresponding tolerances for PRAHER/IBG fittings and piping systems are maintained according to DIN/ISO standards.

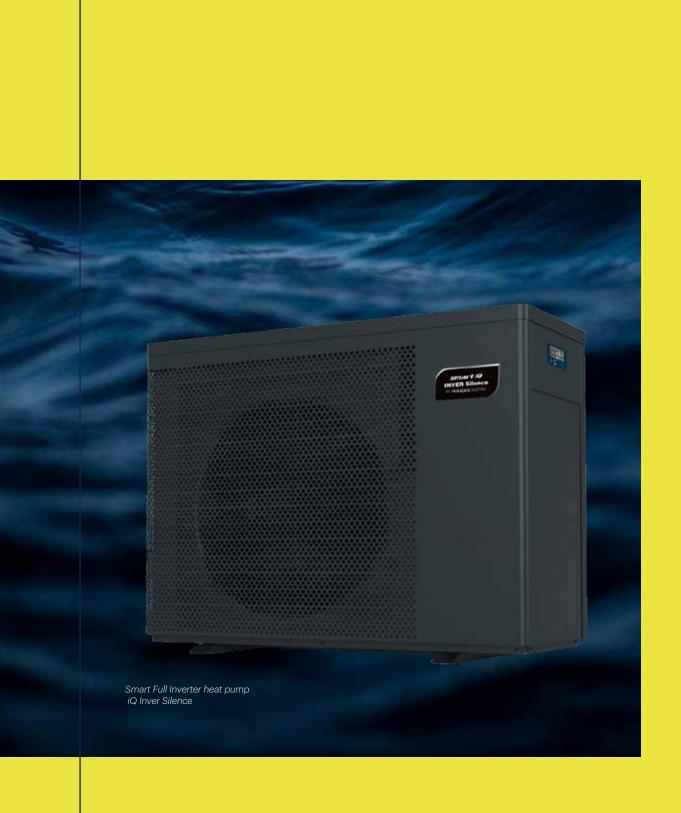
For proper installation and long durability, we recommend observing the following points:

- » Exclusively designed for use in swimming pool installations.
- » We recommend keeping the Flex fittings accessible (do not embed in concrete or lay them under the pool).
- » Before installation, cut off at least the first 15 cm from the ends of the hose rolls.
- » Install the PVC flex hose in a sand bed (10 cm below and above the hose) or in a double pipe system.
- » Take into account the maximum bending radius (R = 5 x D1).
- » Please consider the material behavior of PVC-U under your specific application parameters (temperature, pressure, and mechanical stress).
- » Gluing of the flex hose: Due to the optimally matched tolerances between PRAHER/IBG flex hose and PRAHER/IBG fitting, we recommend using only these in combination with WDF05 adhesive (Article No. 20223) & cleaner.
- » Installation with IBG Flex fittings: Proven "adhesive-free" connection using the comprehensive Flex fitting system from PRAHER/IBG. The best solution for quickly and easily processing flex hoses.
- » Pressure testing of the piping system before commissioning with water at 2 bar.
- » Documentation with pressure test report (required for complaints).
- » Installation below the frost line or operation above 0°C. Empty the pipes in winter.
- » Temperature resistance: 0°C-50°C according to the pressure-temperature diagram, max. pressure 4 bar at 20°C.
- » Immediately check the received delivery and report any deformation due to improper transport, along with the serial number, production date, and batch number marked on the hose, plus a photo, to info@peraqua.com.
- » Warranty/guarantee: Maximum 2 years.



### ASSEMBLY INSTRUCTIONS

For installation, we recommend a minimum temperature of +5°C and a maximum temperature of 40°C. The hose should not be pressed against obstacles or sharp edges when being laid around curves. Ants, termites, or small rodents can damage the underground piping.



# **POOL HEATING**

240	Smart Heat pumps
245	Solar absorber
246	Heat exchanger & electric heater

Pool Heating



CARIBBEAN WARM AND NORTH SEA COOL POOL WATER

### INDIVIDUAL POOL WATER TEMPERATURE

Peraqua's Smart heat pumps are air-to-water heat pumps. The contained refrigerant R32 is heated or cooled by the air drawn in by the pump. The gas is then compressed in a compressor and the resulting heat energy is transferred to the pool water via a heat exchanger.

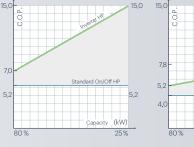


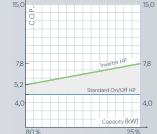
### WHY SMART INVERTER TECHNOLOGY?

## $\rightarrow 65\%$ higher C.O.P. than with standard on/off heat pumps $\rightarrow 50\%$ higher C.O.P. than with standard inverter technologies

Smart Inverter HP vs. standard On/Off HP (while maintaining the pool temperature)

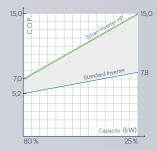
Performance condition: Air 26 °C | Water 26 °C Humidity 80% Performance condition: Air 15 °C | Water 26 °C Humidity 70%



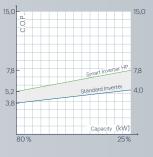


Smart Inverter HP vs. standard Inverter HP (while maintaining the pool temperature)

Performance condition: Air 26 °C | Water 26 °C Humidity 80%



**Performance condition:** Air 15 °C | Water 26 °C Humidity 70%

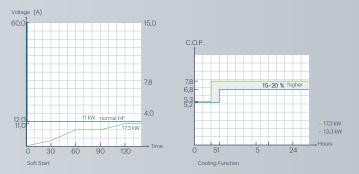


### $\rightarrow$ 10 × quieter

By using the very quiet Mitsubishi inverter compressor and variable speed system, the inverter pump guarantees 10 × quieter operation than conventional heat pumps (while maintaining the pool temperature). It is the quietest heat pump on the market.

### $\rightarrow$ Soft Start

When the inverter heat pump starts, the current starts from 0 A and slowly reaches the rated current in 2 minutes. This has no negative impact on the domestic power supply.



### → Control with a PV system (Photovoltaic system)

Our smart heat pumps are equipped with a contact for external release. This allows, for example, an inverter from the photovoltaic system to take control of the heat pump.

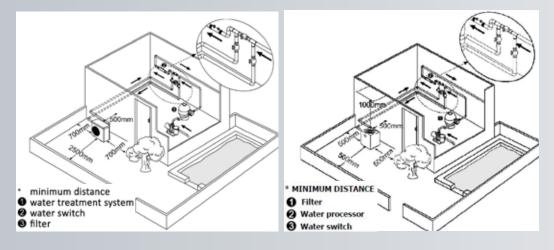


### → Smarte choice

### We recommend not undersizing the inverter heat pump, and in case of doubt, choosing the next larger model.

- $\rightarrow$  In partial load operation, the heat pump operates even more efficiently.
- → Faster heating
- $\rightarrow$  Noticeably quieter operation and a calmer swimming environment
- → Significant energy savings possible due to more efficient operation

### **CORRECT POSITIONING**



### **RELEVANT DATA FOR NOISE PROTECTION CERTIFICATES**

Smart heat pump iQ INVER Silence	7301031	7301032	7301033	7301034	7301035	7301037	7301038
Heating capacity (A2/W35) air 2 °C, wat	er 35 °C						
Smart Modus (kW)	3.00	3.48	4.48	5.62	7.05	8.57	11.43
Turbo Modus (kW)	3.57	4.19	5.38	6.81	8.33	10.24	13.33
Heating capacity (A-7/W35) air -7 °C, wa	iter 35 °C						
Smart Modus (kW)	1.90	2.21	2.84	3.57	4.47	5.44	7.25
Turbo Modus (kW)	2.27	2.66	3.42	4.32	5.29	6.50	8.46
Sound power (daytime) Maximum db(A)	61.2	62.7	63.6	66.3	67.1	67.6	67.7
Sound power (night) Maximum db(A)	53.5	55.3	57.7	58.5	58.4	60.4	57.8
Sound pressure at 1,2,3,4,5 & 10m							
Sound pressure at 1m db(A)	38.5~45.5	38.6~46.9	42~47.7	42.9~50.8	40.8~51.2	43.3~51.9	42.5~51.7
Sound pressure at 2m db(A)	32.5~39.5	32.6~40.9	36~41.7	36.9~44.8	34.8~45.2	37.3~45.9	36.5~45.7
Sound pressure at 3m db(A)	29~36	29.1~37.4	32.5~38.2	33.4~41.3	31.3~41.7	33.8~42.4	33~42.2
Sound pressure at 4m db(A)	26.5~33.5	26.6~34.9	30~35.7	30.9~38.8	28.8~39.2	31.3~39.9	30.5~39.7
Sound pressure at 5m db(A)	24.6~31.6	24.7~33	28.1~33.8	29~36.9	26.9~37.3	29.4~38	28.6~37.8
Sound pressure at 10m db(A)	18.5~25.5	18.6~26.9	22.0~27.7	22.9~30.8	20.8~31.2	23.3~31.9	22.5~31.7







on heat exchanger

on compressor

- » Variable speed through inverter technology
- » Modbus RTU compatible for smart home integration
- » Touch control with WLAN connectivity
- » Suitable for salt electrolysis
- » Very quiet
- » Powder-coated metal housing



### Smart full inverter heat pump iQ Inver Silence

The Inver Silence control system is optimized on the basis of full inverter technology. It perfectly balance the inverter technology and heat exchanger technology, which creates even more capacity and silent operation.

- COP 50~70% higher than standard inverter heat pumps by 100% speed
- Extra 20% capacity for quicker heating
- Average 50% capacity to maintain pool temperature
- Anthracite grey, RAL 7016
- Touch Control with integrated WLAN connection for the control via mobile device, free APP
- 5-year warranty on the entire appliance, plus extended warranty for compressor (7 years) and heat exchanger (8 years).

Product	G-kg	VE	Prod.No.	Price €
Smart full inverter heat pump iQ Inver Silence				
Smart full inverter heat pump iQ Inver Silence 10,2 kW, 230V, 1P, R32, titanium heat exchanger, modbus-capable, metal housing powder-coated	67.00	1.00	7301031	3221.33
Smart full inverter heat pump iQ Inver Silence 13,2 kW, 230V, 1P, R32, titanium heat exchanger, modbus-capable, metal housing powder-coated	70.00	1.00	7301032	4276.52
Smart full inverter heat pump iQ Inver Silence 16,8 kW, 230V, 1P, R32, titanium heat exchanger, modbus-capable, metal housing powder-coated	74.00	1.00	7301033	5279.97
Smart full inverter heat pump iQ Inver Silence 21,0 kW, 230V, 1P, R32, titanium heat exchanger, modbus-capable, metal housing powder-coated	80.00	1.00	7301034	6315.24
Smart full inverter heat pump iQ Inver Silence 25,5 kW, 230V, 1P, R32, titanium heat exchanger, modbus-capable, metal housing powder-coated	116.00	1.00	7301035	7493.89
Smart full inverter heat pump iQ Inver Silence 31,5 kW, 400V, 3P, R32, titanium heat exchanger, modbus-capable, metal housing powder-coated	130.00	1.00	7301037	8302.20
Smart full inverter heat pump iQ Inver Silence 40,0 kW, 400V, 3P, R32, titanium heat exchanger, modbus-capable, metal housing powder-coated	148.00	1.00	7301038	9974.58
ACCESSORIES				
Connection cable BCP to round plug for Modbus connection 1.2 m (internal main board -> BCP round plug)	0.13	1.00	7301101	18.91
Modbus connection cable 10 m for heat pumps	0.35	1.00	7301102	59.63

### **TECHNICAL DATA**

ECHNICAL DATA							
Model	7301031	7301032	7301033	7301034	7301035	7301037	7301038
Recommended Pool volume (m³)	20~40	25~50	30~60	40~75	55~100	65~120	90~160
Operation temperature (°C)			-15	~43*			
Operation conditions: Air 26°C, Water 2	26°C, Humidity 80	%					
Heating capacity (kW) Smart Modus	8,5	11,0	13,8	17,5	21,5	27,0	35,0
Heating capacity (kW) Turbo Modus	10,2	13,2	16,8	21,0	25,5	31,5	40,0
C.O.P in Smart Modus	7,8	8,2	7,5	7,3	7,8	7,4	7,3
C.O.P	15.1~7.1	15.0~7.3	15.5~6.4	15.0~6.3	16.0~6.8	15.8~6.3	15.8~6.4
COP at 50% speed	11,4	11,6	11,2	11,2	11,3	11,2	11,1
Operation conditions: Air 15°C, Water 2	26°C, Humidity 70	%					
Heating capacity (kW) Smart Modus	6,3	7,3	9,4	11,8	14,8	18,0	24,0
Heating capacity (kW) Turbo Modus	7,5	8,8	11,3	14,3	17,5	21,5	28,0
C.O.P in Smart Modus	5,2	5,3	5,0	5,0	5,4	5,3	5,1
C.O.P	6.9~4.8	6.8~4.9	7.3~4.4	7.8~4.6	7.8~4.9	7.8~4.9	7.9~4.7
COP at 50% speed	6,5	6,5	6,6	6,8	6,8	6,8	6,7
Operation conditions: Air 35°C, Water 2	27°C, Humidity 80'	%					
Cooling capacity (kW)	4,4	5,6	6,5	8,0	11,6	13,6	16,0
Sound pressure 1m dB(A)	38.5~45.5	38.6~46.9	42.0~47.7	42.9~50.8	40.8~51.2	43.3~51.9	42.5~51.7
Sound pressure at 10m dB(A)	18.5~25.5	18.6~26.9	22.0~27.7	22.9~30.8	20.8~31.2	23.3~31.9	22.5~31.7
Sound pressure at 50% speed 1m dB(A)	39,5	41,3	43,7	44,5	44,4	46,4	43,8
Heat exchanger				Titanium			
Housing				Metal			
Power supply			230V/1 Ph/50Hz			400V/3	Ph/50Hz
Rated input power at 15°C (kW)	0.18~1.53	0.22~1.8	0.26~2.56	0.31~3.08	0.38~3.53	0.46~4.4	0.60~5.94
Rated current at 15°C (A)	0.78~6.65	0.96~7.82	1.14~11.3	1.35~13.4	1.65~15.3	0.66~6.35	0.87~8.57
Recommended water flow (m³/h)	2~4	3~4	4~6	6.5~8.5	8~10	10~12	12~18
				50			
Water pipe specification in-out (mm)				00			
Water pipe specification in-out (mm) Net dimension LxWxH (mm)	799×432×650	893×432×650	939×432×650	995×432×750	1125×429×952	1074×539×947	1260×539×9

\*Efficient and optimum operation only recommended above freezing point (0 C°).







on compressor

- » Variable speed through inverter technology
- » Modbus RTU compatible for smart home integration
- » Touch control with WLAN connectivity
- » Suitable for salt electrolysis
- » Very quiet
- » Powder-coated metal housing





NOTE

Winter cover, vibration absorber and condensate drain set are included in delivery.

### Smart full inverter heat pump iQ Inver Silence, Vertical

Heat pump with vertical discharge for projects where the required minimum distances cannot be maintained.

By using the very quiet Mitsubishi inverter compressor and the variable fan speed system, the inverter pump guarantees 10 × quieter operation than conventional heat pumps (while maintaining the pool temperature).

The pool water can be kept at a pleasant temperature using the heating and cooling function. The infinitely variable speed of the Smart full inverter heat pump allows the compressor output to be perfectly adapted to the ambient conditions.

The Modbus RTU capable iQ Inver Silence heat pump allows integration into smart control electronics and smart home systems such as iQnnect. The heat pump can be controlled automatically via the "Inverter Life" app.

- metal housing powder-coated, anthracite grey, RAL7016

### TECHNICAL DATA

Model	7301269	7301270	7301271	7301272
Recommended Pool volume (m³)	25~50	30~60	40~75	50~100
Operation temperature (°C)		-15	~43*	
Operation conditions: Air 26°C, Water 26°C,	Humidity 80%			
Heating capacity (kW) in Smart Modus	11	14	17,5	22
Heating capacity (kW) in Turbo Modus	13,2	17,2	21	26
COP in Smart Modus	7,7	7,8	7,3	7,8
СОР	15,0~6,8	15,6~6,5	15,5~6,3	14,9~6,8
COP at 50% speed	11,5	11,7	11,6	11,3
Operation conditions: Air 15°C, Water 26°C,	Humidity 70%			
Heating capacity (kW) in Smart Modus	7,3	9,8	11,6	14,5
Heating capacity (kW) in Turbo Modus	8,8	11,6	14,3	17,5
COP in Smart Modus	5,0	4,9	4,9	5,0
COP	7,3~4,5	7,8~4,5	7,4~4,4	7,3~4,8
COP at 50% speed	6,5	6,7	6,8	6,3
Operation conditions: Air 35°C, Water 27°C,	Humidity 80%			
Cooling capacity (kW)	5,8	7,1	8,2	12,0
Max. Sound pressure 1m dB(A)	38,8~47,9	42,2~48,6	43,1~52,1	41,0~52,9
Sound pressure at 50% speed 1m dB(A)	41,9	44,3	45,2	45,3
Max. Sound pressure 10m dB(A)	18,8~27,9	22,2~28,6	23,1~32,1	21,0~32,9
Heat exchanger		Tita	nium	
Housing		M	etal	
Power supply		230V/1	Ph/50Hz	
Rated input power at 15°C (kW)	0,21~1,95	0,26~2,51	0,33~3,08	0,42~3,67
Rated current at 15°C (A)	0,91~8,48	1,14~10,9	1,43~13,4	1,82~15,9
Recommended water flow (m³/h)	3~4	4~6	6,5~8,5	8~10
Water pipe specification in-out (mm)		50		
Net dimension LxWxH (mm)	710x753x668	710x775x668	710x775x668	710x775x74
Net weight (kg)	66	71	78	102
Gas (g)	700	1000	1200	2000
GWP		675		
CO2 Equivalent (Tonne)	0,473	0,675	0,810	1,350

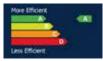
\*Efficient and optimum operation only recommended above freezing point (0 C°).

Product	G-kg	VE	Prod.No.	Price €
Smart full inverter heat pump iQ Inver Silence, Vertical, 13,2 kW, 230V, 1P, R32, titanium heat exchanger, modbus-capable, metal housing powder-coated	77.00	1.00	7301269	4543.31
Smart full inverter heat pump iQ Inver Silence, Vertical, 17,2 kW, 230V, 1P, R32, titanium heat exchanger, modbus-capable, metal housing powder-coated	82.00	1.00	7301270	5610.45
Smart full inverter heat pump iQ Inver Silence, Vertical, 21,0 kW, 230V, 1P, R32, titanium heat exchanger, modbus-capable, metal housing powder-coated	89.00	1.00	7301271	6713.43
Smart full inverter heat pump iQ Inver Silence, Vertical, 26,0 kW, 230V, 1P, R32, titanium heat exchanger, modbus-capable, metal housing powder-coated	106.00	1.00	7301272	7963.74





- » Variable speed through inverter technology
- » Modbus RTU compatible
- » Touch control with WLAN connectivity
- » Suitable for salt electrolysis
- » Very quiet
- » ABS housing, grey RAL7012





By using the very quiet Mitsubishi inverter compressor and the variable fan speed system, the inverter pump guarantees 10 × quieter operation than conventional heat pumps (while maintaining the pool temperature).

The pool water can be kept at a pleasant temperature using the heating and cooling function. The infinitely variable speed of the Smart full inverter heat pump allows the compressor output to be perfectly adapted to the ambient conditions.

The Modbus RTU capable heat pump allows integration into smart control electronics and smart home systems such as iQnnect.

The heat pump can be controlled automatically via the "Inverter Life" app.

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FECHNICAL DATA				
Model	7300714	7300715	7300772	7300716
Recommended Pool volume (m³)	25~45	30~55	35~65	40~75
Operation temperature (°C)		-7	~43*	
Operation conditions: Air 26°C, W	ater 26°C, Humidity	80%		
Heating capacity (kW)	10,3	12,8	15,0	17,3
C.O.P	14.5~6.9	15.0~7.4	15.5~6.7	14.8~5.9
COP at 50% speed	10,4	11,0	10,9	10,5
Operation conditions: Air 15°C, W	ater 26°C, Humidity	70%		
Heating capacity (kW)	7,1	8,3	10,5	11,4
C.O.P	7.3~4.6	7.7~4.8	7.8~4.6	7.5~4.3
COP at 50% speed	6,4	6,8	6,6	6,1
Operation conditions: Air 35°C, W	ater 27°C, Humidity	80%		
Cooling capacity (kW)	4,5	5,5	6,8	7,7
Sound pressure 1m dB(A)	38.6~49.9	42.1~50.7	41.3~54.0	43.1~53.8
Sound pressure at 10m dB(A)	18.6~29.9	22.1~30.7	21.3~34.0	23.1~33.8
Sound pressure at 50% speed 1m dB(A)	43,3	45,7	46,0	46,5
Kompressor		Mitsubishi	i DC Inverter	
Heat exchanger		Tita	anium	
Housing		A	ABS	
Power supply		230V/1	Ph/50Hz	
Rated input power at 15°C (kW)	0.19~1.5	0.22~1.73	0.27~2.2	0.3~2.6
Rated current at 15°C (A)	0.83~6.5	0.96~7.52	1.17~9.6	1.3~11.3
Recommended water flow (m³/h)	3~4	4~6	5~7	6.5~8.5
Water pipe specification in-out (mm)	)		50	
Net dimension LxWxH (mm)	961×340×658	961×340×658	961×340×658	961×420×658
Net weight	49	50	52	63
Gas (g)	750	800	900	1000
GWP		e	375	
CO2 Equivalent (Tonne)	0,506	0,540	0,608	0,675

\*Efficient and optimum operation only recommended above freezing point (0 C°).

Product	G-kg	VE	Prod.No.	Price €
Smart full inverter heat pump Plus				
Smart full inverter heat pump Plus, 10,3 kW, 230V, 1P, R32, titanium heat exchanger, modbus-capable, ABS housing grey	56.00	1.00	7300714	2809.21
Smart full inverter heat pump Plus, 12,8 kW, 230V, 1P, R32, titanium heat exchanger, modbus-capable, ABS housing grey	57.00	1.00	7300715	3553.83
Smart full inverter heat pump Plus, 15,0 kW, 230V, 1P, R32, titanium heat exchanger, modbus-capable, ABS housing grey	59.00	1.00	7300772	4081.42
Smart full inverter heat pump Plus, 17,3 kW, 230V, 1P, R32, titanium heat exchanger, modbus-capable, ABS housing grey	73.00	1.00	7300716	4579.15
ACCESSORIES				
External control kit for all ECO and Full Inverter heat pumps R32 (basis, cable and display)	1.02	1.00	7300898	243.01
Connection cable BCP to round plug for Modbus connection (internal main board -> BCP round plug)	0.13	1.00	7301101	18.91
Modbus connection cable 10 m for heat pumps	0.35	1.00	7301102	59.63



#### NOTE

Winter cover, vibration absorber and condensate drain set are included in delivery.



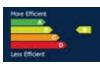




» 3-stage

» Powder-coated metal housing

**R32 refrigerant** 



Smart inverter heat pump ECO

Smart inverter ECO heat pumps are equipped with compressors that operate at three speeds. Unlike traditional heat pumps, which operate at a fixed frequency, Eco heat pumps can increase or reduce their speed depending on the energy requirement and ambient conditions. In this way, higher efficiency and a lower noise level can be achieved.

The pool water can be kept at a pleasant temperature using the heating and cooling function.

WLAN connection and app control can be retrofitted.

3-year warranty on the entire appliance, plus extended warranty for heat exchangers (5 years).

### TECHNICAL DATA

TECHNICAL DATA					
Model	7300704	7300706	7300707	7300708	7300709
Recommended Pool volume (m <sup>3</sup> )	15~30	20~35	30~50	35~65	45~80
Operation temperature (°C)			0~43		
Operation conditions: Air 26°C, W	ater 26°C, Humic	dity 80%			
Heating capacity (kW)	7	9,0	12,5	16,0	20,0
C.O.P	10.3~6.6	10.6~6.8	11.6~7.0	11.2~7.1	11.8~6.5
COP at 50% speed	9,3	9,6	10,1	9,7	10,2
Operation conditions: Air 15°C, W	ater 26°C, Humic	lity 70%			
Heating capacity (kW)	5,0	6,3	8,5	11,0	14,0
C.O.P	6.0~4.8	6.1~4.5	6.3~4.8	6.4~4.7	6.5~4.6
COP at 50% speed	5,8	5,7	6,1	5,9	6,1
Operation conditions: Air 35°C, W	ater 27°C, Humic	dity 80%			
Cooling capacity (kW)	2,5	3,1	4,6	5,6	7,8
Sound pressure 1m dB(A)	38.8~50.2	40.6~52.5	42.9~53.0	45.2~56.3	45.3~57.1
Sound pressure at 10m dB(A)	18.8~30.2	20.6~32.5	22.9~33.0	25.2~36.3	25.3~37.1
Sound pressure at 50% speed 1m dB(A)	42,8	45,8	48,5	48,7	49,6
Heat exchanger			Titanium		
Housing		po	wder-coated met	al	
Power supply			230V/1 Ph/50Hz		
Rated input power at 15°C (kW)	0.29~1.04	0.36~1.40	0.47~1.78	0.59~2.34	0.75~3.04
Rated current at 15°C (A)	1.26~4.52	1.57~6.09	2.02~7.74	2.52~10.17	3.26~13.21
Recommended water flow (m³/h)	2~4	3~4	4~6	6.5~8.5	8~10
Water pipe specification in-out (mm)			50		
Net dimension LxWxH (mm)	744×359×648	864×359×648	864×359×648	954×359×648	954×359×748
Net weight (kg)	42	46	49	60	68

Product	G-kg	VE	Prod.No.	Price €
Smart inverter heat pump ECO				
Smart inverter heat pump ECO, 7,0 kW, 230V, 1P, R32, 3-stage com- pressor, titanium heat exchanger, metal housing powder-coated	48.00	1.00	7300704	1513.11
Smart inverter heat pump ECO, 9,0 kW, 230V, 1P, R32, 3-stage com- pressor, titanium heat exchanger, metal housing powder-coated	52.00	1.00	7300706	2130.30
Smart inverter heat pump ECO, 12,5 kW, 230V, 1P, R32, 3-stage com- pressor, titanium heat exchanger, metal housing powder-coated	55.00	1.00	7300707	2976.46
Smart inverter heat pump ECO, 16,0 kW, 230V, 1P, R32, 3-stage com- pressor, titanium heat exchanger, metal housing powder-coated	66.00	1.00	7300708	3673.28
Smart inverter heat pump ECO, 20,0 kW, 230V, 1P, R32, 3-stage com- pressor, titanium heat exchanger, metal housing powder-coated	78.00	1.00	7300709	4220.78
ACCESSORIES				
WIFI module for smart inverter heat pump ECO	0.17	1.00	7300846	170.92
External control kit for all ECO and full inverter heat pumps R32 (basis, cable and display) $% \left( \frac{1}{2}\right) =0$	1.02	1.00	7300898	243.01

Optional: WLAN connection for control via mobile devices for retrofitting, free app



NOTE

Winter cover, vibration absorber and condensate drain set are included in delivery.



### Smart full inverter heat pump iQ Inver Silence, Commercial

High capacity heat pump with inverter technology for commercial pools.

The pool water can be kept at a pleasant temperature using the heating and cooling function. The infinitely variable speed of the heat pump allows the compressor output to be perfectly adapted to the ambient conditions.

The Modbus RTU capable heat pump allows integration into smart control electronics and smart home systems such as iQnnect.

The heat pump can be controlled automatically via the "Inverter Life" app.

### **TECHNICAL DATA**

Model	7300720	7300721
Recommended Pool volume (m³)	130~260	260~520
Operation temperature (°C)	-7~	43*
Operation conditions: Air 26°C, Water 26°C, Humidity 80%		
Heating capacity (kW)	59,6	109,0
COP at 50% speed	10,0	9,8
Operation conditions: Air 15°C, Water 26°C, Humidity 70%		
Heating capacity (kW)	39.4	80,5
COP at 50% speed	6.7	6.6
Operation conditions: Air 35°C, Water 27°C, Humidity 80%		
Cooling capacity (kW)	26,2	53,7
Sound pressure 1m dB(A)	54.0~62.0	56.0~65.0
Sound pressure at 10m dB(A)	34.0~42.0	36.0~45.0
Sound pressure at 50% speed 1m dB(A)	56,0 58,0	
Compressor	DC-Ir	nverter
Heat exchanger	Tital	nium
Housing	Me	etal
Power supply	400V/3	Ph/50Hz
Rated input power at 15°C (kW)	2.20~8.03	4.69~17.9
Rated current at 15°C (A)	3.17~11.59	6.77~25.8
Max. input current (A)	20	40
Circuit breaker (A)	25,0	48,0
Recommended water flow (m³/h)	20~25	40~50
Water pipe specification in-out (mm)	75	110
Net dimension LxWxH (mm)	1000x1110x1260	2100×1090×1280
Net weight (kg)	212	459
Gas (g)	5500	11000
GWP	20	88
CO2 Equivalent (Tonne)	11,48	22,97

\*Efficient and optimum operation only recommended above freezing point (0  $\mathrm{C}^{\mathrm{o}}$ ).

Product	G-kg	VE	Prod.No.	Price €
Smart full inverter heat pump iQ Inver Silence, Commercial, 59,6 kW, 400V, 3P, R410A, titanium heat exchanger, modbus-capable, metal housing powder-coated	237.00	1.00	7300720	23436.80
Smart full inverter heat pump iQ Inver Silence, Commercial, 109,0 kW, 400V, 3P, R410A, titanium heat exchanger, modbus-capable, metal	494.00	1.00	7300721	46648.25

housing powder-coated





- » High efficiency
- » Low pressure loss
- » Absolutely frost-proof (with empty pipes)
- » Easy installation





### Solar absorber

For cost-efficient and environmentally friendly heating of swimming pool water using solar energy.

The heat-resistant material of the solar absorber absorbs sunlight and is heated as a result. The heat generated is transferred to the pool water flowing through the absorber. The heated water flows back into the pool.

The absorbers can be combined to increase the heat output. The modular system allows easy customisation to the available surface area.

### **TECHNICAL DATA**

• Material: HDPE

- Pressure loss ca. 0.003 bar at 200 l/h/m2
- Flow rate: 150-250 l/m2/h
- Weight: approx. 6 kg/m2
- water volume: 6 l/m2 • Test pressure: 4.5 bar
- Operation pressure: up to 1.2 bar at 40 °C
- Efficiency: up to approx. 85%
- Capacity: up to 0.85 kWh/m2
- Temperature resistant (emptied): from -50 °C up to +115 °C
- Pipe: Ø 40 mm
  - Completely walkable
  - Salt water resistant
  - Modular system

Product	G-kg	VE	Prod.No.	Price €
Solar absorber with 2 connection pieces and integrated collector pipe on one side d40mm, 1320 x 820 mm, black	5.89	1.00	75754	191.77
Solar absorber with 4 connection pieces d25mm, 1280 x 820 mm, black	5.80	1.00	75755	191.77
Solar absorber with integrated collector pipes on both sides d40mm, 1360 $\times$ 820 mm, black	5.84	1.00	75756	191.77

### ACCESSORIES

Product	G-kg	VE	Prod.No.	Price €
Connection-tube for solar absorber, 38 x 5 x 60 mm with 2 stainless steel hose clamps	0.01	1.00	75757	12.53
Connection-tube for solar absorber, 25 x 3 x 63 mm with 2 stainless steel hose clamps	0.01	1.00	75758	11.13
Fixing strap for solar absorber, universal for all roof tiles, V2A, length 700 mm, width 18/12 mm	0.20	1.00	76876	50.38
hole band for solar absorber, zinced 12 x 1 mm l=10m coil	0.10	10.00	76877	78.35
Air vent 3/8" for solar absorber	0.13	1.00	76884	76.56
Drain valve brass 1/2" for solar absorber	0.07	1.00	76885	56.41



Operation with a filter pump and a 3-way ball valve with differential temperature control

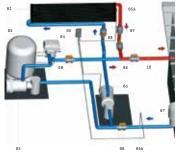
This connection option can generally be used when the absorbers are not mounted more than 6 meters above the water surface.

The 3-way ball valve is installed in the pressure line of the filtration system.

Through differential temperature control, the 3-way ball valve switches when the absorber temperature is higher than the pool water temperature.

The filter flow is then pumped through the absorbers. The heated water flows back into the filtration circuit via a T-piece.

3-way ball valve S4 SOLAR E0510 eco/ind in the Solar Controls chapter.



- 01 Solar collector 02 - Swimming pool filter
  - 03 Filter pump
- 04 Aquastar comfort/automatic backwash valve
- 05 SC02 solar controller
- 05a Hot water temperature sensor
- 05b Cold water temperature sensor
- 06 Solar pump
- 07 Ocean Skimmer deluxe M5
- 08 PVC 2-way ball valve S6 09 PVC cone check valve S6
- 10 IBG PVC pipes and fittings



- » High efficiency with minimal energy loss
- » Primary side AISI 316L
- » Can be connected vertically or horizontally
- » Suitable for salt electrolysis

### Titanium tube heat exchanger

The compact titanium multi-tube bundle element is located in an optimally insulated outer chamber. The small volume of the chamber combined with the high surface area of the titanium tubes ensures outstanding efficiency with minimised energy losses

The outer shell of the primary circuit is made of AISI 316L (V4A) (EN 1.4432) stainless steel and is optimally insulated with an additional aluminium housing with a plastic filling in between, thus guaranteeing the highest possible efficiency.

Depending on the installation situation, the G2 heat exchanger can be installed vertically or horizontally.

### **TECHNICAL DATA**

- Consists of 36 titanium tubes
- Low pressure drop
- 100% compatible with salt chlorinator pools
- Water connection primary circuit: 1" BSP female thread (incl. 1" male/male brass thread adapter)
  - Water connection secondary circuit: 11/2"/50 mm solvent connection

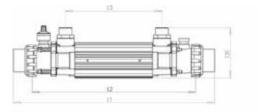
 $\cdot$  Incl. 2 x 1" male brass double nipple, 1 x blanking cap for changing tube, 1 x brass non-return valve 1" female

- Material primary side: AISI 316L (V4A) (EN 1.4432) stainless steel
- Material secundary side: titanium
- max. operation pressure: 4 bar
- Temperature and flow sensor connection
- Floor or wall mounting

Product	G-kg	VE	Prod.No.	Price €
Titanium tube heat exchanger 30 kW	3.91	1.00	740084	817.77
Titanium tube heat exchangerr 49 kW	4.50	1.00	740085	1037.15
Titanium tube heat exchanger 85 kW	5.10	1.00	740086	1276.50
Titanium tube heat exchanger 122 kW	6.00	1.00	740087	1775.14

Standard power output (kW)	Primary (HOT) flow (m <sup>2</sup> /h)	Primary (HOT) head loss (Bar)	Secondary (POOL) flow (m³/h)	Secondary (POOL) head loss (Bar)	ΔT 15° C (kW)	ΔT 20° C (kW)	ΔT 30° C (kW)	ΔT 40° C (kW)	ΔT 50° C (kW)	ΔT 60° C (kW)	ΔT 70° C (kW)
30 kW	1.1	0.061	10	0.050	9	11	16	20	26	30	33
30 kW	1.3	0,068	10	0.050	10	13	18	23	31	34	39
30 kW	1.3	0.058	14	0.070	.11	15	20	26	34	-41	46
49 kW	1.6	0.077	16	0.092	13	18	25	43	41	50	56
49 kw	1.8	0.083	16):	0.092	15	20	28	38	45	55	62
49 kW	2.2	0.093	17	0.098	16	22	33	44	52	64	73
85 kW	2.4	0.113	17	0.106	22	28	40	53	64	75	81
85 kW	2.7	0.129	17	0.106	26	32	46	60	73	82	89
85 kW	3.2	0.147	17	0.106	28	34	49	64	77	90	102
122.kW	3.8	0.183	19	0.126	33	43	68	75	93	108	120
122 kW	4.2	0.200	19	0.126	36	48	70	89	108	126	143
122 kW	4.6	0.211	19	0.126	38	53	73	95	116	137	156

### DIMENSIONS



	30 KW	49 kW	85 kW	122 kW
LT (mm)	540	710	840	1000
L2 (mm)	426	596	726	885
L3 (mm)	247	417	547	707
Net weight (4g)	3.5	4.5	5.3	6.4
Gross weight (kg)	3.9	5.0	6.3	7.6
Volume anh	0.015	0.021	0.026	0.037



- » Heating & cooling of commercial pools
- » Compact design with low holding volume
- » Easy cleaning through simple disassembly
- » Suitable for salt electrolysis

### Titanium plate heat exchanger

The plate heat exchanger is an affordable heat management system for heating and cooling commercial pools. Its high efficiency saves energy, reduces costs and minimises the environmental impact.

The compact design maximises the surface area of the heat exchanger without compromising its mechanical robustness. The plate heat exchanger is characterised by a high overall heat transfer coefficient and high performance with a low holding volume.

### **TECHNICAL DATA**

- Plates: Titanium, Frame: P335NH
- Gaskets: EPDM (max. 150° C)
- Connection pieces primary side and secondary side: stainless steel
- Bolts M12: A193B7
- Temperature: -10/100° C
- Pressure: 10 bar / Test pressure: 14.3 bar
- High overall heat transfer coefficient • High performance with low hold-up volume
- Versatile, modular design
  Connection: M G1 1/4" AISI 304 thread

Product	G-kg	VE	Prod.No.	Price €
Titanium plate heat exchanger 30 kW	24.26	1.00	7301545	1524.47
Titanium plate heat exchanger 50 kW	24.85	1.00	7301546	1762.10
Titanium plate heat exchanger 80 kW	26.04	1.00	7301547	2044.81
Titanium plate heat exchanger 102 kW	31.00	1.00	7301548	2171.33

### Process data (hot side)

	30 kW	50 kW	80 kW	102 kW
Temp in (°C)	90	90	90	90
Temp out (°C)	70	70	70	70
Flow rate (m <sup>3</sup> /h)	1.3	2.2	3.5	4.5
Pressure drop (kPa)	11.80	17.71	20.17	22.11

### Process data (cold side)

30 kW	50 kW	80 kW	102 kW
20	20	20	20
35	35	35	35
1.37	2.88	4.61	5.88
23.08	34.62	39.37	42.19
52.46	52,46	52,46	52.46
30	50	80	102
	20 35 1.37 23.08 52.46	20         20           35         35           1.37         2.88           23.08         34.62           52.46         52.46	20         20         20           35         35         35           1.37         2.88         4.61           23.08         34.62         39.37           52.46         52.46         52.46

### Construction data

	30 kW	50 KW	80 KW	102 KW
Heat transfer area (m²/h)	0.240	0.336	0.528	0.624
Overall K service (w/m <sup>2</sup> *C)	2381.54	2835.17	2886.72	3114.33
Plate thickness (mm)	0.5	0.5	0.5	0.5
Weight empty (kg)	23.65	24.04	24.82	29.00
Weight full (kg)	24.26	24.85	26.04	31.00
ArtNr.	7301545	7301546	7301547	7301548



NOTE The plate heat exchanger can be customized according to customer specifications.



» App control» Smart home integration available



### Touch screen heat controller

Perfect for easy control of the Titanium tube heat exchanger. With Wifi function, temperature and flow sensor. Can be controlled remotely via the TouchSmart Plus app.

The "Priority of Heating" function keeps the water temperature constant at the desired temperature.

### TECHNICAL DATA

- "Priority of Heating" function
- Controllable via TouchSmart Plus app
- RS485 MODBUS RTU; for integration into building automation
- Touchscreen display
- 5 operating modes: normal, timer, priority, installation, standby
- Programmable 24-hour time clock (4 time zones)
- Flow and temperature sensor connections
- Precise control to 0.5° C
- Diagnostic display
- Multilingual user interface

Product	G-kg	VE	Prod.No.	Price €
Touch screen heat controller, incl. 1 m cable flow switch and 1 cable NTC temperature sensor	m 5.70	1.00	7300258	688.11



» App control» Smart home integration available

### Touch screen cooling controller

Perfect for easy control of the Titanium tube heat exchanger. With Wifi function, temperature and flow sensor. Can be controlled remotely via the TouchSmart Plus app.

The "Priority of Heating" function keeps the water temperature constant at the desired temperature.

### **TECHNICAL DATA**

- "Priority of Heating" function
- Controllable via TouchSmart Plus app
- RS485 MODBUS RTU; for integration into building automation
- Touchscreen display
- 5 operating modes: normal, timer, priority, installation, standby
- Programmable 24-hour time clock (4 time zones)
- Flow and temperature sensor connections
- Precise control to 0.5° C
- Diagnostic display
- Multilingual user interface

Product	G-kg	VE	Prod.No.	Price €
Touch screen cooling controller, incl. 1 m cable flow switch and 1 m cable NTC temperature sensor	1.45	1.00	7301549	598.09





- » Titanium flow tube and heating elements
- » Backlit touchscreen
- » Suitable for salt electrolysis

### **Titanium electric heater**

The Titan electric pool heater is equipped with a heating controller, temperature sensor and safety temperature limiter. An reliable flow switch enables safe operation. The titanium flow tube and titanium heating element(s) make the electric heater effective, robust and durable. The touch screen control enables simple and user-friendly operation. The system also has a MODBUS RTU interface.

Ideal in combination with PV systems: If there is a surplus of energy, the energy is used sensibly for pool heating.

For pools and spas.

### **TECHNICAL DATA**

- Robust, durable construction
- Silent operation
- Operating pressure: max. 4 bar
- Easy installation, fully equipped and pre-wired
- Highly reliable flow switch with gold tip and titanium pivot point
- Equipped with heating controller, temperature sensor and safety temperature limiter
   Titanium flow tube and titanium heating element(s)
- Can be horizontally or vertically wall mounted
- ${\boldsymbol{\cdot}}$  Vortex technology for long life and clean heating elements

• 1½" BSP female thread with 50mm stepped ABS connections for rigid pipes and 11/2" stepped hose ends for flexible pipes

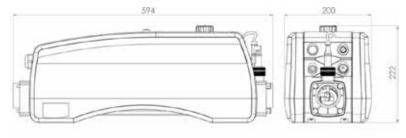
- Safety thermal cut out: 60 °C (manual reset)
- Sealings: High temperature EPDM
- Protection class: IP44

Product
---------

Product	G-kg	VE	Prod.No.	Price €
Titanium electric heater, 3kW, 230V, 1P, IP44	8.83	1.00	7301562	1574.93
Titanium electric heater, 6kW, 400V, 3P, IP44	9.36	1.00	7301563	1957.39
Titanium electric heater, 9kW, 400V, 3P, IP44	9.36	1.00	7301564	1995.76
Titanium electric heater, 15kW, 400V, 3P, IP44	9.36	1.00	7301565	2072.53

	3 KW	6 KW	9 kW	15 kW
Power output (kW)	3	6	9	15
Load (A)	13	15	<b>Z</b> 3	22
Phases	1	3	3	3
Power supply 50/60 Hz (V)	230	400	400	400
Minimum flow (m³/h)	1	1	4	4
Maximum flow (m?/h)	17	17	17	17.
Net weight (kg)	7.7	8.6	8.6	8.6
Gross weight (kg)	8.8	9.7	9.7	9.7
ArtNr.	7301562	7301563	7301564	7301565

### DIMENSIONS



	Titanium electric heater
Length (mm)	594
Heighttinnt	222
Width enmi	200



# MEASURE, CONTROL AND DOSING SYSTEMS

254	Salt electrolysis systems
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## SALT ELECTROLYSIS SYSTEMS

WATER DISINFECTION WIT NaCl

## THIS IS HOW SALT ELECTROLYSIS WORKS

Through water treatment via salt electrolysis, the disinfectant is produced directly in the pool. To begin with, a small amount of salt is added to the pool water at the start of the swimming season, usually 2-4 g/l. This salt (NaCl), also known as table salt, is split by electrolysis into elemental chlorine (Cl<sub>2</sub>), hydrogen (H<sub>2</sub>), and hydroxide ions.

This highly effective free chlorine then disinfects the water and ultimately reacts back to NaCl. This means that the salt itself is not consumed in the process; the

salt concentration simply decreases due to backwashing.

The performance of chlorine production can be regulated either manually or automatically with the help of a REDOX measurement. The REDOX value represents – in simple terms – the disinfection effect of the pool water.

In addition to REDOX regulation, it is also essential to regulate the pH value, as free chlorine can only achieve its full effect in a narrow pH range of 7.0-7.4.



ÖVS Recommendation: Regardless of whether automatic measurement, control, and dosing technology is in place, a manual check is recommended at least once a week.





## **DIMENSIONING FOR SALT ELECTROLYSIS**

The dimensioning of the system depends on the following parameters: pool size, pump operating time, and whether it is an indoor or outdoor pool.

					POOL SI	ZE M <sup>3</sup>			
-		25	50	75	100	125	150	175	200
runtime [h]	4	15 g/h	25 g/h						
runti	6	10 g/h	20 g/h	25 g/h	35 g/h				
	8	10 g/h	15 g/h	20 g/h	25 g/h	35 g/h	35 g/h		
Filter pump	10			15 g/h	20 g/h	25 g/h	35 g/h	35 g/h	
Filte	12				20 g/h	25 g/h	25 g/h	35 g/h	35 g/h



Probes should overwinter in a storage solution. These, as well as spare parts and accessories, can be found in our webshop.

## OVERVIEW OF FUNCTIONS OF ALL SALT ELECTROLYSIS SYSTEMS



	iQntrol SALT-COMPLETE	iQntrol SALT-PRO	iQntrol SALT-MODBUS	TOUCH LOW SALT
Power supply		230 Vac - 5	50 Hz / 60 Hz	
Production	25 g/h	10 g/h – 35 g/h	15 g/h – 35 g/h	15 g/h – 30 g/h
Maximum power	174 W	75 W - 263 W	80,25 W - 187,25 W	187,5 W - 385 W
Required salt concentration	1,5 - 4 g/l	> 4-6 g/l	> 4-6 g/l	> 1-2 g/l
REDOX measurement	<b>~</b>	✓ *	✓ *	
ph-measurement	<b>~</b>		✓ *	✓ *
Automatic display of low salt content	<b>~</b>	✓ *	~	✓ *
Automatic display of high salt content	<b>~</b>	<b>~</b>	✓	~
Display of water temperature	<b>~</b>	✓ *	✓ *	✓ *
Self-cleaning cell	<b>~</b>	<b>~</b>	<b>~</b>	~
Cell lifespan display		~	~	~
Programmable relays		~	<b>~</b>	~
MODBUS-RTU interface			<b>~</b>	~
RS485 interface	<b>~</b>			
App-capable, LAN interface	<b>~</b>			
Poolmanagement funktions	<b>~</b>			
Automatic Alarm				
Water Flow Rate	✓	<b>v</b>	~	~
Chlor gas formation in the cell		<b>~</b>	<b>~</b>	~
Accessories				
Temperature Sensor Set		✔ *	✓ *	✓ *
Flow rate monitoring	<b>~</b>	✔ *	✓ *	✓ *

\*Not included in the delivery, accessories required.

## Salt electrolysis systems



#### » Includes pool management

- » Touchscreen
- » App-enabled

» Plug-and-play

» Low-salt capable (up to 12.5g Cl/h @ 2g/l salt concentration)

» Also suitable for magnesium salt



Class B DIN EN 17645



#### DID YOU KNOW THAT ...

...our iQntrol SALT-COMPLETE could just as well be called a hydrolysis system? Hydrolysis (from the ancient Greek hydor "water" and lysis "solution, decomposition, termination") formally refers to the splitting of a chemical compound through reaction with water. This means that every hydrolysis system is essentially a saltwater system.



**NOTE** Storage solution for the probes can be found in the following accessories.

#### iQntrol salt electrolysis system SALT-COMPLETE

iQntrol SALT-COMPLETE is a high-precision disinfection system with intelligent pool management functions, measures the salt content and the redox value, monitors the set pH value, adjusts the dosage to the changing ambient conditions, doses the set amount of algaecide daily in relation to the swimming pool volume

#### POOL MANAGEMENT FUNCTIONS

- Filter times (two time intervals per day)
- Level control: The water level can be monitored with the optional pressure sensor or float switch; the water level can be monitored in up to four levels for overflow basins

- Backwash control (backwash frequency): in combination with the Aquastar Easy 2 automatic backwash valve (backwash duration)

- Pump control: connection for ON/OFF pump via integrated socket, for speed-controlled pump via 4 potential-free contacts, when changing the valve position (automatic 6-way valve) the pump is

- switched off, when backwashing the speed is increased for more efficient backwashing
- Heating control: Intelligent control of the set water temperature for electric heaters, heat exchangers, heat pumps (supports temperature-dependent heat pump release)
- Economy mode possible for overflow basins

#### PRODUKCT DETAILS

- For private pools up to 75 m<sup>3</sup>
- Dosing capacity: 25g Cl/h
- Required salt concentration: 1.5 4 g/l
- Measuring parameters: Salt content, redox value, pH value, water temperature, flow rate
  - Dosing: pH minus, algaecide
- Dosing pump capacity: 60 ml/min, max. 1 bar
- App-capable, RS485+LAN interface, read & alarm functions
- Water-cooled
- Touch screen
- Ready to plug in
- Max. operating pressure: 1.5 bar
- Power supply: 230 V AC 50 60 Hz
- Incl. pH probe, Redox probe, electrode, fine filter with integrated flow and salinity sensor
- Max. output for directly plugged-in filter pumps: 1.4kW | 230V
- Frost protection: Winterisation without draining the water, heating is activated from a certain outside temperature and the pool pump is active 24 hours a day
- Protection class IP30

Product	G-kg	VE	Prod.No.	Price €
iQntrol salt electrolysis system SALT-Complete 25g Cl/h	14.00	1.00	7301688	4979.29

#### Accessories and spare parts

0.35	1.00	7301747	68.06
0.11	1.00	7301698	39.41
0.80	1.00	7301734	189.86
0.66	1.00	7301694	1067.50
1.90	1.00	7301697	1071.09
0.30	1.00	7301695	42.71
0.40	1.00	7301692	515.50
0.40	1.00	7301690	218.51
	0.11 0.80 0.66 1.90 0.30 0.40	0.11       1.00         0.80       1.00         0.66       1.00         1.90       1.00         0.30       1.00         0.40       1.00	0.11         1.00         7301698           0.80         1.00         7301734           0.66         1.00         7301694           1.90         1.00         7301697           0.30         1.00         7301695           0.40         1.00         7301692





### iQntrol salt electrolysis system SALT-MODBUS

#### PRODUCT DETAILS

- Highly efficient bi-polar cell
- Lock function display
- TFT colour touch screen
- Data Log
- Easy handling - MODBUS-RTU interface
- APP available for IOS and ANDROID (only available in combination with iQnnect Loxone®)
- 4 programmable relays for signal control of a frequency-controlled pump
- protection class IP65
- 3-year guarantee on device, 2-year guarantee on cell

Product	G-kg	VE	Prod.No.	Price €
iQntrol salt electrolysis system SALT-MODBUS 15g Cl/h self cleaning cell for private pools up to 50m3	6.00	1.00	7300971	1916.93
iQntrol salt electrolysis system SALT-MODBUS 20g Cl/h self cleaning cell for private pools up to 75m3	6.00	1.00	7300972	2078.63
iQntrol salt electrolysis system SALT-MODBUS 25g Cl/h self cleaning cell for private pools up to 100m3	6.00	1.00	7300973	2136.37
iQntrol salt electrolysis system SALT-MODBUS 35g Cl/h self cleaning cell for private pools up to 125m3	6.00	1.00	7300974	2406.34



### iQntrol salt electrolysis system SALT-PRO

#### PRODUCT DETAILS

- Low energy consumption
- Protection code IP65
- Low weight
- Compact and easy adaption for each installation
- Low operation temperature
- Improved performance with power supply with switching power supply
- Integrated micro processor control for operation hour analysis
- Digitales display, easy and intuitive handling
- 1 freely programmable relay, e.g. for the filter pump 3-year guarantee on device, 2-year guarantee on cell

Product	G-kg	VE	Prod.No.	Price €
iQntrol salt electrolysis system SALT-PRO 10g Cl/h self cleaning cell for private pools up to 25m3	6.00	1.00	7300560	1564.23
iQntrol salt electrolysis system SALT-PRO 15g Cl/h self cleaning cell for private pools up to 50m3	6.00	1.00	7300561	1622.95
iQntrol salt electrolysis system SALT-PRO 20g Cl/h self cleaning cell for private pools up to 75m3	6.00	1.00	7300562	1759.82
iQntrol salt electrolysis system SALT-PRO 25g Cl/h self cleaning cell for private pools up to 100m3	6.00	1.00	7300563	1808.67
iQntrol salt electrolysis system SALT-PRO 35g Cl/h self cleaning cell for private pools up to 125m3	6.00	1.00	7300564	2037.26



#### NOTE

Models from 50 - 100 g/h for hotel and public pool installations are available upon request.

Accessory packages such as pH and Redox sets can be found in the following accessories section.



#### Smart salt electroysis system TOUCH LOW SALT

Compact salt electrolysis system with IP65 housing, touch display, 15 - 30g for private pools

### TECHNICAL DATA

- Required salt concentration: 1-2 g/l
- Low energy consumption
- Protection code IP65
- Low weight
- Compact and easy adaption for each installation
- Low operation temperature
- Improved performance through power supply using a switching power supply Integrated micro processor control for operation hour analysis
- Touch display, easy and intuitive handling
- highly efficient bipolar cell
- DataLog
- 4 programmable signal relays
- 2 years guarantee for cell MODBUS-RTU interface

Product	G-kg	VE	Prod.No.	Price €
Smart salt electrolysis system TOUCH LOW SALT 15g Cl/h self clea- ning cell for private pools up to 50m3, MODBUS-RTU-ready	6.00	1.00	7301581	2568.82
Smart salt electrolysis system TOUCH LOW SALT 20g Cl/h self clea- ning cell for private pools up to 75m3, MODBUS-RTU-ready	6.00	1.00	7301582	3009.93
Smart salt electrolysis system TOUCH LOW SALT 30g Cl/h self clea- ning cell for private pools up to 100m3, MODBUS-RTU-ready	6.00	1.00	7301583	3982.20



#### **Smart Sea Salt**

Extracted and purified from sea salt in salt gardens or extracted by other methods. Smart sea salt contains small quantity of other particles such as salts of potassium, magnesium and manganese.

#### FEATURES

- Degree of purity 99,99%
- Smart sea salt has a positive effect on skin, muscles and bones due to the percentage of manganese
  - Very low workload during the season
- Safe storage and handling (no contact with hazardous pool chemistry substances)
- Low operation costs
- No substance withdraw due to natural salts
- Dosage: 4-6 kg/m³ and 1-2 kg/m³ for Low Salt electrolysis systems

Product	G-kg	VE	Prod.No.	Price €
Smart Sea Salt 1-2mm Grade for usage in combination with salt electrolysis systems for pool applications, 25 kg bag	25.00	1.00	7301260	18.30
Smart Sea Salt 2-5mm Grade for usage in combination with salt electrolysis systems for pool applications, 25 kg bag	25.00	1.00	7301261	18.30





Accessories

Product	G-kg	VE	Prod.No.	Price €
Transparent electrode holder d50, 3x sensor holders ½" internal thread	0.30	1.00	7300857	116.56
Closure plug ½" external thread for electrode holder	1.00	1.00	7300780	1.92
Sensor flow meter $\frac{1}{2}^{\prime\prime}$ male thread, without saddle	0.10	1.00	7300602	78.31
Temperature sensor set, incl. sensor holder $\%^{\ast}$ external thread, without saddle clamp	0.06	1.00	7300603	164.46
Redox (ORP) sensor incl. sensor holder $\ensuremath{\mathcal{U}}^{\ensuremath{\prime}}$ external thread , without saddle clamp	0.24	1.00	7300604	339.87
Dosing pump 1,5l/h	0.75	1.00	7300856	249.51
pH sensor incl. sensor holder $\ensuremath{\mathscr{V}}$ external thread and dosing pump, without saddle clamp	0.32	1.00	7300605	430.37
Electrode probe pH with 6 m cable length for all ADVANCED PRO and PREMIUM TOUCH devices	0.19	1.00	7301140	200.74
Sensor holder $\ensuremath{\rlap{\sc 2}}^{\mbox{\tiny "}}$ external thread for Smart salt electrolysis systems	0.10	1.00	7300855	30.47
Sensor earthing, ¾", wihtout saddle	0.68	1.00	7300609	13.90
Clamp saddle type "A" reinforced PP black female thread 5 -1/2" $$	0.25	60.00	73431	7.96
Clamp saddle type "B" reinforced PP black female thread 63-1/2"	0.29	40.00	71950	9.44
Clamp saddle type "A" reinforced PP black female thread 50-3/4"	0.25	60.00	73432	7.96
Clamp saddle type "B" reinforced PP black female thread 63-3/4"	0.30	40.00	73436	9.44
Buffer liquid pH 7, 90ml	0.10	1.00	7300776	15.82
Buffer liquid pH 4, 90ml	0.10	1.00	7300777	15.82
ORP buffer liquid 475mV, 90ml	0.10	1.00	7300778	18.82
Wearing parts set for Smart salt electrolysis systems consisting of: Peristaltic hose, injection valve, PVC hose for pressure and suction side dosing line and foot valve	0.29	1.00	7301544	105.84
Storage liquid for pH and REDOX probes	0.11	1.00	7301696	10.82



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NOTE pH and Redox sensors are considered consumables. Tips for winterizing the sensors can be found in the manual. Regular calibration can also be used for function testing.

## Qntrol CONTROL SYSTEMS

FOR OPTIMAL WATER QUALITY

## EVERYTHING UNDER CONTROL WITH IQNTROL MEASURE AND CONTROL SYSTEMS

The control systems DOS-COMPLETE and DOS-NET are high-precision disinfection systems that set new standards in pool water treatment. By using the smallest possible amounts of chemical agents, they ensure crystal-clear water in swimming pools up to 250 m<sup>3</sup>. The combination of precise measurement and tailored dosing automatically adjusts the dosage to changing environmental conditions. This not only saves chemicals but also time and effort.

With the internet connection, all parameters can be conveniently monitored from anywhere in the world. Through the integrated RS485 interface, easy integration into the iQnnect system is possible.









- » App-capable, RS485+LAN
- Dosage: Liquid chlorine, pH-minus,

algaecide, flocculant



Class B DIN EN 17645

#### iQntrol dosing system DOS-COMPLETE

iQntrol DOS-COMPLETE is a high-precision disinfection system with intelligent pool management functions. Thanks to the four dosing pumps, disinfection, pH liquid, algaecide and flocculant can be dosed with one device. The touchscreen display shows all the information about the water quality and makes it easy to set up the entire system. With the internet connection, you can monitor the parameters of your pool via a mobile and/or web application.

#### WATER TREATMENT

The DOS-COMPLETE dosing system ensures crystal-clear water in your pool using the smallest possible quantities of chemical additives. The free chlorine or redox value is measured using a membrane probe or redox probe. It monitors the set pH value of the pool water and automatically adjusts the dosing to the changing ambient conditions.

In addition, the dosing system doses the set amount of algaecide daily in relation to the swimming pool volume. The additional use of algaecide reduces the chlorine requirement. The slow, continuous dosing of flocculant binds even the smallest impurities and improves filter efficiency.

#### POOL MANAGEMENT FUNCTIONS

- Filter times (two time intervals per day)
- Level control: The water level can be monitored with the optional pressure sensor or float switch; the water level can be monitored in up to four levels for overflow basins
- Backwash control (backwash frequency): in combination with the Aquastar Easy 2 automatic backwash valve (backwash duration)

- Pump control: connection for ON/OFF pump via integrated socket, for speed-controlled pump via 4 potential-free contacts, when changing the valve position (automatic 6-way valve) the pump is switched off, when backwashing the speed is increased for more efficient backwashing

- Heating control: intelligent control of the set water temperature for electric heaters, heat exchangers, heat pumps (supports temperature-dependent heat pump release)

- Economy mode possible for overflow basins

#### PRODUCT DETAILS

- For pools up to 250 m<sup>3</sup>
- Measuring parameters: Redox value/free chlorine, pH value, water temperature, flow rate
- Dosing: liquid chlorine, pH minus, algaecide, flocculant
- Dosing pump capacity: 60 ml/min, max. 1 bar
- App-capable, RS485+LAN interface, read & alarm functions
- Touch screen
- Plug-in ready
- Max. operating pressure: 1.5 bar
- Connection: external thread 1/4"
- Power supply: 230 V AC 50 60 Hz
- Incl. flow sensor with fine filter, pH probe, Redox/CLF probe
- Filter pump connection: max. 230 V, potential-free relay
- Max. power for directly connected filter pumps: 1.4kW | 230V
- Frost protection: Winterisation without draining the water, heating is activated from a certain outside
- temperature and the pool pump is active 24 hours a day
- Protection class IP30

Product	G-kg	VE	Prod.No.	Price €
iQntrol dosing system DOS-Complete CLF (free chlorine measure- ment)	9.00	1.00	7301685	5687.14
iQntrol dosing system DOS-Complete Redox	9.00	1.00	7301686	5129.74



float switch

#### Accessories and spare parts

Product				
Transparent vaccination line 4x ¼" - threads, d50/63	0.35	1.00	7301747	68.06
Storage liquid for pH and REDOX probes, 20ml, for correct storage in winter, can extend service life	0.11	1.00	7301696	10.82
pH electrode Long Life, high-quality glass electrode as spare part as soon as the end of the service life has been reached	0.40	1.00	7301690	218.51
Float switch, for installation in skimmer pools, connecting cable device <> control box not included	0.80	1.00	7301734	189.86
Level sensor, hydrostatic level sensor for installation in skimmers or surge tanks	0.66	1.00	7301694	1067.50
Peristaltic tube set, consisting of: Peristaltic tube, special silicone grease and screw connections	0.30	1.00	7301695	42.71





» App-compatible, RS485+LAN

» Dosage:

Liquid chlorine, pH-minus



Class B DIN EN 17645

## iQntrol dosing system DOS-NET

iQntrol DOS-NET is a compact dosing system for water treatment that directly measures the redox potential of the swimming pool water and thus doses the minimum amount of chemical additives required.

The system also monitors the set pH value of the pool water and automatically adjusts the dosing to the changing ambient conditions.

The touchscreen display allows full control over the measurement and regulation of the water values in the pool. With the internet connection, you can monitor the parameters of your pool via a mobile and/ or web application.

## PRODUCT DETAILS

- For pools up to 250 m<sup>3</sup>
   Measuring parameters: Redox value, pH value, water temperature, flow rate
- Dosing: liquid chlorine, pH minus
- Dosing pump capacity: 60 ml/min, max. 1 bar
- App-capable, RS485+LAN interface, read & alarm functions
- Touch screen
- Plug-in ready
- Max. Operating pressure: 1.5 bar
- Connection: sample water line and injection valve: external thread 1/4"
- Power supply: 230 V AC 50 Hz
- Incl. flow sensor with fine filter
- Power consumption: 14 W
- Frost protection: Winterisation without draining the water, heating is activated from a certain outside temperature and the pool pump is active 24 hours a day
   Protection class IP50

Product	G-kg	VE	Prod.No.	Price €
iQntrol dosing system DOS-NET, pH/redox	4.50	1.00	7301687	3141.61





» Wear-free Redox probe

- » App-compatible in combination with Loxone
- » Dosage Liquid chlorine, pH-minus



Class B DIN EN 17645

#### iQntrol dosing system DOS-MODBUS

The iQntrol DOS-MODBUS is a Modbus-capable chlorine dosing system for reliable compliance with the water quality.

The measured values (Redox value, pH value, temperature), current operating conditions as well as malfunctions and alarms can be displayed on any browser-enabled device. (only possible in combination with iQnnect!)

Self-priming peristaltic metering pumps inject disinfectants and pH regulators directly into the sample water flowing through. The flow monitoring switches the device off automatically, if the flow cell flow is too low.

Including redox electrode consisting of large-area, self-cleaning platinum probe. This ensures a reliable response to changes in the water quality and reliable maintenance of the desired disinfection power. The redox electrode is wear-free and lasts the life of the device.

A compact, transparent acrylic glass block with measuring cell lighting is not only an eye-catcher, it is used to indicate the device status.

The system is pre-assembled on a mounting plate and delivered individually tested. A simple, quick installation is guaranteed.

#### TECHNICAL DETAIL

- For pools up to 100m<sup>3</sup> (bigger pools/volumes upon request)
- Measuring parameters: Redox value, pH value, temperature, flow rate
- Dosing: liquid chlorine, pH minus
- Disinfection dosage rate: approx. 1.2 l/h standard
- Dosing performance pH regulation: approx. 1 l/h standard
- Power supply: 230 V/AC 50 Hz
- Dimensions: 48 x 67x 17 cm
- Included: fine filter 300µm ¼"

Product	G-kg	VE	Prod.No.	Price €
iQntrol dosing system DOS-MODBUS measure, control & dosing technology pH / redox for private pools for disinfection, pH-value and temperature, 7″ touch-grafic display, mounting plate, MODBUS	17.50	1.00	7301302	7980.89







» Dosage: Liquid chlorine, pH-minus



Class C DIN EN 17645

## iQntrol dosing system DOS-PRO

The iQntrol DOS-PRO controls the measured variables pH, Redox value and temperature and is suitable for disinfection with liquid chlorine. Occurring faults and alarms are displayed with self-explanatory icons on the touch display.

Self-priming peristaltic metering pumps inject liquid chlorine and pH regulators directly into the sample water flowing through. pH and redox electrodes ensure that the desired water values are maintained. The flow monitoring switches the device off automatically if the flow cell flow is too low.

### TECHNICAL DETAIL

- For Pools up to 100m<sup>3</sup> (bigger pools/volume upon request)
- electrical connection: 110-240V/AC 50 Hz
- Measuring parameters: Redox, pH value, temperature
- Dosing: liquid chlorine, pH minus
- Dosage rate liquid chlorine: approx. 1.2 l/h
- Dosing performance pH regulation: approx. 0.7 l/h
- Dimensions: 42.5 x 33.5x 15 cm
- Including fine filter 300µm ¼"

Product	G-kg	VE	Prod.No.	Price €
iQntrol dosing system DOS-PRO measure, control & dosing techno- logy ph / redox for private pools for disinfection, pH-value and temperature, 3,2" touch-grafic display, mounting plate	7.60	1.00	7301303	5366.26



#### Accessories and spare parts

Product	G-kg	VE	Prod.No.	Price €
Microfilter 300 $\mu m$ ¼" complete with hose connectio	0.16	1.00	7301304	125.23
Cleaning pearls 5ml for redox probe, for the cleaning of the redox probe	0.02	1.00	7301471	14.66
Maintenance set flow controller for DOS-MODBUS	0.02	1.00	7301472	75.78
Sealing set for redox electrode 1/2" for DOS-MODBUS, should be replaced once a year	0.01	1.00	7301473	10.35
pH electrode 55mm for DOS-MODBUS	0.09	1.00	7301474	240.46
ORP electrode 120mm for DOS-PRO	0.10	1.00	7301475	324.20
pH electrode 120mm for DOS-PRO	0.10	1.00	7301476	291.47
Dosing cassette SR10 for DOS-MODBUS and DOS-PRO, spare dosing cassette should be exchanged annually	0.03	1.00	7301477	158.70
Valve rubber 9x1, 5x14 (2 pieces) for DOS-MODBUS and DOS-PRO	0.01	1.00	7301478	7.35
Storage liquid for pH and REDOX probes, 20ml, for correct storage in winter, can extend service life	0.11	1.00	7301696	10.82



Liquid chlorine, pH-minus

## iQntrol dosing system DOS-ECO pH Redox

iQntrol DOS-ECO automatically regulates the pH value and the redox value at the same time. The dosing system adjusts the dosing (injection quantity) to the chemical requirement. Ideally suited for retrofitting, horizontal or vertical installation possible.

- integrated pumps pH value 1.5l/h and redox value 1.5l/h
- includes complete kit (2 in 1 probe holder) for quick and easy installation
- for pools up to max. 90 m<sup>3</sup>
- ideal for subsequent automation of water treatment
- optional chemical level monitoring using special suction lances

Product	G-kg	VE	Prod.No.	Price €
iQntrol dosing system DOS-ECO pH Redox 1,51/h pH minus and chlorine dosing, incl. 2 in 1 sensor holder, d50 & d63	2.00	1.00	7300333	1806.34



**Dosage:** 

Class B DIN EN 17645



2-in-1 sensor holder



NOTE SPARE PARTS The peristaltic hose is considered a wear part.

Please check the hose for damage at the start of the season.

### Spare parts DOS-ECO

Product	G-kg	VE	Prod.No.	Price €
pH-Sensor for Smart water treatment systems	0.32	1.00	7300486	180.80
Redox Sensor for Smart water treatment systems	0.24	1.00	7300487	195.62
Buffer solution pH 7, 90ml	0.10	1.00	7300776	15.82
Buffer liquid pH 4, 90ml	0.10	1.00	7300777	15.82
ORP buffer solution 475mV, 90ml	0.10	1.00	7300778	18.82
Hydraulic hose PVC, 4x6mm, length: 4m, transparent	0.10	1.00	7300779	17.97
Peristaltic hose 6x9 mm for dosing pump	0.00	1.00	7300899	21.35
Probe holder 2 in 1	0.35	1.00	7301253	205.33
Injection valve for 2 in 1 probe holder	0.15	1.00	7301744	58.49
Storage liquid for pH and REDOX probes, 20ml, for correct storage in winter, can extend service life	0.11	1.00	7301696	10.82

#### Niveau sensor, lance for chemical container

Product	G-kg	VE	Prod.No.	Price €
Niveau sensor, lance for chemical container	0.53	1.00	7300775	178.25







**Dosage: Liquid chlorine** 

## Aseko Dosing system PP60 Redox

The dosing system automatically measures and regulates the redox value of the pool water. The data is easy to read and set via the LED display. A glass probe and peristaltic dosing pump are integrated. User-friendly operation, easy installation and compact design.

#### PRODUCT DETAILS

- For pools and whirlpools up to 250 m<sup>3</sup>
- Measuring parameters: Redox potential
- Dosing: Liquid chlorine
- Dosing pump output: 60 ml/min, max. 1 bar
- Touchscreen
- Plug-in ready
- Max. operating pressure: 1.5 bar
- Connection: Measuring water line and injection valve: external thread 1/4"
- Power supply: 230 V AC 50 Hz
- Protection class IP30

Product	G-kg	VE	Prod.No.	Price €
Aseko dosing system PP60 Redox, LED display, integrated dosing pump, incl. glass probe, for pools and whirlpools up to 250m <sup>3</sup>	2.20	1.00	7301746	1106.90



**Dosage:** pH-minus oder pH-plus

#### Aseko Dosing system PP60 pH

The dosing system automatically measures and regulates the pH value of the pool water. The data is easy to read and set via the LED display. A glass probe and peristaltic dosing pump are integrated. User-friendly operation, easy installation and compact design.

#### PRODUCT DETAILS

- For pools and whirlpools up to 250 m<sup>3</sup>
- Measuring parameters: pH value
- Dosing: pH minus or pH plus
- Dosing pump output: 60 ml/min, max. 1 bar
- Touchscreen
- Plug-in ready
- Max. operating pressure: 1.5 bar
- Connection: Measuring water line and injection valve: external thread 1/4"
- Power supply: 230 V AC 50 Hz
- Protection class IP30

## Dundunt

Product	G-kg	VE	Prod.No.	Price €
Aseko dosing system PP60 pH, for ph-minus or ph-plus, LED display, integrated dosing pump. incl. glass probe, for pools and whirlpools up to 250m <sup>3</sup>	2.20	1.00	7301748	1106.90



**Dosierung:** Flocculant

#### Aseko Dosing pump PP10 Floc+c

The peristaltic pump is suitable for the automatic dosing of FLOC+C, but also for other flocculants and coagulants specifically designed for the treatment of swimming pool water and whirlpools. The pump doses according to the set dosage amount per hour. User-friendly operation, easy installation and compact design.

### PRODUCT DETAILS

- For pools and whirlpools up to 250 m<sup>3</sup>
- Dosing: flocculant
- Dosing pump output: 10 ml/min, max. 1 bar
- Ready to plug in
- Max. operating pressure: 1.5 bar
- Connection: injection valve: external thread 1/4"
- Power supply: 230 V AC 50 Hz
- Protection class IP50

Product	G-kg	VE	Prod.No.	Price €
Aseko dosing pump PP10 Floc+c, automatic time dosing, ready to plug in, IP50, for pools and whirpools up to 250m³	2.20	1.00	7301749	648.38



## **ICO Pool Partner V2**

The ICO pool partner for private pools measures the pH value, the ORP/Redox value and the pool temperature. The salt version also measures the conductivity/TDS (salt content). The ICO pool partner transmits these values to your end device via Wifi/Bluetooth. Suggestions for further water treatment are issued and alarm messages are sent.

CHARACTERISTICS

- Low floating line (approx. 18 mm), can also be used with pool covers
- Total height 150 mm
- Incl. 2 or 3 Plug&Play probes: ph, Redox or TDS
- Longlasting, changeable sensores
- Steady control of water conditions
- rechargeable battery via USB, long battery life
- Simple connection to the local wifi net and mobile device.
  - Free download app
  - Spare part service

Product	G-kg	VE	Prod.No.	Price €
ICO Pool Partner V2 incl. pH, ORP/Redox & temperature sensor	1.50	1.00	7301757	633.59
ICO Pool Partner V2 Salt incl. pH, ORP/Redox, temperature sensor & TDS	1.50	1.00	7301758	717.16



#### ICO Spa Partner V2 for spa and whirlpools

The ICO Spa Partner for spa and whirlpools measures the pH value, the ORP/Redox value and the pool temperature. The salt version also measures the conductivity/TDS (salt content). The ICO Spa Partner transmits these values to your end device via Wifi/Bluetooth. Suggestions for further water treatment are issued and alarm messages are sent.

#### CHARACTERISTICS

- Low floating line (approx. 18 mm), can also be used with pool covers
- Total height 150 mm
- Incl. 2 or 3 Plug&Play probes: ph, Redox or TDS
- Longlasting, changeable sensores
- Steady control of water conditions
- rechargeable battery via USB, long battery life
- Simple connection to the local wifi net and mobile device.
- Free download app
- Spare part service

Product	G-kg	VE	Prod.No.	Price €
ICO Spa Partner V2 incl. pH, ORP/Redox & temperature sensor	1.50	1.00	7301779	633.59
ICO Spa Partner V2 Salt incl. pH, ORP/Redox, temperature sensor & TDS	1.50	1.00	7301780	717.16



## Spare Parts for ICO POOL/SPA Partner

Product	G-kg	VE	Prod.No.	Price €
Replacement sensor pH for ICO pool partner	0.15	1.00	7300255	180.42
Replacement sensor ORP/Redox for ICO pool partner	0.15	1.00	7300256	201.35
Replacement sensor conductivity for ICO pool partner	0.19	1.00	7300257	201.35
Calibration kit for ICO Pool & Spa Partner	0.16	1.00	7300860	61.62
Replacement sensor ORP/Redox gold for ICO pool partner (for saltwater pools)	0.15	1.00	7300805	224.42



Model 110 W

» Up to 95% reflection

#### **UV-C** water treatment

this water treatment was developed by latest state of the art know-how refering highly reflective reactor casing materials. This leads to 95% reflectivity (20 – 28% with common stainless steel) and inhibition of growth of micro-organisms.

UV-C technology - neutralizes bacteria and viruses that even chlorine cannot kill. Reduce chlorine consumption - enjoy pure and clean water.

- compatible with liquid chlorine or salt electrolysis systems
- Self-cleaning and repellent inner surface
- Incl. flow sensor and operating time display via colored LED

#### **TECHNICAL DATA**

- voltage: 220 240 V, 50 60 Hz
- max. operation pressure: 3 bar
- max. flow one tube: 21 m3/h, 55 W lamp, pools up to 50 m3 max. flow two tubes: 42 m3/h, 2 x 55 W lamp, pools up to 100 m3
- lamp life span: bis 9.000 h
- protection code IP55
- connection: ABS solvent 2"/63 mm, incl. reduction for1 1/2" or 50 mm

Product	G-kg	VE	Prod.No.	Price €
UV-C Water Treatment 55W 220-240V, pmax. 3bar, Vmax 21 m3/h, d63/50, life span lamp (9000 Std.) incl. incl. flow switch and analogue lamp life indicator	9.00	1.00	7301024	1002.62
UV-C Water Treatment 110W 220-240V, pmax. 3bar, Vmax 42 m3/h, d63/50, life span lamp (9000 Std.) incl. flow switch and analogue lamp life indicator	10.00	1.00	7301025	1440.44

Model 110 W

Model 55 W

ECO

#### » 95% reflection

- » Photocatalysis
- » Titanium lining

## **Quantum Hybrid UV water treatment**

Quantum produces crystal-clear, hygienic pool water by Nano Crystal Technology; meaning that photokatalytic reaction produces additional oxidisers, which transforms organic substances as sun oil, biofilm and urea to their harmless molecular formation. Enjoy pure and clean water.

- Combined Photocatalytic & Hydroxyl Radical and UV technology
- Destroys bacteria, micro-organisms, pathoganic agents and viruses than even chlorine cannot kill
- Reduces chlorine consumption
- Sea water suitable
- Compatible with liquid chlorine and salt electrolysis systems
- Flow monitor included
  - Control lamp for lamp exchange

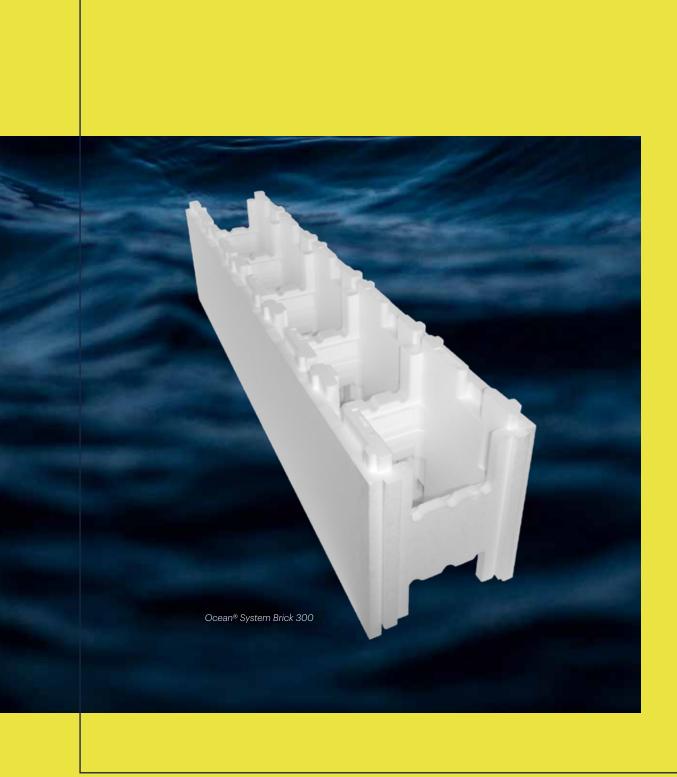
#### **TECHNICAL DATA**

- Voltage: 220 240 V, 50 60 Hz
- Max operation pressure: 3 bar
- Max flow single tube: 12 m3/h, 55 W lamp, pools up to 65 m3
- Max flow double tube: 24 m3/h, 2 x 55 W lamp, pools up to 130 m3 • Lamp life cycle: up to 14.000 h
- Protection code IP55
- Water connections: ABS solvent connection 2"/63 mm, incl. reduction for 11/2" or 50 mm

Product	G-kg	VE	Prod.No.	Price €
Quantum Photocatalytic Water Treatment 55W	6.63	1.00	740104	2243.89
Quantum Photocatalytic Water Treatment 110W	10.83	1.00	740105	2997.37

## Accessories for UV-C and Quantum

Product	G-kg	VE	Prod.No.	Price €
UV replacement lamp for Quantum or UV-C 55W/110W	0.53	1.00	7300337	131.26



## SWIMMING POOL LINERS & OCEAN® SYSTEM BRICKS

270	Swimming pool liner anti-slip
274	Accessories
276	Ocean <sup>®</sup> system brick
279	Ocean <sup>®</sup> Brick pool system

## ACRYLIC SWIMMING POOL LINERS

## TO EVERY POOL ITS OWN COLOR

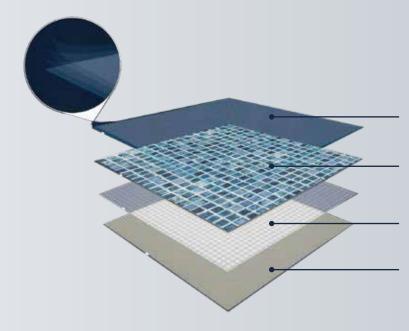
## SWIMMING POOL LINERS WITH ACRYLIC COATING

Our swimming pool linings are coated with acrylic. The material properties of the 4-layer, 1.5 mm thick, fabric-reinforced films guarantee waterproofness, color fastness and chlorine resistance for many years.

They can be laid on any type of surface using hot air welding. The special acrylic coating optimally protects the waterproofing membrane against UV radiation, staining, abrasion, scratching and microorganisms. This protects the pool lining from daily environmental influences and premature ageing and makes it particularly easy to maintain.



Reference installation: Haogenplast, Egypt



## BASIC STRUCTURE OF ACRY-LIC SWIMMING POOL LINERS

4. LAYER / TOP LAYER Acrylic coating (4-layer) for increased abrasion, stain and UV resistance

3. LAYER PVC layer (75 mic), light-resistant printing pigments against color fading, anti-fungal function, chlorine and UV resistance

2. LAYER Strong polyester fabric with extremely high dimensional stability

1. LAYER / BUTTOM LAYER PVC layer (75 mic), anti-fungal function, chlorine and UV resistance







## POOL LINERS UNI 3D

Our proven Uni-Colour liners are getting an upgrade: The 3D surface adds a fascinating depth effect and new radiance to the classic solid colors. See for yourself and request a sample now. >> info@peraqua.com



## SWIMMING POOL LINERS STONETILE SMARAGD

The unique STONETILE design offers an excellent sealing solution for the construction or renovation of private pools.

The STONETILE series is formulated with exceptional ingredients, including an enhanced surface coating that ensures excellent stain resistance, outstanding UV resistance, and a slip-resistant, perforated stone grip with Antislip properties.



» NF 15836-2 Certificate

## Swimming pool liner deluxe/ACRYL/Anti-slip

1,5mm fabric reinforced, roll length 25m (anti-slip 5m), 12 rolls / palette, roll 1,65m = 41,25m2 / roll 2,05m = 51,25m2 / roll = 8,25m2 prices/m2







## Swimming pool liner deluxe white

Product	G-kg	VE	Prod.No.	Price €
Swimming pool liner deluxe, 165 cm	2.00	41.25	77449	32.60
Swimming pool liner deluxe, 205 cm	1.83	51.25	77450	32.60
ACRYL swimming pool liner deluxe, 165 cm	1.83	41.25	77431	36.91
ACRYL swimming pool liner deluxe, 205 cm	1.83	51.25	78471	36.91
Swimming pool liner deluxe, 165 cm, anti-slip, l=5m coil	1.90	8.25	77437	57.15
Swimming Pool Liner 3D-UNI white, width 165 cm	2.50	41.25	7301711	39.94

## Swimming pool liner deluxe sand

Product	G-kg	VE	Prod.No.	Price €
Swimming pool liner deluxe, 165 cm	2.00	41.25	77447	32.60
Swimming pool liner deluxe, 205 cm	1.83	51.25	77448	32.60
ACRYL swimming pool liner deluxe, 165 cm	1.83	41.25	77430	36.91
ACRYL swimming pool liner deluxe, 205 cm	1.83	51.25	78480	36.91
Swimming pool liner deluxe, 165 cm, anti-slip, l=5m coil	1.90	8.25	77436	57.15
Swimming Pool Liner 3D-UNI sand, width 165 cm	2.50	41.25	7301712	39.94



## Swimming pool liner deluxe light grey

Product	G-kg	VE	Prod.No.	Price €
Swimming pool liner deluxe, 165 cm	2.00	41.25	77443	32.60
Swimming pool liner deluxe, 205 cm	1.83	51.25	77444	32.60
ACRYL swimming pool liner deluxe, 165 cm	1.83	41.25	77428	36.91
ACRYL swimming pool liner deluxe, 205 cm	1.83	51.25	78476	36.91
Swimming pool liner deluxe, 165 cm, anti-slip, I=5m coil	1.90	8.25	77434	57.15
Swimming Pool Liner 3D-UNI light grey, width 165 cm	2.50	41.25	7301713	39.94



## Swimming pool liner deluxe dark grey

Product	G-kg	VE	Prod.No.	Price €
Swimming pool liner deluxe, 165 cm	2.00	41.25	77441	32.60
Swimming pool liner deluxe, 205 cm	1.83	51.25	77442	32.60
ACRYL swimming pool liner deluxe, 165 cm	1.83	41.25	77427	36.91
ACRYL swimming pool liner deluxe, 205 cm	1.83	51.25	78473	36.91
Swimming pool liner deluxe, 165 cm, anti-slip, I=5m coil	1.90	8.25	77433	57.15
Swimming Pool Liner 3D-UNI dark grey, width 165 cm	2.50	41.25	7301714	39.94



## Swimming pool liner deluxe light blue

Product	G-kg	VE	Prod.No.	Price €
Swimming pool liner deluxe, 165 cm	2.00	41.25	77445	32.60
Swimming pool liner deluxe, 205 cm	1.83	51.25	77446	32.60
ACRYL swimming pool liner deluxe, 165 cm	1.83	41.25	77429	36.91
ACRYL swimming pool liner deluxe, 205 cm	1.83	51.25	78477	36.91
Swimming pool liner deluxe, 165 cm, anti-slip, I=5m coil	1.90	8.25	77435	57.15
Swimming Pool Liner 3D-UNI light blue, width 165 cm	2.50	41.25	7301715	39.94

## Swimming pool liner deluxe dark blue

Product	G-kg	VE	Prod.No.	Price €
Swimming pool liner deluxe, 165 cm	2.00	41.25	77439	32.60
Swimming pool liner deluxe, 205 cm	1.83	51.25	77440	32.60
ACRYL swimming pool liner deluxe, 165 cm	1.83	41.25	77426	36.91
ACRYL swimming pool liner deluxe, 205 cm	1.83	51.25	78472	36.91
Swimming pool liner deluxe, 165 cm, anti-slip, I=5m coil	1.90	8.25	77432	57.15
Swimming Pool Liner 3D-UNI dark blue, width 165 cm	2.50	41.25	7301716	39.94





## Swimming pool liner deluxe caribbean green

Product	G-kg	VE	Prod.No.	Price €
Swimming pool liner deluxe, 165 cm	2.00	41.25	77538	32.60
ACRYL swimming pool liner deluxe, 165 cm	1.83	41.25	78478	36.91
Swimming pool liner deluxe, 165 cm, anti-slip, l=5m coil	1.90	8.25	74206	57.15

#### NF 15836-2 certification

» Stain resistant

» Top chlorine resistance

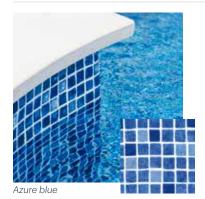
» Suitable for public pools



### ACRYL swimming pool liner deluxe mosaic & marble

1,5mm fabric reinforced, roll length 25m, 12 rolls / palette, roll 1,65m = 41,25m2 prices / m

Product	G-kg	VE	Prod.No.	Price €
ACRYL swimming pool liner deluxe fabric reinforced PVC 165 mm MOSAIC azure blue	2.00	41.25	75011	52.26
ACRYL swimming pool liner deluxe fabric reinforced PVC 165 cm MARBLE blue	2.00	41.25	75015	52.26





Marble blue





#### NF 15836-2 certification »

» Stain resistant

**Top chlorine resistance** »



#### Swimming pool liner deluxe larch, wood look

at the end of a long developing process a unique design could be reached that offers a real challenge to natural wood. Through a complex printing and embossing process we have a liner guaranteeing a perfect look & feel wood design.

Product	G-kg	VE	Prod.No.	Price €
Swimming Pool Liner deluxe LARCH nature, width 165 cm, thickness 1,50 mm, roll length 25 m	2.00	41.25	7301294	53.30
Swimming Pool Liner deluxe LARCH light, width 165 cm, thickness 1,50 mm, roll length 25 m	2.00	41.25	7301295	53.30
Swimming pool liner deluxe antislip fabric reinforced PVC, LARCH nature, width 165 cm, thickness 1,50mm, roll length 5m	1.90	8.25	7301305	65.34
Swimming pool liner deluxe antislip fabric reinforced PVC, LARCH light, width 165 cm, thickness 1,50mm, roll length 5m	1.90	8.25	7301306	65.34



Larch nature



#### NF 15836-2 certification »

» Stain resistant

**Top chlorine resistance** 



## **Swimming Pool Liner deluxe STONETILE**

The unique STONETILE designs provides a magnificent waterproofing solution to build or renovate private pools.

STONETILE range is formulated with exceptional ingredients, including enhanced surface coating, ensuring superior stain resistance, superior UV resistance and a stone perforated dry-feel non-slip grip.

#### The dimensions of the tiles vary, mostly ~40cm by ~20cm

Product	G-kg	VE	Prod.No.	Price €
Swimming Pool Liner deluxe STONETILE Elegance, width 165 cm, thickness 1,5mm	2.50	41.25	7301503	65.18
Swimming Pool Liner deluxe STONETILE grey, width 165cm, thickness 1,5mm	2.50	41.25	7301504	65.18
Swimming Pool Liner deluxe STONETILE golden, width 165cm, thickness 1,5mm	2.50	41.25	7301505	65.18
Swimming Pool Liner deluxe STONETILE Emerald, width 165 cm, thickness 1.5 mm	2.50	41.25	7301579	65.18



- » NF 15836-2 certification
- » Stain resistant

» Top chlorine resistance



## Swimming pool liner deluxe STONEFLEX

Our exclusive STONEFLEX designs make it possible to build or renovate pools with a water-proof 3D membrane. Flex-liners have an improved surface coating, which makes cleaning easier and the UV-protection is better. Flex-liners have 6 layers Acryl protection coating and are classified as B-anti-slip category prices / m2, thickness 1.5 mm.

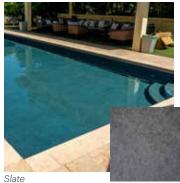
Product	G-kg	VE	Prod.No.	Price €
Swimming pool liner deluxe STONEFLEX, 165 cm light grey	2.50	41.25	7301026	65.18
Swimming pool liner deluxe STONEFLEX, 165 cm grey	2.00	41.25	740111	65.18
Swimming pool liner deluxe STONEFLEX, 165 cm sand	2.00	41.25	740112	65.18
Swimming pool liner deluxe STONEFLEX, 165 cm silver	2.00	41.25	7300457	65.18
Swimming pool liner deluxe STONEFLEX, 165 cm marble	2.00	41.25	7300908	65.18
Swimming Pool Liner deluxe STONEFLEX, 165 cm ivory	2.00	41.25	7301338	65.18
Swimming Pool Liner deluxe STONEFLEX, 165 cm slate	2.00	41.25	7301339	65.18













Silver



Ivory



## Liquid PVC

for liner welding, 1l bottle, serves to seal the seam and has no condensing function

Product	G-kg	VE	Prod.No.	Price €
Liquid-PVC weld sealing dark blue	1.20	6.00	77457	60.59
Liquid-PVC weld sealing dark grey	1.20	6.00	77458	60.59
Liquid-PVC weld sealing light grey	1.20	6.00	77459	60.59
Liquid-PVC weld sealing light blue	1.20	6.00	77460	60.59
Liquid-PVC weld sealing sand	1.20	6.00	77461	60.59
Liquid-PVC weld sealing white	1.20	6.00	77462	60.59
Liquid-PVC weld sealing caribbean green	1.20	1.00	74205	60.59
Liquid-PVC weld sealing STONEFLEX light grey	1.20	1.00	7301027	78.36
Liquid-PVC weld sealing STONEFLEX grey	1.20	1.00	7300891	78.46
Liquid-PVC weld sealing STONEFLEX sand	1.20	6.00	7300889	78.46
Liquid-PVC weld sealing STONEFLEX silver	1.20	6.00	7300890	78.46
Liquid-PVC weld sealing STONEFLEX marble	1.20	6.00	7300913	78.36
Liquid-PVC weld sealing STONEFLEX ivory	1.20	6.00	7301340	78.36
Liquid-PVC weld sealing STONEFLEX slate	1.20	6.00	7301341	78.36
Liquid-PVC weld sealing LARCH nature	1.20	6.00	7301296	66.44
Liquid-PVC weld sealing LARCH light	1.20	6.00	7301297	66.44
Liquid-PVC weld sealing STONETILE Elegance	1.20	1.00	7301506	78.46
Liquid-PVC weld sealing STONETILE Grey	1.20	1.00	7301507	78.46
Liquid-PVC weld sealing STONETILE golden	1.20	1.00	7301508	78.46
Liquid PVC weld sealing STONETILE Emerald	1.20	1.00	7301580	78.46



## Griffon<sup>®</sup> M-385 foil adhesive

for smaller repair work, for PVC foil

Product	G-kg	VE	Prod.No.	Price €
Griffon® M-385 foil adhesive for PVC foil 250 ml	0.27	24.00	78555	29.43

## Smart swimming pool fleece

price/m²

special net prices from 10 pallets on request, Ocean® swimming pool liner systems incl. accessories, as PVC liquid film an fleece, are optimally matched to each other, therfore we recommend the use in the system to avoid negative interactions

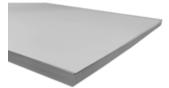


Product	G-kg	VE	Prod.No.	Price €
Smart swimming pool fleece OCEANCOAT 450				
Smart Swimming Pool Fleece OCEANCOAT 450, 200 cm	0.45	100.00	77456	11.30
Smart Swimming Pool Fleece OCEANCOAT 450, 165 cm	0.45	82.50	77455	11.30
Smart swimming pool fleece OCEANCOAT 400				
Smart Swimming Pool Fleece OCEANCOAT 400, 200 cm	0.40	100.00	77454	13.79
Smart Swimming Pool Fleece OCEANCOAT 400, 165 cm	0.40	82.50	77453	13.79
Smart swimming pool fleece OCEANCOAT 300				
Smart Swimming Pool Fleece OCEANCOAT 300, 200 cm, (I=100m)	0.30	200.00	77452	6.03
Smart Swimming Pool Fleece OCEANCOAT 300, 200 cm, (I=50m)	0.45	100.00	7301226	6.03
Smart Swimming Pool Fleece OCEANCOAT 300, 165 cm, (I=100m)	0.30	165.00	77451	6.03
Smart Swimming Pool Fleece OCEANCOAT 300, 165 cm, (I=50m)	0.30	82.50	74834	6.03

## Smart coated sheet metal plate

one side PVC coated, 200 x 100 mm, thickness 0.8 mm, light grey, uncut, price / m2  $\,$ 

Product	G-kg	VE	Prod.No.	Price €
Smart sheet metal plate 200 x 100 mm	6.10	100.00	77606	58.29





## Smart sheet steel angles

Inside or outside coating, Price/pcs

Product	G-kg	VE	Prod.No.	Price €
Sheet steel angle 90° coated, 50x50x2000 mm, outside coating, grey	1.09	1.00	74835	13.63
Sheet steel angle 90° coated, 70x40x2000 mm, outside coating, grey	1.11	1.00	74836	15.22
Sheet steel angle 90° coated, $80x20x2000$ mm, outside coating, grey	1.09	1.00	74837	13.63
Sheet steel angle 90° coated, 50x20x2000 mm, outside coating, grey	0.76	1.00	74838	13.63
Sheet steel angle 90° coated, 50x50x2000 mm, inside coating, grey	1.09	1.00	74839	13.63
Sheet steel angle 90° coated, 80x20x2000 mm, inside coating, grey	1.09	1.00	74840	13.63
Sheet steel angle 90° 50x20x2000 mm, inside coating, grey	0.76	1.00	74841	13.63
Steel sheet with edgefold - 50mm outside coating with 15mm edge- fold, 2000mm, grey	0.72	1.00	74842	9.88
Steel sheet without fold, one-side coated, 50x2000 mm, grey	0.37	1.00	74843	7.42



## **Smart hammer rivets**

AL/A2, 4.8 × 25 mm, clamping range 20.5 – 22.0 mm

Product	G-kg	VE	Prod.No.	Price €
Smart hammer rivets AL/A2 4.8 x 25.0 mm	0.01	250.00	78085	1.22

## Nail sleeve

diameter 6 mm, dowel length 30 mm, unit=100 pcs

Product	G-kg	VE	Prod.No.	Price €
Nail sleeve FNH 6/30	0.33	1.00	75001	22.95



## Spray bottle

250 cm3 and 500 m3

Product	G-kg	VE	Prod.No.	Price €
Spray bottle 250 cm³	0.08	1.00	75003	26.64
Spray bottle 500 cm³	0.05	1.00	75004	14.49



#### **Ocean® System Brick 300**

The Ocean<sup>®</sup> Brick is a formwork brick for the construction of individual size. With a strong and especially developed design we meet the requirements of professional pool building. Based on a common standard formwork brick we optimized the Ocean<sup>®</sup> Brick for maximum of safety, quick installation and easy handling.

Ocean® Brick and Ocean® inserts are made of expanded polystyrene (EPS). The material protects, insulates and has its place in the construction industry due to high stability.

Standard hardness grade of Ocean® Brick EPS25 and EPS30 available from stock St. Valentin, hardness grade EPS MAX on request.

Delivery on non-returnable palletes, 36/32 pieces per pallet (for Ocean® Brick 300 mm). Calculations and information for various pool sizes on request.

Personalization and labeling on inner bridge on request.

#### FEATURES

- 82 mm reinforced inner stage with stress-optimized transitions to the side walls and integrated slopes to get better concrete spreading

-The shaped inner contour guarantees more stability at the tongue and groove connection

- Three guide throughs give strong hold to the reinforcement bars

- Two frontal connecting bridges and grooves facilitate the dry connection of Ocean®bricks (tongue and groove system)

- Extra high and wide connection bridge

- 1250 mm long, divisible in 250 mm parts, integrated notches and markings for easy divisioning

Product	G-kg	VE	Prod.No.	Price €
Ocean® system brick EPS 25	1.01	36.00	7301114	22.09
Ocean® system brick EPS 30	1.21	36.00	7301115	23.47
Ocean® system brick EPS MAX	1.61	3600.00	7301117	27.65



## **Ocean® Brick system insert**

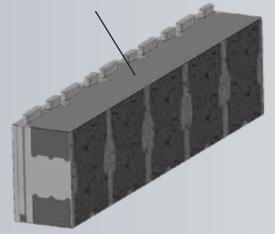
The solid connection of the Ocean® Bricks was realized by the tongue and groove junction. This minimizes the risk of leak of concrete during the filling process.

The strong tongue and groove junction with 25 mm height and 20 mm width fit together and provide stability.

The inserts interlock with the next brick, even at 90° edges.

Product	G-kg	VE	Prod.No.	Price €
Ocean® brick insert EPS 30	0.02	400.00	7301120	1.57

## **CONCRETE VOLUME 54 LITERS**



## **DIMENSIONS IN MM**







Extra wide and high connecting bars

82 mm reinforced inner bar, stress-optimized transitions to the side walls







Shaped inner contour increases stability when filling

## **QUANTITY TABLE**

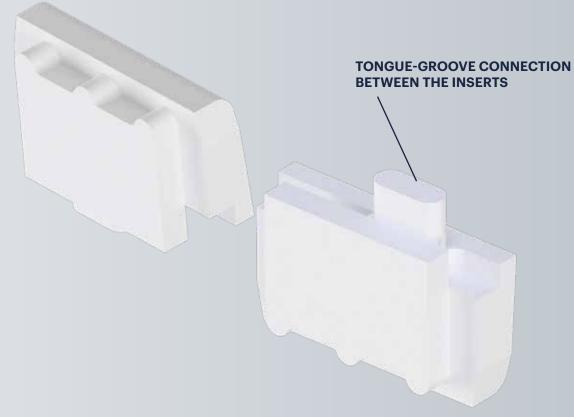
Pool size m	Required elements*	ISO elements m²	EPS panels** m²	Lining m <sup>2</sup>	Edge Ifm
5 x 3 x 1,5	68	25,5	15	40,5	16
5 x 3,5 x 1,5	72	27	17,5	44,5	17
5 x 4 x 1,5	76	28,5	20	48,5	18
6 x 3 x 1,5	76	28,5	18	46,5	18
6 x 3,5 x 1,5	80	30	21	51	19
6 x 4 x 1,5	84	31,5	24	55,5	20
7 x 3 x 1,5	84	31,5	21	52,5	20
7 x 3,5 x 1,5	88	33	24,5	57,5	21
7 x 4 x 1,5	92	34,5	28	62,5	22
8 x 3,5 x 1,5	96	36	28	64	23
8 x 4 x 1,5	100	37,5	32	69,5	24
9 x 4 x 1,5	108	40,5	36	76,5	26
9 x 5 x 1,5	116	43,5	45	88,5	28
10 x 4 x 1,5	116	43,5	40	83,5	28
10 x 5 x 1,5	124	46,5	50	96,5	30

\*The quantities do not include any spare elements. The quantity of elements required for the construction of the technical shaft and the access steps must be calculated and ordered separately. \*\*Stand firm design for the pool floor area, 100 x 500 x 5 cm



#### 40 pcs Ocean® inserts are required for each pool size.

Static calculations regarding the required amount of iron must be provided by a qualified construction company, as these static requirements can vary from pool location to pool location (e.g.: level location or slope, groundwater, etc.).

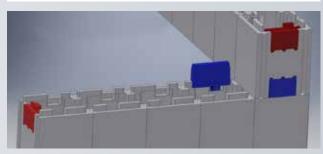


## THE INSERTS INTERLOCK AND REINFORCE EACH OTHER



**DIMENSIONS IN MM** 





EVEN WITH ANGLED JOINTS, THE INSERTS ENGAGE IN THE BRICKS



Respresentative image









Respresentative image

#### **Ocean® Brick Pool System**

#### CONSISTING OF FOLLOWING COMPONENTS:

Ocean®Brick 1250x250x300 mm EPS25 (quantity of bricks and inserts depending on pool size and, please see table of quantities), Ocean® liner sack PVC 0,8mm blue incl. fleece, profile rail, corner profile and hammer rivets.

#### POOL SIZE 7X3,5X1,5M :

Compact filter unit VIENNA 1 laminated, side mount blue, d500, transparent lid, incl. piping set, incl. original Praher 6 way backwash valve 1½" manual, incl. Ocean® filter pump O50 2", 11,1 m3/h at 10m, incl. Smart Nature Works glass filter media. Smart ladder De Luxe II stainless AISI 304 3 steps STANDARD antislip steps

Ocean® ABS built-in set deluxe Made in Austria:

1x Ocean® skimmer deluxe M5 stainless steel inserts A4 ABS white double lip sealing 1x Ocean® skimmer height extension white 4x Ocean® wall conduit M5 deluxe

4x Ocean<sup>®</sup> inlet nozzles M5 deluxe white

1x Ocean® main drain M5 deluxe white

2x VISION Spectra under water lights 10 LED RGB incl. wall conduits, covers, Trafo + control (remote)

#### POOL SIZE 8X4X1,5M

Compact filter unit VIENNA 1 laminated, side mount blue, d600, transparent lid, incl. piping set, incl. original Praher 6 way backwash valve 1½" manual, incl. Ocean® filter pump O75 2", 13,5 m3/h at 10m, incl. Smart Nature Works glass filter media, Smart ladder deluxe II stainless steel AISI 304 3-stepsSTAN-DARD antislip steps

Ocean® ABS built-in set deluxe Made in Austria: 2x Ocean® skimmer deluxe M5 stainless steel inserts A4 ABS white double lip sealing 2x Ocean® skimmer height extension white 5x Ocean® wall conduits M5 deluxe 5x Ocean® inlet nozzles M5 deluxe white 1x Ocean® main drain M5 deluxe white 2x VISION Spectra under water lights 10 LED RGB incl. wall conduits, covers, Trafo + control (remote) POOL SIZE 9X4X1.5M :

#### POOL SIZE 9X4X1,5M :

Compact filter unit VIENNA 1 laminated, side mount blue, d600, transparent lid, incl. piping set, incl. original Praher 6 way backwash valve 1½" manual, incl. Ocean® filter pump O75 2", 13,5 m3/h at 10m, incl. Smart Nature Works glass filter media, Smart ladder deluxe II stainless steel AISI 304 3-stepsSTAN-DARD antislip steps

Ocean® ABS built-in set deluxe Made in Austria:

- 2x Ocean® skimmer deluxe M5 stainless steel inserts A4 ABS white double lip sealing
- 2x Ocean® skimmer height extension white
- 5x Ocean<sup>®</sup> wall conduit M5 deluxe
- 5x Ocean® inlet nozzles M5 deluxe white

1x Ocean® main drain M5 deluxe white

2x VISION Spectra under water lights 10 LED RGB

incl. wall conduits, covers, Trafo + control (remote)

#### INFORMATION

High quality Ocean® pool liners de Luxe ACRYL 1,5mm fabric reinforced + fleece + PVC liner sealing can be offered at additional surcharge as well as in widths 1,65 and 2,05 in all common colours and mosaic designs. Delivery only in complete roll length of 25m.

Optionally available on request and surcharge: PVC – piping material made by Praher Plastics & IBG Austria. Ocean® V4A stainless steel covers for Ocean® ABS white goods. Ocean® skimmer de Luxe High 47 or 75 high water level skimmer for water level up to 4,5cm beyond pool edge, salt electrolysis units PH & REDOX (Caution: not for use in combination with V4A parts to avoid rusting.)

Product	G-kg	VE	Prod.No.	Price €
Ocean® Brick Pool System 7x3,5x1,5 m	0.00	1.00	74974	11317.15
Ocean® Brick Pool System 8x4x1,5 m	0.00	1.00	74975	12549.08
Ocean® Brick Pool System 9x4x1,5 m	0.00	1.00	74976	12993.51



# CLEANING & WATER TREATMENT

292 Cleaning accessories

298 Water testing

## **CLEANING ACCESSORIES & WATER TESTER**

EVERYTHING FOR CLEANING, FROM A-Z



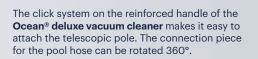


Designed, developed and manufactured in Austria - Ocean® deluxe cleaning accessories stand for quality at the very highest level.

The outstanding design goes hand in hand with sophisticated product features. The floor vacuum cleaner in the deluxe line reduces your working time thanks to intelligently arranged floor brushes.

3 full years guarantee on housing or frame breakage and 5 years spare parts delivery guarantee on selected Ocean® products.







makes cleaning the pool floor easier.

With the robust design of the Ocean® deluxe vacuum cleaner, the suction head is pressed downwards, preventing buoyancy in the water. This

The Ocean® Alu telescopic pole deluxe is available in 2-part and 3-part versions. The insertion sleeve is located at the start of the pole. The click system makes it very easy to attach and change leaf skimmer. vacuum cleaners etc.

The dirt collection flaps on the frame of the Ocean® deluxe leaf rake are functional aids for collecting dirt on the walls and floor.





The integrated adjustment ring is located under the water. The Ocean® deluxe chlorine dispenser therefore allows individual dosing. Chlorine soaks the pool water depending on how far the outlet gaps are opened.

The transparent lid shows immediately whether a new chlorine tablet needs to be refilled.





## **MORE ATTENTION PLEASE**

The POS sales display and the appealing packaging design of Ocean<sup>®</sup> cleaning accessories are the perfect way to put the products in the spotlight in your store or showroom.



Smart by Peraqua stands for intelligent and innovative pool cleaning accessories that are designed and developed in Austria.

Particular emphasis is placed on an attractive design, good functionality during use and production processes that are carried out and monitored in accordance with strict conditions.





## THE PHOTOMETER RANGE

Photometers are the all-rounders in water analysis. They measure the concentration of a substance based on the light that penetrates a water sample. Lovibond<sup>®</sup> photometers can be used universally for a wide range of measurement parameters and methods.





#### Ocean<sup>®</sup> deluxe leaf skimmer

frame made of reinforced PPGF, UV-resistant, with extra strong net, integrated dirt collection flaps and flat frame design, 45 x 34 cm

Product	G-kg	VE	Prod.No.	Price €
Ocean® deluxe Leaf skimmer blue	0.40	25.00	7301229	16.95

#### Ocean® deluxe leaf rake

frame made of reinforced PPGF , UV-resistant, with extra finely woven and extra deep net, integrated dirt collection flaps and flat frame design,  $45 \times 35$  cm

Product	G-kg	VE	Prod.No.	Price €
Ocean® deluxe Leaf rake blue	0.40	25.00	7301228	23.94



### Ocean® deluxe leaf skimmer incl 3-part alu rod

frame made of reinforced PPGF, UV-resistant, extra strong net, lateral integrated dirt collection flaps, flat design incl. 3-part aluminium telescopic rod, 58 - 122 cm.

Product	G-kg	VE	Prod.No.	Price €
Ocean® deluxe leaf skimmer incl 3part alu rod 58-122cm	0.64	6.00	7301262	27.37



made of PPGF, robust and UV-resistant body, resistant, chlorine resistant bristles 44 cm



Product	G-kg	VE	Prod.No.	Price €
Ocean® deluxe Wallbrush white 42cm	0.26	12.00	7301234	15.71



## Ocean<sup>®</sup> deluxe corner brush

robust PPGF body, hose connection (d38), special cleaning bristles for steps and white goods for optimal cleaning of pool corners

Product	G-kg	VE	Prod.No.	Price €
Ocean® deluxe Corner brush white	0.13	30.00	7301233	12.93



## Ocean® deluxe hand brush

robust PPGF body, UV-resistant, ergonomic handle, for quick cleaning of water level stains

Product	G-kg	VE	Prod.No.	Price €
Ocean® deluxe Handy brush white	0.17	24.00	7301236	14.42
Ocean® deluxe Handscrubber white	0.16	24.00	7301235	8.11





blue, loose packing, in PE foil

Product	G-kg	VE	Prod.No.	Price €
Handscrubber Ocean blue, double pack, loose packed	0.05	48.00	70209	8.80

## $Ocean^{\tiny (0)} \ deluxe \ vacuum \ cleaner \ head \ - \ the \ patented \ ORIGINAL!$

swivelling pool hose connection (d32/d38), extremely robust ABS body, UV resistant, robust floor and side brushes, optional without side brushes, recommended for liner, tile and polyester pools up to 12 x 6 m

Product	G-kg	VE	Prod.No.	Price €
Ocean® Vac deluxe Vacuum head without side bristles	1.24	10.00	7301231	37.14
Ocean® Vac deluxe Vacuum head with side bristles	1.33	10.00	7301230	43.76



### Ocean® manual vac head deluxe

heavy type, standard handle, body made of anodized aluminium, floor brushes and rubber lips for optimal suction, 4 wheels, flexible suction connection (d38), for cleaning of large tile and mosaic pools up to 20 x 10 m, 35 and 45 cm

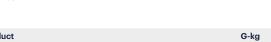
Product	G-kg	VE	Prod.No.	Price €
Vacuum Head Ocean Vac heavy construction silver anodized 35cm	2.63	1.00	75587	61.85
Vacuum Head Ocean Vac heavy construction silver anodized 45cm	3.45	1.00	75588	78.44

### Ocean® deluxe single flex vac

robust and flexible PPGFbody, UV-resistant, reinforced aluminium handle, with floor and/or side brushes.

Product	G-kg	VE	Prod.No.	Price €
Ocean® deluxe Single Flex vac blue/white with fixed hose connection, 35 cm/14" $$	1.09	10.00	7301250	45.69
Ocean® deluxe Flex vac with side brushes, blue/white, with fixed hose connection, 35 cm/14"	1.10	10.00	7301251	51.58







#### Ocean<sup>®</sup> pool thermometer

UV-resistant floating ring, well readable temperature scale (0 up to +43 °C), temperature sensor, nylon cord for fixing on pool edge, with customized face for min. quantity of 1.000 pcs per year

Product	G-kg	VE	Prod.No.	Price €
Pool-Thermometer d= 18 cm blue	0.51	1.00	70927	56.80

#### Ocean® deluxe chlorine dispenser

transparent lid (Ø 96mm), integrated adjustment ring for optimal dosage, nylon cord for fixation, UV resistant, capacity: 200 g chlorine tablet (Ø 160mm); Dimensions: height 165mm, outside Ø 180mm

Product	G-kg	VE	Prod.No.	Price €
Ocean® deluxe chlorine dispenser type "B" blue	0.32	12.00	7301232	12.42

## Ocean® aluminium telescopic rod deluxe, 2- and 3-parts

excenter length adjustment, ergonomic soft hand grips, patented system for easy fixing of Ocean and Smart cleaning accessories, protection against injuries, 1,1 mm wall thickness for long life cycle 2-part: 1.8–3.6 m; 2.4–4.8 m; 3.75–7.5 m; 3-part: 1.2–3.6 m; 1.6–4.8 m

Product	G-kg	VE	Prod.No.	Price €
Ocean® telescopic rod 2-parts alu silver anodized 1.8 - 3.6m	1.30	10.00	170003	37.52
Ocean® telescopic rod 2-parts alu silver anodized 2.4 - 4.8m	1.58	10.00	170004	44.01
Ocean® telescopic rod 2-parts alu silver anodized 3.75 - 7.5m	2.60	10.00	170025	88.54
Ocean® telescopic rod 3-parts alu silver anodized 1.1 - 3.3 m	1.06	10.00	7301087	39.99
Ocean® telescopic rod 3 parts alu silver anodized 1.2 - 3.6m	1.16	10.00	170005	46.76
Ocean® telescopic rod 3 parts alu silver anodized 1.6 - 4.8m	1.50	10.00	170006	52.11



#### Ocean<sup>®</sup> wall holder set deluxe

for storage of telescopic rods

Product	G-kg	VE	Prod.No.	Price €
Wall holder De Luxe for telescopic rod	0.16	1.00	75743	9.59



## **Ocean® Pool cleaning kit deluxe**

Ocean® pool cleaning kit deluxe consisting of:

Ocean<sup>®</sup> deluxe leaf rake PP blue Ocean<sup>®</sup> deluxe leaf skimmer blue Ocean<sup>®</sup> floor vacuum De Luxe Ocean<sup>®</sup> corner brush PP white Ocean<sup>®</sup> pool brush standard PP white 42cm Ocean<sup>®</sup> hand scrubber De Luxe PP white Ocean<sup>®</sup> hand brush PP white

Product	G-kg	VE	Prod.No.	Price €
Ocean® Pool cleaning kit deluxe	3.23	1.00	7301419	128.75



## Ocean® sales display for cleaning accessories

The floor display is ideal for presenting  $\mathsf{Ocean}^{\circledast}$  cleaning accessories and is a real eye-catcher in any sales room.

 $\cdot$  Sales display made of strong cardboard consisting of a floor display and top sign that can be clipped on

- · Incl. 8 metal hooks (220 mm length)
- $\cdot$  Easy to assemble (incl. assembly instructions)
- $\cdot$  Dimensions: 850 x 420 x 1770 mm

Product	G-kg	VE	Prod.No.	Price €
Ocean® sales display for cleaning accessories	8.50	1.00	7301560	236.42



Delivery without Ocean® cleaning acces-

sories items.

## Ocean® swimming pool hose d38 1 1/2"

extremely durable material, UV resistant, with two integrated sockets, one socket 360° swivelling, packed in strong boxes,

lengths: 6, 8, 9, 10, 12, 15 and 20 m

Product	G-kg	VE	Prod.No.	Price €
Swimming pool hose ocean with elastic socket d=38mm blue I=6m	2.08	1.00	7301369	28.01
Swimming Pool Hose Ocean with elastic socket d=38mm blue l=8 m	2.35	1.00	77072	32.66
Swimming Pool Hose Ocean with elastic socket d=38mm blue I=9 m	2.58	1.00	72629	36.12
Swimming Pool Hose Ocean with elastic socket d=38mm blue l=10 m	2.85	1.00	73600	38.89
Swimming Pool Hose Ocean with elastic socket d=38mm blue l=12 m	3.31	1.00	72630	45.85
Swimming Pool Hose Ocean with elastic socket d=38mm blue l=15 m	4.08	1.00	72631	57.90
Swimming Pool Hose Ocean with elastic socket d=38mm blue l=20 m	5.57	1.00	77081	103.05



## Ocean® swimming pool hose deluxe d38

extremely durable material, UV-resistant, socket distance 1.5 m (ø38), for demanded trimming, packed in waterproof and tearproof PE bags

Product	G-kg	VE	Prod.No.	Price €
Swimming pool hose socket distance 1,5m d38 PE white I=100 m	0.19	100.00	70010A	3.42
Swimming pool hose socket distance 1,5m d38 PE blue I=100,5 m	0.20	100.50	70128a	3.41

## Ocean<sup>®</sup> swimming pool hose black d38

extremely durable material, very UV and low pressure resistant, socket distance 0.5 m for demanded trimming, packed in waterproof and tearproof PE bags

Product	G-kg	VE	Prod.No.	Price €
Swimming pool hose socket distance 0.5 m d38 PE black I=50 m	0.21	50.00	71921	7.18

## Ocean® swimming pool hose black d38 in carton

extremely durable material, very UV and low pressure resistant, socket distance 0.5 m for demanded trimming, packed in carton

Product	G-kg	VE	Prod.No.	Price €
Swimming pool hose socket distance 0.5 m d38 black l=15m	3.95	1.00	7301392	7.34





for swimming pool hose d38

Product	G-kg	VE	Prod.No.	Price €
Hose clamp metal 30-45 / 12 mm	0.03	100.00	50187	1.47



## Ocean<sup>®</sup> hose nozzle

for optimal connection to Ocean® swimming pool hose d32 or d38

Product	G-kg	VE	Prod.No.	Price €
Hose Nozzle double d=32mm PP white loose packing	0.02	1.00	150244	2.55
Double hose nozzle d=38mm PP white MOP 2,5 bar loose packed	0.03	1.00	150245	2.64





## Ocean<sup>®</sup> hose nozzle d32 to d38

for optimal connection to Ocean® swimming pool hose d32 to d38

Product	G-kg	VE	Prod.No.	Price €
Double hose nozzle D=32/38 PP white MOP 2,5 bar loose packed	0.02	1.00	150209	2.64

## Ocean® t-piece hose nozzle d38 black

for optimal connection to Ocean® swimming pool hose d38

Product	G-kg	VE	Prod.No.	Price €
T-piece black d38 hose connection loose packed	0.05	100.00	71001	3.52

## Ocean® hose nozzle 90° d40 black

d40 hose nozzle with 1 1/2" male thread

Product	G-kg	VE	Prod.No.	Price €
Hose nozzle 90° d40 PP hose nozzel / male thread R 1 1/2"	0.05	5.00	70025	5.39

# C.S.S.

## Hose nozzle for ball valve S6 and cone check valve S6

Product	G-kg	VE	Prod.No.	Price €
Hose nozzle DN40 ABS white d32-d39 MOP 6 bar	0.06	1.00	150133	5.09

## Hose nozzle/female thread R 1 1/2"

Product	G-kg	VE	Prod.No.	Price €
Hose nozzle d=39mm ABS white hose nozzle/female thread R 1 $1/2^{\prime\prime}$ MOP 6 bar	0.04	100.00	150322	4.24













## Hose nozzle/male thread R 11/2" white/black

Product	G-kg	VE	Prod.No.	Price €
Hose nozzle d=39mm ABS white male thread R 1 1/2" BSP MOP 6 bar loose packed	0.04	1.00	150217	1.82
Hose Nozzle d=39mm ABS black male thread R 1 1/2" BSP MOP 6 bar loose packed	0.04	1.00	150268	3.04

## 3

Hose nozzle solvent

Product	G-kg	VE	Prod.No.	Price €
Hose Nozzle d=39mm ABS white solvent 50mm MOP 6 bar loose packed	0.03	1.00	150218	1.82
Hose Nozzle d=41,5mm ABS white solvent 48,4 loose packed	0.03	500.00	150229	1.82

## Hose nozzle stepped solvent

Product	G-kg	VE	Prod.No.	Price €
Hose nozzle d=32/38mm stepped ABS white solvent 50mm loose packed	0.07	1.00	150258	4.24
Hose Nozzle d=32/38mm stepped ABS white solvent 48,4 loose packed	0.03	500.00	150259	4.24

## Hose nozzle staged male thread R 11/2"







## Battery-powered floor and wall cleaner X-Warrior X60 AI-wireless pool robot

The intelligent detection system helps the wireless pool robot plan the most efficient cleaning path. Thanks to the advanced control system, the motors can automatically adjust their performance according to cleaning conditions, saving more energy and supporting a longer service life. The robot cleans the pool floor, the walls and also the waterline.

- · Up to 6h battery life
- · cleaning modes: floor only or floor/wall/waterline
- App control
  - · Filter capacity: 3.2l
  - · Speed: 12m/min
  - · Cleaning in orderly lanes
  - · Cleaning time: 0.5h, 1h or 2h

Product	G-kg	VE	Prod.No.	Price €
Battery-powered floor and wall cleaner X-Warrior X60 AI-wireless pool robot	15.10	1.00	7301468	2568.80





## » Up to 6 hours of battery life

» Intelligent cleaning path

## App control



## NOTE

It is recommended to place the robot at the corner of the swimming pool when starting the cleaning, as this allows for quick coverage of the entire pool floor.



Intelligent 3D cleaning path in organized tracks, which also includes pool walls, reducing cleaning time.



The full-inverter technology and advanced algorithms enable a runtime of up to 6 hours!

## **Cleaning accessories**



## Smart leaf skimmer blue

Product	G-kg	VE	Prod.No.	Price €
Smart Leaf Skimmer blue Standard PP-GFK single packed	0.25	12.00	78701	9.45



## Smart leaf skimmer blue, heavy duty

Product	G-kg	VE	Prod.No.	Price €
Smart heavy duty aluminium leaf skimmer blue, PP-GFK with nylon net,single packed	8.20	24.00	7300610	21.56



## Smart leaf rake

Product	G-kg	VE	Prod.No.	Price €
Smart Leaf Rake PP-GFK blue single packed	0.23	12.00	78700	12.84



## Smart leaf rake, heavy duty

Product	G-kg	VE	Prod.No.	Price €
Smart heavy duty aluminium leaf rake blue, PP-GFK with nylon net, single packed	4.90	12.00	7300611	35.84



## Smart leaf skimmer

with 3x60 cm telescope function, high quality PE net

Product	G-kg	VE	Prod.No.	Price €
Smart leaf skimmer with 3x60 cm telescopic function	0.44	1.00	74726	25.07



## Smart wall brush short blue

with soft plastic bristles, for liner and tile pools, 13 cm /5"

Product	G-kg	VE	Prod.No.	Price €
Smart Wall brush short PP blue 13 cm/5"	0.10	48.00	78846	10.07

## Smart wall brush blue

in 45 cm/18" or 26 cm/10" variant

Product	G-kg	VE	Prod.No.	Price €
Smart Wall Brush standard PP-GFK 45 cm/18" single packed	0.27	12.00	78703	12.84
Smart Wall Brush Standard PP-GFK blue, 26 cm/10" single packed	0.23	12.00	78702	9.96

## Smart wall brush blue, heavy duty

Product	G-kg	VE	Prod.No.	Price €
Smart heavy duty aluminium wall brush blue, PP-GFK, 45 cm/18"	4.70	12.00	7300612	22.77



## Smart wall brush "whale type"

For spine friendly pool wall cleaning, blue, in widths of 45cm/18" or 50 cm/20"

Product	G-kg	VE	Prod.No.	Price €
Smart Wall Brush "Whale Type" PP blue 45 cm/18"	0.92	12.00	78714	64.24
Smart Wall Brush "Whale Type" wide PP blue 50 cm/20"	1.38	8.00	78729	76.60



## Smart algue brush blue, heavy duty

PP, 13 cm/5" or 25,5 cm/10"

Product	G-kg	VE	Prod.No.	Price €
Smart heavy duty algue brush blue, PP 13 cm/5"	4.70	48.00	7300613	17.51
Smart heavy duty algue brush blue, PP 25,5 cm/10"	7.20	24.00	7300614	21.81





## Smart hand scrubber blue

Product	G-kg	VE	Prod.No.	Price €
Smart hand scrubber blue, 14,5 x 8,5 x 3 cm, single-packed	0.07	24.00	78712	5.87

## Smart dirt rubber white

size: 13 x 5,5 x 3 cm, 10 pcs/package, for removal of watermarks



Product	G-kg	VE	Prod.No.	Price €
Smart eraser white (1 package = 10 pcs.)	0.03	10.00	75021	16.95



## Smart wall mount for pool accessories

for safe and clear storage of Ocean® and Smart pool cleaning accessories. For wall fastening incl. mount for Ocean® telescopic rods.

Product	G-kg	VE	Prod.No.	Price €
Smart wall mount for pool accessories, 56,5 x 11 x 4 cm, grey	0.52	6.00	78297	43.37



## Smart floor vac head white/blue

with vacuum adjustment, variants: with or without side brushes

Product	G-kg	VE	Prod.No.	Price €
Smart Vac Head white/blue with side brushes	1.25	12.00	78708	30.88
Smart Vac Head white/blue	1.25	12.00	78738	29.27



## Smart floor vac head white/blue

with vacuum adjustment

Product	G-kg	VE	Prod.No.	Price €
Smart Vac Head white/blue	0.92	6.00	78709	25.22



## Smart floor vac head TRI deluxe blue

fixed pool hose connection (d32/38), floor brushes

Product	G-kg	VE	Prod.No.	Price €
Smart vacuum head TRI deluxe blue	1.34	6.00	78843	22.43



## Smart automatic floor vac head blue

with 10 m special hose, for pools up to 8x4 m, minimum pump capacity: 6-8m3/h

Product	G-kg	VE	Prod.No.	Price €
Smart Automatic Vac Head blue with diaphragme, with 10m hose, single packed	7.50	1.00	78723	306.39

## Smart chlorine dispenser blue/white

with lid (Ø 95,6mm), for Ø 7.6cm/3" tabs, with fixing clamp, dimensions: height 165 mm, outside Ø 175 mm

Product	G-kg	VE	Prod.No.	Price €
Smart Chlorine dispenser blue/white for Ø 7,6cm/3″ tablets	0.31	24.00	78710	10.07



## Smart chlorine dispenser with thermometer

blue/white, for Ø 7.6cm/3" tablets, with fixing clamp, integrated thermometer and childproof lock lid. Dimensions: height 270mm, lid Ø 89,4mm, temperature display 25x135mm. When tablet is used up, the dispenser turns upside down.

Product	G-kg	VE	Prod.No.	Price €
Smart Chlorine Dispenser with thermometer and childproof lock lid, blue/white	0.25	12.00	78733	15.64



## Smart MINI chlorine dispenser with thermometer

for quick up pools and whirpools, Dimensions: height 118mm, outside Ø 11 cm, Ø for chlorine tablets 47mm. temperature display 18x115mm

Product	G-kg	VE	Prod.No.	Price €
Smart MINI chlorine dispenser incl. thermometer, diameter 11 cm, blue for 20g chlorine tablets	2.10	24.00	7301286	8.75

## PERAQUA



## Smart pool thermometer blue

Sizes: 17 cm and 24,5 cm

Product	G-kg	VE	Prod.No.	Price €
Smart Pool Thermometer blue 17 cm	0.03	216.00	78841	6.19
Smart pool thermometer blue 24,5 cm	0.06	100.00	71519	6.62



## Smart pool thermometer white

Product	G-kg	VE	Prod.No.	Price €
Smart pool thermometer white 18 cm	0.06	120.00	78842	8.68



## Smart pool thermometer dolphin / turtle / duck

Product	G-kg	VE	Prod.No.	Price €
Smart Pool Thermometer Dolphin, 21cm, single packed	0.14	48.00	78715	7.64
Smart Pool Thermometer tortoise, 21 cm, yellow-green, single packed	0.14	48.00	78716	7.64
Smart pool thermometer duck, 21 cm, yellow, single packed	0.14	48.00	78717	7.64



## Smart pool thermometer Ø 18 cm

UV resistant ring, clearly legible scale (0 up to +43 °C), temperatur sensor, nylon cord for fixing on the pool edge.

Product	G-kg	VE	Prod.No.	Price €
Smart Pool Thermometer d=18 cm blue	0.19	12.00	78853	39.76





## Smart safety ring

inner diameter 43.2 cm, white

Product	G-kg	VE	Prod.No.	Price €
Smart safety ring, inner diameter 43.2 cm, white	1.33	1.00	78719	36.07



## Smart rescue loop

Optimal together with Ocean® telescopic rod De Luxe

Product	G-kg	VE	Prod.No.	Price €
Smart rescue loop aluminium, for telescopic rod	0.45	10.00	78761	30.34



## Smart tub blue

optimal for pool entrance area, 40x40x10 cm

Product	G-kg	VE	Prod.No.	Price €
Smart tub blue 40x40x10cm	0.55	12.00	78720	15.33



d32, optionally in white or blue, packed in soil resistant PE bags

Product	G-kg	VE	Prod.No.	Price €
Smart Swimming Pool Hose ECO socket distance 1,1m d32 blue I=55 m	0.18	55.00	75597	4.73
Smart Swimming Pool Hose ECO socket distance 1,1m d32 white I=55 m	0.18	55.00	75598	4.73



## **Water testing**



## Lovibond® Pool tester outdoor chlorine

for determination of outdoor chlorine 0.1 - 3.0 mg/l and pH value 6.8 - 8.2

Product	G-kg	VE	Prod.No.	Price €
Pool tester outdoor chlorine 0.1 - 3.0 mg/l and pH value 6.8 - 8.2	0.20	6.00	7301612	29.91



## Lovibond® Pool tester bromine content

for determination of bromine content 1.0 - 8.0 mg/l and pH value 6.8 - 8.2

Product	G-kg	VE	Prod.No.	Price €
Pool tester bromine content 1.0 - 8.0 mg/l and pH value 6.8 - 8.2	0.19	6.00	7301613	29.91



## Lovibond® Pool tester active oxygen

for determination of oxygen 0 - 10 mg/l and pH value 6.8 - 8.2

Product	G-kg	VE	Prod.No.	Price €
Pool tester active oxygen 0 - 10 mg/l and pH value 6.8 - 8.2	0.19	6.00	7301615	29.91



## Lovibond<sup>®</sup> Pool tester biguanide

hydrogen peroxide - pH, 10 - 100 mg/l PHMB / 5 – 50 mg/l H2O2, pH value 6.8 - 8.2

Product	G-kg	VE	Prod.No.	Price €
Pool tester biguanide, hydrogen peroxide - pH	0.20	6.00	7301617	22.99



## Lovibond® Blister refill packs

Blister refill packs for Pool tester

Product	G-kg	VE	Prod.No.	Price €
Blister refill pack, 30 chlorine-pH and bromine-pH tablets each in strips of 10 pcs, fast dissolving for the pool testers CI-pH and bromine-pH	0.05	1.00	7301614	22.33
Blister refill pack, 30 DPD4 / Rapid and pH tablets each in strips of 10 pcs, fast dissolving for Pool Tester Active Oxygen	0.05	1.00	7301616	22.33
Blister refill pack, Hydrogen peroxide - pH for 20 determinations each, for pool tester Biguanide	0.05	1.00	7301618	41.74



## Lovibond<sup>®</sup> Minikit Chloride AF-418

User-friendly and suitable for water analysis.

Easy to use and exact dosage

## · High analysis accuracy

## INCLUDED IN DELIVERY:

Measuring container, necessary accessories and reagent tablets for approx. 30 tests.

Product	G-kg	VE	Prod.No.	Price €
Minikit Chloride AF-418, incl. 200 reagent tablets, measuring range 5 – 5000 mg/l	0.27	1.00	7301620	138.30

## **Replacement tablets for Minikit Chloride AF-418**

Pack of 250 pcs

Product	G-kg	VE	Prod.No.	Price €
Replacement tablets for Minikit Chloride AF-418, Pack of 250 pcs	0.09	1.00	7301621	148.19



## Lovibond<sup>®</sup> Scuba 3s multiparameter pool tester

for chlorine (total, free, bound), pH value, cyanuric acid, bromine, alkalinity-m, calcium hardness, active oxygen, copper & active chlorine

## THE SCUBA IS NOT MISSING FROM ANY POOL IN THE WORLD.

With the Scuba 3s, monitoring pool hygiene is now even faster, more versatile, handy and easier.

· wireless data transmission via NFC

- · Lovibond® PoolAssistant App for pool maintenance & results
- · all important pool parameters
- · light signal (green/red) to indicate safe water conditions

Sturdy plastic box with reagent tablets (20 DPD 1 and PHENOL RED as well as 10 pcs each of DPD 3, CyA test and Alka-M). More than 10 methods, menu options with scroll function, data storage of 50 data sets, waterproof, Pool App, CE & UKCA conformity

Product	G-kg	VE	Prod.No.	Price €
Scuba 3s multiparameter pool tester	0.18	1.00	7301625	248.90





NOTE

Photometer and accessories for public pool construction can be found in the Public Pool Construction section.

## Reagent tablets for Lovibond® Scuba 3s multiparameter pool tester

- · Highest accuracy of test results
- Easy handling & application
- Precise dosage & enormous durability

Product	G-kg	VE	Prod.No.	Price €
Tablets DPD 1 in a pack of 500 $\ensuremath{pcs}$ , slowly soluble, for the determination of outdoor chlorine	0.15	1.00	7301626	66.14
Tablets Alka-M in a pack of 100 pcs, slowly soluble, for the determination of the acid capacity $% \left( {{{\rm{T}}_{\rm{A}}}} \right)$	0.04	1.00	7301630	80.57
Tablets cyanuric acid in a pack of 100 pcs, slowly soluble, for the de- termination of the cyanuric acid	0.04	1.00	7301631	32.35
Tablets DPD 3 Evo in a pack of 500 pcs, for the determination of total chlorine	0.15	1.00	7301648	



## Lovibond<sup>®</sup> pool tester SD40 Multi Pocket Tester

for precise measurement of pH, Con, TDS, salt and T

three-color LED light system with the colors blue (measurement), green (calibration) and red (alarm)
 transparent lid not only serves as a stable stand, but also protects the sensitive glass sphere of the pH electrode, can be used as a sample container for calibration or measurement and can be filled with storage solution

· enables a running time of up to 2000 operating hours

- · comfortable carrying option via lanyard or clip
- · waterproof housing

Measuring range: 0 - 14 pH, Con < 20 mS/cm, TDS < 20 ppt, Salt < 10 g/l Operating temperature: 0 - 50  $^{\circ}{\rm C}$ 

## MEASURING RANGE

- · Con: 0.01 20.00 mS/cm
- · pH: 0.00 14.00
- · Salinity: 0.01 10 g/L ppt
- · TDS: 0.01 20.00 ppt

## SCOPE OF DELIVERY

- · Tester incl. electrode
- · 4 AAA batteries
- · Lanyard
- Storage box
- Multilingual instruction manual
- Certficate of compliance • Warranty declaration

## roduct

Product	G-kg	VE	Prod.No.	Price €	
Lovibond® pool tester SD40 Multi Pocket Tester, portable hand-held instrument for the accurate measurement of pH, Con, TDS, Salt and T	0.27	1.00	7301641	448.94	



## Lovibond<sup>®</sup> replacement electrode for Lovibond<sup>®</sup> pool tester SD40 Multi Pocket Tester

The multi-replacement electrode with gel electrolyte for the Lovibond® pool tester SD40 Pocket Tester is equipped with a highly sensitive glass membrane and two robust graphite electrodes that are easy to clean. The built-in temperature sensor ensures that your measurement is not exposed to temperature fluctuations and can be individually adapted to each measurement sample.

Use the electrode cover to protect the sensitive glass membrane from breakage, dirt and from dryingout by moistening it.

Measuring range: 0 - 14 pH, Con < 20 mS/cm, TDS < 20 ppt, Salt < 10 g/l Operating temperature: 0 - 50  $^{\circ}{\rm C}$ 

## PRODUCT DETAILS

Measuring range: 0 - 14 pH, Con < 20 mS/cm, TDS < 20 ppt, Salt < 10 g/l Operating temperature: 0 - 50 °C Sensor shape: Bulb Reference: Ag/AgCl Diaphragm: Plastic Fibers (Pellon) Electrolyte: Gel, saturated KCl Integrated temperature sensor: NTC 30 kΩ Outer material: PC

Product	G-kg	VE	Prod.No.	Price €
Lovibond® replacement electrode for Lovibond® pool tester SD40 Multi Pocket Tester	0.05	1.00	7301646	230.28





## Ocean® test kit deluxe

Tablets for Ocean® test kit deluxe

DPD 1 / PHENOL RED, 250 tablets blistered 10 pieces each

transparent testing instrument, legible colour scale, multilingual manual, inclusive 20 x PH/CL test tablets each

Product	G-kg	VE	Prod.No.	Price €
Testkit DPD ocean single packed	0.10	45.00	170060	11.72

G-kg

0.09

0.09

VE

250.00

250.00

Prod.No.

50122

50124

Price €

0.27

0.27







## Smart test kit DPD

PH/CL liquid.

Product

DPD 1 Tablets

PHENOL RED Tablets

Product	G-kg	VE	Prod.No.	Price €
Testkit DPD ECO liquid loose packing	0.12	48.00	78847	10.07



## refill bottle for test kit DPD ECO

for test kit DPD ECO liquid

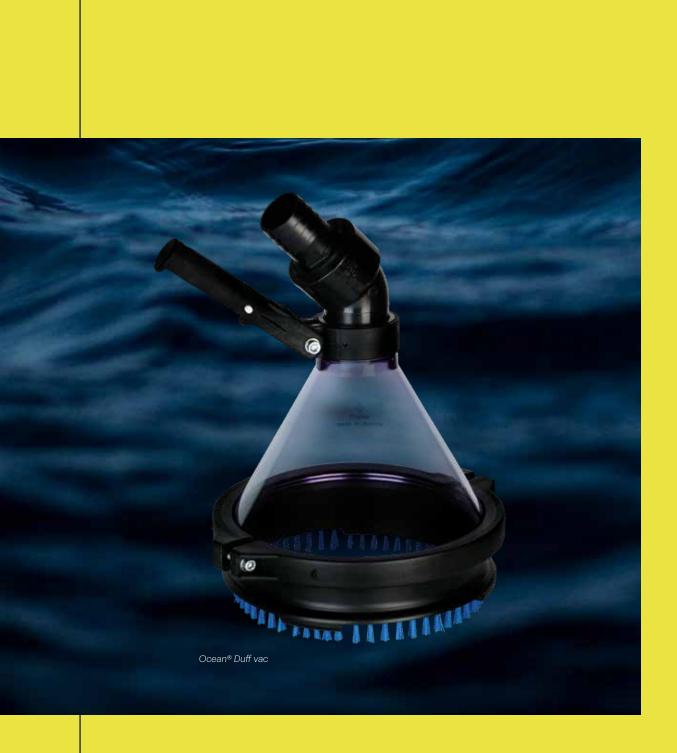
Product	G-kg	VE	Prod.No.	Price €
bottle for test kit DPD ECO liquid loose packed	0.05	100.00	75753	5.08



## Smart test kit PH/CL

Test kit with tablets, per 10 pcs DPD 1 and PH, incl. storage box

Product	G-kg	VE	Prod.No.	Price €
Smart test kit PH/CL DPD single packed, tablet	0.13	72.00	78707	10.50



## PRODUCTS FOR NATURAL POOLS

306	White goods for natural pools
311	Liner for natural pools

312 Cleaning accessories

## NATURAL POOL ASSORTMENT

NATURE & TECHNOLOGY IN HARMONY





## WHERE THE NATURAL POOL BECOMES THE INTELLIGENT NATURAL POOL

Planning a natural pool places different demands on the individual components. We have developed special installation parts and cleaning accessories specifically for natural pools and swimming ponds, such as the automatic Loxone Aquastar® Air pool control system.

The design of the built-in parts flatters the natural ambience, the aluminumreinforced construction of the cleaning accessories withstands the special conditions (e.g. heavy sludge).



The Ocean® mulch vacuum cleaner from Praher Plastics® gently and efficiently cleans different and sensitive surfaces and natural pool floors. To protect the pond liner, the mulm vacuum cleaner has a stepped, replaceable suction ring.

A special feature is the transparent suction cup made of indestructible polycarbonate. The flexible adapter handle made of high-performance polyamide (5 times stronger) can be rotated 360°.

An additional brush ring can be ordered as an option to clean decorative stones or steps even better.

## NATURAL TECHNOLOGY

The planning of a natural pool is often not only the desire for naturally filtered water, but also to ecological considerations. Water-saving, energy-efficient and hygienically treated are properties that can be perfectly achieved with the following Peraqua® products.



The infinitely variable/speed-controlled **Ocean® Inver iQ300 swimming pool pump** with IE4 motor stands for maximum efficiency and considerable energy savings of up to 82%.

The **Aquastar® Control-P6 pool control** system fully automatically regulates backwashing, pump performance, temperature and water level. The coordinated interaction of the functions achieves maximum efficiency and sustainability in pool operation.





Thanks to its high water permeability and dirt retention capacity, the **Hi-Tech glass filter media Nature Works** reduces the number of backwashing processes and lowers the water consumption by up to 25% compared to other filter media. It is also one of the most hygienic in its class.

The **Smart Quantum Hybrid UV water treatment** system produces chemically free, pure, sterile pool water through a photocatalytic reaction. AT COM

Based on a standard commercial block, we have optimized the Ocean® Brick for maximum safety, quick installation, and practical handling.

Our products in the **FlexFit**® **series** are designed to protect the environment thanks to the adhesive-free bonding of the **PVC fittings and hoses.** Production with high-quality materials at Praher guarantees durability and saves resources.



For more information on products suitable for natural pools, ask our specialists: info@peraqua.com, +43 7435 58488-0



## Ocean<sup>®</sup> skimmer deluxe PT (black)

for liner, build-up and concrete/tile pools, with basket, flange set, skim vac plate d32/38, cover, self-drilling PT screw set, sealings, reductions 2''/1/2'' and overflow connection d50. Incl. cut for niveao sensor. Recommended flow rate 8 m3/h. One skimmer recommended for 25 m2 water surface.

Product	G-kg	VE	Prod.No.	Price €
Skimmer Ocean® De Luxe PT ABS black, double lip sealing, Ocean single packing	2.41	1.00	170598A	210.00

## Collar for Ocean® skimmer deluxe black



Product	G-kg	VE	Prod.No.	Price €
Ocean® height extension for skimmer black ABS	0.20	1.00	150402	45.47



## Ocean<sup>®</sup> skimmer extension PT (black)

25 cm, self-drilling PT screw set, sealings, cover, for optimal frontal extension of the skimmer PT deluxe

Product	G-kg	VE	Prod.No.	Price €
Extension for skimmer Ocean® PT ABS black (170598a)	1.31	1.00	170920A	127.98



## Ocean<sup>®</sup> wide mouth extension (6°) (black)

25 cm mounting depth, this allows the Ocean® Skimmer deluxe PT to be "straight" mounted on the sloping pool flange. In addition to optical advantages, this also has technical advantages, since the function of the skimmer (optionally with electric level control Praher NCO1) is optimally guaranteed.

Product	G-kg	VE	Prod.No.	Price €
Enlargement 6° for wide mouth skimmer Ocean® PT ABS black (prod. code 170598a)	2.17	1.00	170926A	370.71



## Smart skimmer High75 black ABS

ABS, suction 700x90 mm for concrete, liner and build-up pools, sealings, screw set, sieve basket, R1 1/2"+2" female thread connection for high water level 6-7 cm

Product	G-kg	VE	Prod.No.	Price €
High water level skimmer High75 black ABS with brass inserts	9.01	1.00	78515	519.42





## Smart overflow skimmer 20

compact PE - plastic skimmer, leaf basket made of Niro, connection d63, incl. safety bar, Ø top: 21 cm, base: 40  $\times$  40 cm,

total height: approx. 37 cm, hose connection D63 PVC- solvent connection, application: acc. to pump type between 5 and 12 m<sup>3</sup>, leveling: approx. 22 cm, optimal water level: approx. 48 cm, min. installation height: approx. 40 cm – 4 cm

Product	G-kg	VE	Prod.No.	Price €
Smart float skimmer SKT 20 PE black d63 incl. safety bar, leaf basket made of Niro incl. escape hatch acc. ÖNORM L 1128	4.60	1.00	78077	1001.52

## Smart overflow skimmer 30

compact PE plastic skimmer, leaf basket made of Niro, connection d75, incl. safety bar,

Ø top: 32,5 cm, base: 58 × 58 cm,

total height: approx. 45 cm, hose connection D75 PVC solvent connection, application: acc. to pump type between 12 and 20 m<sup>3</sup>,

leveling: approx. 26 cm, optimal water level: approx. 58 cm, min. installation height: approx. 49 cm - 5 cm

Product	G-kg	VE	Prod.No.	Price €
Smart float skimmer SKT 30 PE black d75 incl. safet bar, leaf basket made of Niro incl. escap hatch acc. ÖNORM L 1128	12.00	1.00	78078	1498.64

## Smart escape hatch for overflow skimmer 20/30 (net only)

acc. ÖNORM L1128

Product	G-kg	VE	Prod.No.	Price €
OCEAN skimmer retrofitting for SK20, escape hatch	0.05	1.00	78598	94.15
OCEAN skimmer retrofitting for SK30, escape hatch	0.06	1.00	78599	94.15



## Smart Skim 300s

30 cm diameter, 85 cm leading edge, solvent socket or nozzle, VA basket, 8 mm mesh, dirt ring, V4A overflow skimmer stainless steel

Product	G-kg	VE	Prod.No.	Price €
Smart Skim 300s 2" AG, VA skimmer incl. 2" nozzle	11.00	1.00	7300418	886.08



## Smart Skim 400s

36 cm diameter, 3" male thread, VA basket 8mm mesh, dirt ring, V4A overflow skimmer stainless steel

Product	G-kg	VE	Prod.No.	Price €
$3^{\prime\prime}$ male thread, VA stainless steel incl. PVC socket $3^{\prime\prime}$ female thread x 110	17.50	1.00	7300419	1453.92





## Smart skimmer with cave chamber for 12V pump

Incl. liner flange and stainless steel strainer, integrated overflow, made of PE, escape hatch according to ÖNORM L1128 standard

Product	G-kg	VE	Prod.No.	Price €
Ocean skimmer 230 with cave chamber for 12V pump, material: PE, escape hatch acc. to ÖNORM L 1128, L=595 x B=355 x H= 521	24.00	1.00	74946	3164.75
Ocean skimmer 330 with cave chamber for 12V pump, material: PE, escape hatch acc. to ÖNORM L 1128, L=715 x B=455 x H= 621	32.00	1.00	74947	3386.66
Ocean skimmer 460 MONO with cave chamber for 12V pump, material: PE, escape hatch acc. to ÖNORM L 1128, L=715 x B=585 x H= 621	33.50	1.00	74948	3738.55
Ocean skimmer 460 TWIN with cave chamber for 12V pump, material: PE, escape hatch acc. to ÖNORM L 1128, L=715 x B=585 x H= 621	38.00	1.00	74949	3949.25





Incl. liner flange and stainless steel strainer, integrated overflow, made of PE, escape hatch according to ÖNORM L1128 standard

Product	G-kg	VE	Prod.No.	Price €
Ocean skimmer 230 for external pump, material: PE, escape hatch lt. ÖNORM L 1128, L=595 x B=355 x H=521	22.00	1.00	74950	3164.75
Ocean skimmer 330 for external pump, material: PE, escape hatch lt. ÖNORM L 1128, L=715 x B=455 x H=621	32.00	1.00	74951	3386.66
Ocean skimmer 460 for external pump, material: PE, escape hatch, lt. ÖNORM L 1128, L=715 x B=585 x H=621	35.00	1.00	74952	4018.04

## Ocean<sup>®</sup> wall conduit M5 deluxe

for liner and build-up pools/tile pools, integrated M5 A4 (ss316) thread inserts, 2" female thread/male thread/solvent d50 mm, for optimal fixing incl. 2 fixing brackets, holes for rebars and nuts for wall formwork

Product	G-kg	VE	Prod.No.	Price €
Wall conduit Ocean® M5 stainless steel thread inserts A4 with clam- ping nut, set	0.35	10.00	170629	49.66

## Ocean® inlet nozzle deluxe standard liner pools (black)

with ball universal type 13/17/21 mm, sealings, screw set, in combination with wall conduit M5 deluxe (prod code 170629)

Product	G-kg	VE	Prod.No.	Price €
Inlet nozzle with ball universal type 13/17/21 mm for Ocean® wall conduit M5 deluxe black	0.18	1.00	170914A	27.27

## Ocean® inlet nozzle deluxe DIN build-up pools (Poly-/Vinylester pools, PP)

with ball acc DIN EN16582, flange set, sealings, POM washer, clamp nut, ABS,set

Product	G-kg	VE	Prod.No.	Price €
Inlet nozzle $\ensuremath{Ocean}^{\circledast}$ for polyester pools ABS black, set (sealing set and clamping nut)	0.22	1.00	170904A	36.81







## Smart wall conduit for liners, single

incl. stainless steel flange with screws

Product	G-kg	VE	Prod.No.	Price €
Wall conduit for liners d50/50, s.steel flange 1.4574 incl screws	0.24	1.00	78823	61.94

## Smart wall conduit for liners, double

incl. stainless steel flange with screws

Product	G-kg	VE	Prod.No.	Price €
Wall Conduit double d63/75 inkl. stainless steel flange 1.4574 with	0.88	1.00	78824	241.02
screws				





## Ocean<sup>®</sup> main drain PT (black)

for liner, build-up and concrete/tile pools, with PT screws, flat cover  $2^{\prime\prime}$  female thread connection, flange screw set, sealing set, max. flow rate 15 m3/h

Product	G-kg	VE	Prod.No.	Price €
Main drain PT ABS black	0.92	1.00	170902	88.25



## Smart main drain universal

our new main drain has top functions in combination with high quality. with the new strainer the main drain comes along with a PVC socket, for the easy installation on site. 4 mm fixed-loose flange in combination with rubber sealing, V4A stainles steel.

Product	G-kg	VE	Prod.No.	Price €
Smart main drain Universal VBA 100, incl. sieve and rubber sealing, VA stainless steel	3.00	1.00	7300421	559.90



## Star diffusor

Our diffusor plate offers you an optimal flow through your repositioning area (clarification zone). Suitable for the discharge into sewage treatment areas and for the removal of the water from the clarification zone. Stable PEHD construction. Made in the size 120 cm x 80 cm, it already covers a large area. It can easily be interconnected multiple plates.

Product	G-kg	VE	Prod.No.	Price €
Smart star diffusor 1,2 m x 0,8 m incl. 50 mm PVC angle	6.30	1.00	7300420	309.32



## Smart water distribution plate PE-VP

for an even distribution of water in ponds or natural pools, the many small openings in the plate distribute the water over a wide area, which leads to better ventilation and an even temperature distribution, the flow-free water supply avoids stirring up of the pond floor and therefore protects the plants, material: PE

Dimensions: 500x500 mm, 500x1000 mm 500 for approx. 2,5m2 filter area,

Product	G-kg	VE	Prod.No.	Price €
Smart Wasserverteilerplatten PE-VP 500 d50	0.00	1.00	79063	257.19
Smart water distribution plate PE-VP 1000 d32	0.00	1.00	79064	349.25



## Smart under water light 300 W/12 V black

for liner and polyester pools ABS, flange set, 18 × brass inserts, 25 mm scres, for installation in polyester pools we recommend 35 mm screws

Product	G-kg	VE	Prod.No.	Price €
Under water light Ocean for liner pools ABS black 300W 12V with flange set & 18x brass inserts & 25 mm screws	2.58	1.00	78021	226.50

## » NF 15836-2 Certificate



## Liner deluxe for natural pools

1.5mm fabric-reinforced for lining natural pools, without fungicidal film components, i.e. this film is also suitable for use with plants and fish

NF 15836-2 certified, roll length 25 m, waterproof, colorfast and UV-resistant for many years

Product data sheet in the webshop or on request at info@peraqua.com

Product	G-kg	VE	Prod.No.	Price €
PVC natural pool liner deluxe, reinforced, dark grey, 1,5mm, width165 cm, l=25 m $$	2.00	41.25	740047	30.95
PVC natural pool liner deluxe, reinforced, light grey, width 165cm, thickness 1,5mm, I=25 m coil	2.00	41.25	75172	30.95
PVC natural pool liner deluxe, reinforced, dark green, width 165 cm, thickness 1,5mm, I=25m coil	2.00	41.25	78474	30.95



dark grey





lieght grey

dark green

## **Cleaning accessories**



## Ocean® leaf skimmer De Luxe, PP black

Frame made of reinforced PPGF, UV-resistant, with extra strong net, integrated dirt collection flaps, flat frame design, 45 x 34 cm

Product	G-kg	VE	Prod.No.	Price €
Ocean® leaf skimmer De Luxe, PP black	0.40	25.00	7301736	18.65



## Ocean<sup>®</sup> leaf rake De Luxe, PP schwarz

Extra finely woven and extra deep net, frame made of reinforced PPGF, UV-resistant, integrated dirt collection flaps, flat frame design,  $45 \times 35$  cm

Product	G-kg	VE	Prod.No.	Price €
Ocean® leaf rake De Luxe, PP black	0.52	25.00	7301652	26.33



## Ocean® algae leaf rake De Luxe, PP black

Extra fine mesh and deep net (white) with antimicrobial coating, frame made of reinforced PPGF, UV-resistant, integrated dirt collection flaps, flat frame design,  $45 \times 35$  cm

Product	G-kg	VE	Prod.No.	Price €
Ocean® algae leaf rake De Luxe, PP black	0.96	25.00	7301647	21.03





## Ocean® wall brush De Luxe, PP black

Made of PPGF, robust and UV-resistant body, resistant, chlorine resistant bristles 44 cm

Product	G-kg	VE	Prod.No.	Price €
Ocean® wall brush De Luxe, PP black, 42cm	0.48	12.00	7301653	17.28



## Ocean® wall brush De Luxe, PP black, short

With soft plastic bristles for liner and tile pools, 13 cm /  $5^{\prime\prime}$ 

Product	G-kg	VE	Prod.No.	Price €
Ocean® Wall brush De Luxe, PP black. short 13 cm/5"	0.27	24.00	7301654	11.08





## Ocean<sup>®</sup> hand scrubber De Luxe, PP black

Robust cleaning pad with solid handle, fleece pad is very absorbent and effectively removes dirt and algae from the pool wall, 14.5 x 8.5 x 3 cm

Product	G-kg	VE	Prod.No.	Price €
Ocean® hand scrubber De Luxe, PP black	0.27	24.00	7301655	8.92



## Ocean<sup>®</sup> floor vacuum De Luxe, black

with side brushes

Product	G-kg	VE	Prod.No.	Price €
Ocean® floor vacuum De Luxe, black, with side brushes	1.33	10.00	7301737	48.14



## Ocean® telescopic rod De Luxe, alu, 3-parts

Excenter length adjustment, black ergonomic soft hand grips, patented system for easy fixing of Ocean® and Smart cleaning accessories, protection against injuries, silver anodized aluminium, 1.1 mm thickness for long life cycle, 3-part: 1.6 - 4.8m

Product	G-kg	VE	Prod.No.	Price €
Ocean® Telescopic rod De Luxe, 3 parts alu silver anodized 1.6 - 4.8 m black	1.44	10.00	7301656	57.32



## Smart nature aluminium leaf skimmer, grey/black

with robust aluminium handle system

Product	G-kg	VE	Prod.No.	Price €
Leaf skimmer standard PP-GFR single packed	0.46	12.00	78726	25.08

## Smart nature wall brush 45 cm/18", black

with robust aluminium handle system

Product	G-kg	VE	Prod.No.	Price €
Wallbrush standard PP-GFR aluminium grey, single packed 24"	0.83	12.00	78728	28.92

## PERAQUA M



## Smart wall brush WHALE TYPE large, grey, 50 cm

for optimal cleaning of stairs, rocks and liners, adjustable blade mechanism, 10 times higher pressure, ideal for effortless and efficient cleaning of the pool walls

Product	G-kg	VE	Prod.No.	Price €
Smart Wall brush "Whale type", width 50 cm, grey RAL7016, single packing	1.38	8.00	7301086	76.60



## Smart hose for natural pools d38, 50 m, black

socket distance 0.5 m, black, plastic wrapping

Product	G-kg	VE	Prod.No.	Price €
Floating hose, distance of socket 0.5 m, d38, black, I=50 m	0.21	50.00	71921	7.18

## Smart nature Flex vac head

48 cm/19", black/white, with robust aluminium handle system

Product	G-kg	VE	Prod.No.	Price €
Vacuum head single packed	1.56	12.00	78725	59.47



ANALAI

## Ocean® duff vac head

for efficient and easy cleaning of different natural pool areas. With transparent, unbreakable policarbonate body, adapter handle made of high-performance polyamide (5x higher strength) can be rotated 360°, step-shaped replaceable suction ring for protection of the pool liner.

Product	G-kg	VE	Prod.No.	Price €
Ocean® Duff vac	1.75	1.00	170933	303.28



## Ocean® vac ring with brushes for duff vacuum head

for opimal cleaning of stone stairs and rocks

Product	G-kg	VE	Prod.No.	Price €
Suction Ring for Duff Vac Head with brushes	0.84	10.00	190145	250.66







## Ocean® leaf/dirt collector

hose connection d38, snap closing, transparent, optimal as prefilter for wall vac and duff vac in combination with an external centrifugal pump

Product	G-kg	VE	Prod.No.	Price €
Leaf/dirt basket, hose connection d38 mm, transparent, with snap closing	0.94	4.00	78851	131.52
Filter bag leaf & dirt basket	0.39	1.00	74091	31.18

## Smart impeller pump 8000 + 12000

Dry self-suction impeller pump, for professional pond and natural pool cleaning, guarantees continuous and pulsation-free flow, robust and compact construction, flexible and high-quality impeller

Product	G-kg	VE	Prod.No.	Price €
Ocean Impeller pump 8000 220V, 8000 l/h, 4 bar, 2,2 kW incl. trolley, on and off protection switch	38.20	1.00	74962	3072.77
Ocean Impeller pump 12000 220V, 12000 I/h, 5 bar, 2,2 kW incl. trolley, on and off protection switch	43.28	1.00	74963	3552.31
VA stainless steel stoneburier for all models	6.00	1.00	75100	1905.65

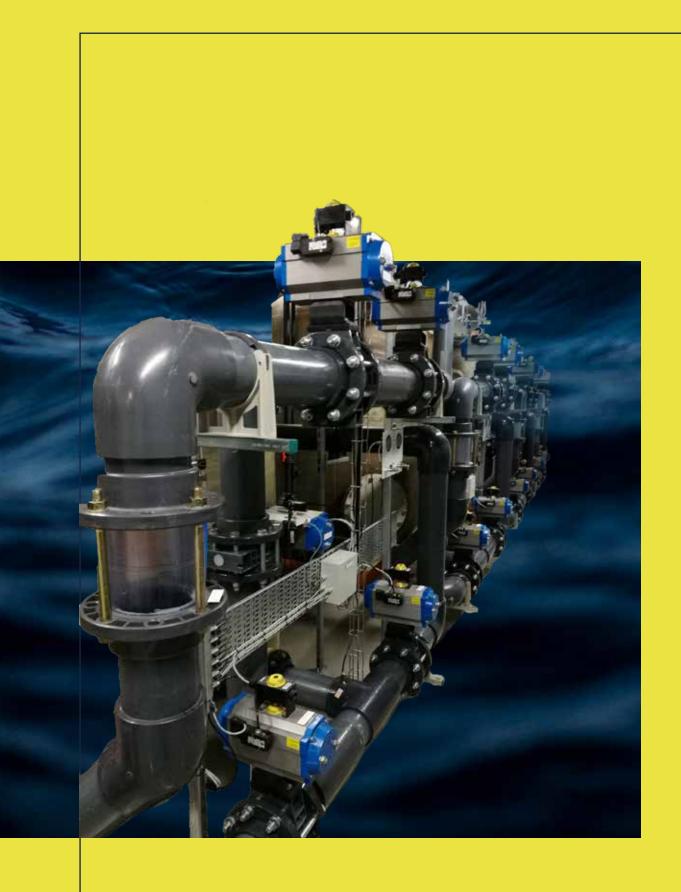


## Submersible pump NOVA UP

Submersible motor pump with vertical pressure outlet, an automatic or manual version with removable filter for suction mode 2-3 mm

- Operation area up to 15 m3/h at a delivery head up to 10 m
- Temperature of liquid from 0° 35° for private use
- For cloudy, fibre-free water
- Max. depth 7 m
- Installation vertical, fix or mobile
- Protection IP 68
- Insulation class F
- Vertical outlet 1¼" - With 10 m cable

Product	G-kg	VE	Prod.No.	Price €
Submersible pump NOVA UP 300 M-AE 230V, P1 – 0,38kW, P2 – 0,21kW	5.60	1.00	7300917	482.96
Submersible pump NOVA UP 300 M-AE NOVA UP 600 M-AE 230V, P1 – 0,77kW, P2 – 0,52kW	7.30	1.00	7300918	708.32



## COMMERCIAL POOLS

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» Ø 220 mm openings

- » Operating temperature < 40 °C
- » Operating pressure 0-1.6 bar
- » Nozzle floor according to DIN 19643/ÖNORM 6216

## Polyester high layer filter LEOBEN 2

Polyester high layer filter, RAL5011 steel blue, side mount with black lid flange type, 1m or 1.2 m sand bed, filter star or nozzle plate, d620, d750, d900, incl. original Praher 6-way backwash valve and piping set, 2 years guarantee for filter tank tightness

## PRODUCT DETAILS

- Suitable for private and public pools
- Including original Praher 6-way valve, 2", black
- In diameter d620, d750 and d900 available
- Filter bed height 1.0 or 1.2 m
- Filter star or nozzle plate
- PPGF flange cover, easy to open
- Pipework set included
- Including pressure gauge
- With side opening and inspection glass
- Max. operating pressure: 2 bar
- Max. working temperature: 40 °C
- Reinforced fibreglass filter bowl
- UV-resistant
- Side mount
- Swivelling filter arm for easier filling of the filter with filter medium
- Drain tap for emptying water and sand - Integrated ventilation to prevent air bubbles in the filter
- Filter container in RAL5011 steel blue
- 2-year guarantee on filter housing tightness

## **TECHNICAL DATA**

Ø Filter	Ø 620	Ø 620	Ø 620	Ø 750	Ø 750	Ø 750	Ø 900	Ø 900	Ø 900
A mm	1645	1845	1845	1645	1845	1845	1645	1845	1845
B mm	620	620	620	750	750	750	900	900	900
C mm	728	728	728	728	728	728	728	728	728
D mm	868	868	868	868	868	868	868	868	868
Emm	1000	1200	1200	1000	1200	1200	1000	1200	1200
Filterbett	Stern	Stern	Düsen	Stern	Stern	Düsen	Stern	Stern	Düsen
Filter bed height	1,0	1,2	1,2	1,0	1,2	1,2	1,0	1,2	1,2
Filtration area m <sup>2</sup>	0,3	0,3	0,3	0,44	0,44	0,44	0,64	0,64	0,64
Flow rate m³/h bei 20 m/h	5,7	5,7	5,7	8,3	8,3	8,3	11,9	11,9	11,9
Flow rate m³/h bei 30 m/h	9,4	9,4	9,4	13,8	13,8	13,8	19,9	19,9	19,9
Flow rate m³/h bei 40 m/H	12	12,3	12,3	18	17,9	17,9	26	25,8	25,8

Product	G-kg	VE	Prod.No.	Price €
Filter star, sand bed 1.0m				
Polyester high layer filter LEOBEN 2, laminated, RAL5011 steel blue, d620, sand bed 1m, filter star, cover flange type black, incl. mano- meter, piping kit and original Praher SM2" 6 way backwash valve, manual	75.00	1.00	7300509	2102.46
Polyester high layer filter LEOBEN 2, laminated, RAL5011 steel blue, d750, sand bed 1m, filter star, cover flange type black, incl. mano- meter, piping kit and original Praher SM2" 6 way backwash valve, manual	85.00	1.00	7300510	2447.88
Polyester high layer filter LEOBEN II, laminated, RAL5011 steel blue, d900, sand bed 1m, filter star, cover flange type black, incl. mano- meter, piping kit and original Praher SM2" 6 way backwash valve, manual	100.00	1.00	7300511	2973.50
Filter star, sand bed 1.2 m				
Polyester high layer filter LEOBEN 2, laminated, RAL5011 steel blue, d620, sand bed 1,2m, filter star, cover flange type black, incl. mano- meter, piping kit and original Praher SM2" 6 way backwash valve, manual	75.00	1.00	7300512	2778.27
Polyester high layer filter LEOBEN 2, laminated, RAL5011 steel blue, d750, sand bed 1,2m, filter star, cover flange type black, incl. mano- meter, piping kit and original Praher SM2" 6 way backwash valve, manual	85.00	1.00	7300513	3348.95
Polyester high layer filter LEOBEN 2, laminated, RAL5011 steel blue, d900, sand bed 1,2m, filter star, cover flange type black, incl. mano- meter, piping kit and original Praher SM2" 6 way backwash valve, manual	100.00	1.00	7300514	4069.78



NOTE

Use our CAD parts database for your pool projects. Add our components to your CAD designs with just a click of the mouse. Save time and rely on the data quality of Peraqua® original data.



Nozzle plate, sand bed 1.2m				
Polyester high layer filter LEOBEN 2, laminated, RAL5011 steel blue, d620, sand bed 1,2m, nozzle plate, cover flange type black, incl. manometer, piping kit and original Praher SM2" 6 way backwash valve, manual	75.00	1.00	7300515	4778.66
Polyester high layer filter LEOBEN 2, laminated, RAL5011 steel blue, d750, sand bed 1,2m, nozzle plate, cover flange type black, incl. manometer, piping kit and original Praher SM2" 6 way backwash valve, manual	85.00	1.00	7300516	5315.37
Polyester high layer filter LEOBEN 2, laminated, RAL5011 steel blue, d900, sand bed 1,2m, nozzle plate, cover flange type black, incl. manometer, piping kit and original Praher SM2" 6 way backwash valve, manual	100.00	1.00	7300517	6402.93



## AQUASTAR CONTROL, prices without filter

Product	G-kg	VE	Prod.No.	Price €
AquaStar Control with pressure sensor for V6 ND 3" 24V AC/DC	4.22	0.00	131494	2945.88
AquaStar Control with pressure sensor for V6 ND 3" 100-240 VAC	4.30	0.00	131495	3155.82



- » 0-2 bar operating pressure
- » < 40 °C operating temperature
- » Filter star
- » Includes pressure relief valve

## **Polyester filter laminated**

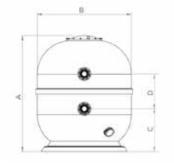
Commercial side mount filter with laminated, glass fibre reinforced filter container. UV-resistant. Large flange cover (d400 mm). The filter bed height is 1.0 m. Supplied with pressure relief valve as standard. Suitable for large private and public pools.

- Flange connections
- Filter bed height 1.0 m
- Filter star
- Large GRP flange cover (d400 mm)
- Pressure relief valve included
  Including drain set (d75), 1" plug
- Max. operating pressure: 2 bar
- Max. operating temperature: 40 °C
- Glass fibre reinforced filter container
- Laminated
- UV-resistant
- Side mount
- Filter container in blue

## TECHNICAL DATA

Ø Filter B mm	Ø 1050	Ø 1200	Ø 1400	Ø 1600	Ø 1800	Ø 2000
A mm	1755	1755	1755	1755	1980	1980
C mm	685	685	685	685	700	700
Dmm	520	520	520	520	720	720
Flansch-Connection mm	D90	D90	D110	D125	D140	D160
Filtration area m <sup>2</sup>	0,87	1,13	1,54	2,01	2,54	3,14
Flow rate m³/h	43	45-56	62-77	100	125	157

Product	G-kg	VE	Prod.No.	Price €
Polyester filter laminated, side mount, blue d1050 GFK cover 400 mm black, drain set d75 mm incl. 1″ plug, filtration bed height 1000 mm, PVC flange connection d90 mm	114.40	1.00	7300546	4400.19
Polyester filter laminated, side mount, blue d1200 GFK cover 400 mm black, drain set d75 mm incl. 1″ plug, filtration bed height 1000 mm, PVC flange connection d90 mm	130.50	1.00	7300547	4805.65
Polyester filter laminated, side mount, blue d1400 GFK cover 400 mm black, drain set d75 mm incl. 1" plug, filtration bed height 1000 mm, PVC flange connection d110 mm	167.00	1.00	7300548	5841.87
Polyester filter laminated, side mount, blue d1600 GFK cover 400 mm black, drain set d75 mm incl. 1" plug, filtration bed height 1000 mm, PVC flange connection d125 mm	211.00	1.00	7300549	7088.34
Polyester filter laminated, side mount, blue d1800 GFK cover 400 mm black, drain set d75 mm incl. 1" plug, filtration bed height 1000 mm, PVC flange connection d140 mm	281.00	1.00	7300550	9461.13
Polyester filter laminated, side mount, blue d2000 GFK cover 400 mm black, drain set d75 mm incl. 1" plug, filtration bed height 1000 mm, PVC flange connection d160 mm	302.00	1.00	7300551	12314.48







## **GRP multi-layer filter STEYR - DIN 19643**

Filter container made of high-quality glass fibre reinforced plastic. Handmade to ensure maximum chemical and mechanical resistance. The built-in parts are made of PP, ABS and PVC. All installed screws are made of high-strength, corrosion-resistant INOX (stainless steel), nuts are made of nickel-plated brass. The filter tank is supplied with a connection for manual or automatic venting and draining.

5-year guarantee on filter container.

## PRODUCT DETAILS

- DIN 19643 compliant
- Max. operating pressure: 2 bar (PA) / 2.5 bar (PP)
- Nozzle base
- Glass fibre reinforced plastic
- Incl. connection for venting and draining
- Side viewing window
- Large manhole at the side
- Bottom cover for easy servicing - Filter container in RAL5015 blue

Product	G-kg	VE	Prod.No.	Price €
GRP multi-layer filter STEYR DIN 19643, d610, DN 90 75, nozzle base	100.00	1.00	7301702	6755.84
GRP multi-layer filter Steyr DIN 19643, d765, DN 90 80, nozzle base	150.00	1.00	7301703	7989.07
GRP multi-layer filter Steyr DIN 19643, d920, DN 110 90, nozzle base	170.00	1.00	7301664	9906.62
GRP multi-layer filter Steyr DIN 19643, d1080, DN 140 110, nozzle base	250.00	1.00	7301665	13609.23
GRP multi-layer filter Steyr DIN 19643, d1250, DN 160 140, nozzle base	310.00	1.00	7301666	16340.69
GRP multi-layer filter Steyr DIN 19643, d1450, DN 160 140, nozzle base	460.00	1.00	7301667	18842.10
GRP multi-layer filter Steyr DIN 19643, d1800, DN 225 160, nozzle	900.00	1.00	7301668	29775.20

## DIMENSIONS

base

	d610	d765	d920	d1080	d1250	d1450	d1800
Connection (DN)	90/75	90/80	110/90	140/110	160/140	160/140	225/160
D inside (mm)	590	740	900	1050	1230	1430	1780
D outside (mm)	635	790	945	1120	1295	1470	1840
Height (mm)	2100	2350	2350	2500	2500	2700	2900
Filtration area (m <sup>a</sup> )	0.27	0.43	0.64	0.87	1.19	1.61	2.49
Flow rate 35 (m <sup>1</sup> /h)*	9.6	15.1	22.3	30.3	41.6	56.2	87.1
Flow rate 50 (m <sup>1</sup> /h)**	13.7	21.5	31.9	43.3	59.4	80.3	124,4
Top/side opening (DN mm)	210/210	210/210	210/430	500/500	500/500	500/500	500/500
Art.Nr.	7301702	7301703	7301664	7301665	7301666	7301667	7301668

\* (v = 35 m/h) | \*\* (v = 50 m/h)

## FILLING QUANTITIES

	d610	d765	d920	d1080	d1250	d1450	d1800
Filter bed height (mm)	1200	1200	1200	1500	1500	1500	1500
Nature Works (kg)*	437	688	1019	1335	1903	2572	3986
Filter sand (kg)*	492	774	1145	1558	2138	2890	4479

\* Guide values



## GRP multi-layer filter STEYR - ÖNORM M 6216

Filter container made of high-quality glass fibre reinforced plastic. Handmade to ensure maximum chemical and mechanical resistance. The built-in parts are made of PP, ABS and PVC. All installed screws are made of high-strength, corrosion-resistant INOX (stainless steel), nuts are made of nickel-plated brass. The filter tank is supplied with a connection for manual or automatic venting and draining.

5-year guarantee on filter container.

## PRODUCT DETAILS

- ÖNORM M 6216 compliant
- Max. operating pressure: 2 bar (PA) / 2.5 bar (PP)
- Nozzle base with 9 purge air nozzles
- Glass fibre reinforced plastic
- Incl. connection for venting and draining
- 2 side viewing windows
- Large manhole at the side
- Bottom cover for easy servicing
- Filter container in RAL5015 blue

G-kg	VE	Prod.No.	Price €
100.00	1.00	7301704	8545.26
150.00	1.00	7301705	9908.08
170.00	1.00	7301669	11696.05
250.00	1.00	7301670	15398.66
310.00	1.00	7301671	18130.11
460.00	1.00	7301672	20631.52
900.00	1.00	7301673	31564.62
	100.00 150.00 170.00 250.00 310.00 460.00	100.00       1.00         150.00       1.00         170.00       1.00         250.00       1.00         310.00       1.00         460.00       1.00	100.00         1.00         7301704           150.00         1.00         7301705           170.00         1.00         7301669           250.00         1.00         7301670           310.00         1.00         7301671           460.00         1.00         7301672

## DIMENSIONS

	d610	d765	d920	d1080	d1250	d1450	d1800
Connection (DN)	90/75	110/90	110/90	140/110	160/140	160/140	225/160
D inside (mm)	590	740	900	1050	1230	1430	1780
D outside immi	635	790	945	1120	1295	1470	1840
Height (mm)	2100	2350	2350	2500	2500	2700	2900
Fitration area (m²)	0.27	0.43	0.64	0.87	1.19	1,61	2.49
Flow rate 35 milmor	9.6	15.1	22.3	30.3	41.6	56.2	87,1
Flow rate \$0 (m <sup>1</sup> /h)**	13.7	21.5	31.9	43.3	59,4	80.3	124.4
Top/side opening (DN mm)	210/210	210/210	210/430	500/500	500/500	500/500	500/500
Art.Nr.	7301704	7301705	7301669	7301670	7301671	7301672	7301673

\* (y = 35 m/h) | \*\* (y = 50 m/h)

## FILLING QUANTITIES

	d610	d765	d920	d1080	d1250	d1450	d1800
Fiter bed height (mm)	1200	1200	1200	1500	1500	1500	1500
Nature Works (kg)*	437	688	1019	1335	1903	2572	3986
Filter sand (kg)*	492	774	1145	1558	2138	2890	4479

\* Guide values



# **GRP single-layer filter STEYR ÖNORM M 6216**

Filter container made of high-quality glass fibre reinforced plastic. Handmade to ensure maximum chemical and mechanical resistance. The built-in parts are made of PP, ABS and PVC. All installed screws are made of high-strength, corrosion-resistant INOX (stainless steel), nuts are made of nickel-plated brass. The filter tank is supplied with a connection for manual or automatic venting and draining.

5-year guarantee on filter container.

## PRODUCT DETAILS

- ÖNORM M 6216 compliant
- Max. operating pressure: 2 bar (PA) / 2.5 bar (PP)
- Nozzle base with 9 purge air nozzles
  Glass fibre reinforced plastic
- Incl. connection for venting and draining
- Side viewing window
- Large manhole at the side
- Bottom cover for easy servicing
- Filter container in RAL5015 blue

Product	G-kg	VE	Prod.No.	Price €
GRP single-layer filter Steyr ÖNORM M 6216, d610, DN 90 75, nozzle base	100.00	1.00	7301700	7189.73
GRP single-layer filter Steyr ÖNORM M 6216, d765, DN 110 90, nozzle base	150.00	1.00	7301701	8552.54
GRP single-layer filter Steyr ÖNORM M 6216, d920, DN 110 90, nozzle base	170.00	1.00	7301659	10340.51
GRP single-layer filter Steyr ÖNORM M 6216, d1080, DN 140 110, nozzle base	250.00	1.00	7301660	14043.12
GRP single-layer filter Steyr ÖNORM M 6216, d1250, DN 160 140, nozzle base	310.00	1.00	7301661	16774.58
GRP single-layer filter Steyr ÖNORM M 6216, d1450, DN 160 140, nozzle base	460.00	1.00	7301662	19275.98
GRP single-layer filter Steyr ÖNORM M 6216, d1800, DN 225 160, nozzle base	900.00	1.00	7301663	30209.09

### DIMENSIONS

	d610	d765	d920	d1090	d1250	d1450	d1800
Connection (DN)	90/75	110/90	110/90	140/110	160/140	160/140	225/160
D inside (mm)	590	740	900	1050	1230	1430	1780
D outside (mm)	635	790	945	1120	1295	1470	1840
Height (mm)	2100	2350	2350	2500	2500	2700	2900
Filtration area (m <sup>3</sup> )	0.27	0.43	0.64	0.87	1.19	1.61	2.49
Flow rate 35 (m <sup>3</sup> /h)*	9.6	15,1	22.3	30.3	41.6	56.2	87.1
Flow rate 50 m <sup>3</sup> /hit**	13.7	21.5	31.9	43.3	59.4	80.3	124.4
Top/side opening (DN mm)	210/210	210/210	210/430	500/500	500/500	500/500	500/500
Art.Nr.	7301700	7301701	7301659	7301660	7301661	7301662	7301663

\* (v = 35 m/h) } \*\* (v = 50 m/h)

#### FILLING QUANTITIES

	d610	d765	d920	d1080	d1250	d1450	d1800	
Filter bed height (mm)	1200	1200	1200	1500	1500	1500	1500	
Nature Works (kg)*	437	688	1019	1335	1903	2572	3986	
Filter sand (kg*	492	774	1145	1558	2138	2890	4479	

\* Guide values





- » Filtration up to 1 µm
- » Only a single grain size is required
- » < 99.64% filtration efficiency





## **Nature Works Glass Filter Media BIG BAG**

Crystal-clear pool water with the highest hygienic factor through glass filter medium made from the purest, white flat glass with regard to the environment.

- maximum performance for crystal clear, hygienic pool water
- resistant against biofilm and bacteria
- the purity of Nature Works is greater than 99.999%
- Filtration efficiency up to 99,64%, filtration up to 1 µm
  less backwashing due to anti-compaction technology
- the world's only glass filter medium with NSF61 certification
- maximum lifetime
- economical use of pool chemistry
- recycled flat glass
- ONLY granular size 0.6 1.2 mm as BIG BAG available

Certifications: NSF, DIN 19643, Bureau Veritas ES026775-A-CPI, ES026775-CPI, IFTS-testing, accredited Absence of Biofilm

#### THIS IS WHAT MAKES NATURE WORKS SO UNIQUE AND SUSTAINABLE

Anti-compaction technology prevents compaction and micro-channel formation in the filter material. The result is low pressure loss and optimal backwashing efficiency. The pressure loss before and after filtering is minimal and has been proven to be 50-60% lower compared to other glass filter media. Nature Works® generally recommends monthly backwashing at a comparatively low filter speed of only 30m/h. Water savings of more than 75% are quite realistic with Nature Works® Hi-Tech glass filter medium. This also reduces chemical consumption.

Nature Works guarantees an almost infinite lifespan and reusability. Nature Works uses environmentally friendly, recyclable packaging made from paper with FSC certification.

Product	G-kg	VE	Prod.No.	Price €
Nature Works Hi-Tech glass filter media, granual size 0,6 - 1,2 mm BIG BAG, packing unit = 1000 kg bag	1015.00	1.00	7301553	1378.26

## Smart filter sand

washed, crushed und fire-dried, acc. to EN 12904, 25 kg

Product	G-kg	VE	Prod.No.	Price €
Smart filter sand 0.7 - 1.25 mm DIN 19623 25 kg	25.00	48.00	78086	13.90
Smart filter sand 1.0 - 2.0 mm DIN 19623 25 kg	25.00	48.00	78087	13.90
Smart filter sand 0.4 - 0.8 mm DIN 19623 25 kg	25.00	48.00	78339	13.90
Smart filter sand 2.0 - 3.0 mm DIN 19623 25 kg	25.00	48.00	78340	13.90
Smart filter sand 3.0 - 5.0 mm DIN 19623 25 kg	25.00	40.00	78341	13.90
Smart filter sand 5.0 - 7.0 mm DIN 19623 25 kg	25.00	40.00	78342	13.90



## Smart Anthrasit filter medium, made in Austria

Hydro Anthrasit Type H, granulation 1, 0.6–1.6 mm, layer height 600–800 mm, DIN12907/19643 Hydro Anthrasit Type N, granulation 1, 0.6–1.6 mm, layer height 600–800 mm, DIN12909/19643 DVGW documentation W213, packed in robust 50 l bags

Product	G-kg	VE	Prod.No.	Price €
Smart Hydro Anthrasit H filter medium, 50 lt. bag EN12907	50.00	20.00	740131	129.23
Smart Hydro Anthrasit N filter medium, 50 lt. bag EN12907	50.00	20.00	740132	129.23





» Automatic control via settings on the digital display

» External control of positioning via 2 digital inputs possible

## Aquastar® Control, 3"

the Aquastar Control® is a fully automated backwash system for the Praher Plastics® 6 way backwash valve in sizes 3". With its intelligent electronic control system and easy-to-read display it provides perfect clarity and numerous fully automatic functions on a single unit for use in swimming pools as well as commercial and industrial water purification. The Aquastar can also be programmed to suit individual requirements.

# FEATURES

- A lifting and rotating actuator with control functions 24V AC/ DC and 100 265V AC
- Real RTC with 10 year battery
- Easy to retrofit
- Human interface with display and buttons included into the cover
- Automated backwash trigger
- Automated pump trigger
- Niveau control
- Temperature or solar controlError Handling integrated
- Relays with gold contactsConfigurable relays
- Configurable digital inputs
- Protection IP65
- Optical position indicator
- Additional position CLOSED
- Additional position Winter

Product	G-kg	VE	Prod.No.	Price €
Aquastar® Control actuator				
AquaStar Control with pressure sensor for V6 ND 3" 24V AC/DC	4.22	0.00	131494	2945.88
AquaStar Control with pressure sensor for V6 ND 3" 100-240 VAC	4.30	0.00	131495	3155.82
Aquastar® Control, with valve, with pressure sensor				
AquaStar Control with pressure sensor, SM31 AO 3" ASA-GF nature, thread ends 3",BSP MOP 5 bar NBR EPDM, 100-240 VAC	11.69	0.00	131502	4223.31

# Backwash valve AQUASTAR® mp6 plc

excellent in combination with a PLC control, with ABS backwash valve (max. pressure 3.5 bar) or ASA-GF (max. pressure 5 bar) version available, for fully automatic and cost-efficient back wash of filter systems d500–d1050

#### CHARACTERISTICS

• With micro processor controlled lift-rotary drive for SPS controls, where positions driven by the DC signales of the SPS

- Integrated direct error handling
- Early error identification for maintenance
- Relais with gold contact for response
- Multi-grade voltage (100-240 VAC 50-60Hz/150-300VDC or 24V AC/DC)
- For dimensions 1½", 2" and 3"
- IP65 protection code
- Valve and electric head body UV resistant
- 7 positions controllable with PLC control (f, r, k, n, z, g, e), postition 7 = winter position
- Position "circulation" can be applied with salt water chlorination
- Potential free clamps, for control of Praher EO510 electric valves
- Direct pump connection
- Retro-fit installation on all manual Praher Ocean® V6 side or top mount valves with new sealing system
   on all well-known filter brands possible
- Position indication on filter lid
- Position indication on filter
- TGM test certificate

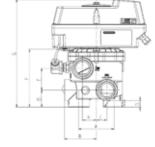
#### DIMENSIONS

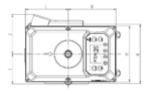
	Α	В	с	D	E	F	G	н	I	J	к	L	М	N	Р
3" SM	170	330	50	85,5	110	306	46	50	165	117	330	125	165	140	х
Product								G-I	kg \	/E		Prod.N	lo.	Price	€
AquaStar mp6 plc MOP 5 bar NBR EF				nature	thread	ends 3'	BSP	10	.33 1	.00		13139	8	3218.	76
AquaStar mp6 plc BSP MOP 5 bar NE				nature	thread	connec	tion R 3'	″ 10	.33 1	.00		13139	9	3545.	68



## » External PLC/SPS control

Compatible with Smart Home systems







## » 21/2" Connection

» 3.5 bar



# 6-way backwash valve side mount 21/2"

3,5 bar, black

# CHARACTERISTICS

- Easy handling
- Extreme low-noise operation
- High durable sealing material and pressure springs
- Pressure tightness and operation tests according to DIN 3230
- Easy installation on the AQUASTAR® automatic backwash valve actuator
- Additional "winter position" for release for the sealing system

# APPLICATION

Swimming pool, natural pool, aquaristics, fish ponds and water attractions (fountains) with temperatures up to 40  $^{\circ}\mathrm{C}$ 

Product	G-kg	VE	Prod.No.	Price €
VALVE				
6 way multiport valve 2 $1/2^{\prime\prime}$ - d75, Top + Bottom = glue connection d75, Pump + Return + Waste = union connection glue d75 metric, neutral handle	6.66	1.00	77464	415.42
ACCESSORIES				
PVC sight glass transparent DN65/d75	1.55	1.00	7300323	144.78
Connection union nut for 2 1/2" valve	0.10	0.00	74435	129.42

» 3" Connection

» ABS housing

» 3.5 bar







# 6-way backwash valve V6 side mount 3" ABS

available in ABS (3.5 bar) and in various connections, 7 positions including winter position

Product	G-kg	VE	Prod.No.	Price €
VALVES				
Back wash valve V6 ND SM30 3 3" ABS white thread ends R 3" BSP MOP 3,5 bar EPDM EPDM Praher-label	6.49	1.00	130192	929.08
Back wash valve V6 ND SM30 AO, 3" ABS black thread ends 3" BSP, MOP 3,5 bar EPDM tpe single packed -neutral label	6.98	1.00	130002	929.08
Back wash valve V6 ND SM30 AO 3" ABS white thread ends R 3" BSP MOP 3,5 bar EPDM EPDM single packed Praher-label	7.64	1.00	130000	929.08
Back wash valve V6 ND SM30 AO 3" ABS white solvent socket d90 metric MOP 3,5 bar EPDM EPDM single packed Praher-label	6.80	1.00	130074	929.08
UNION 3"				
Union ocean PVC grey solvent socket-male thread 90-3" BSP EPDM	1.11	1.00	170085	46.75
Union ocean excessive PVC grey solvent socket male thread 90 -3" $\ensuremath{BSP}$ EPDM	1.76	1.00	170185	105.19
SIGHT GLASS				
Sight glass S4 DN80 PVC transparent PVCu solvent socket ends d90 metric PN16 EPDM	4.01	1.00	123256	189.24



- » 3" Connection
- » ASA GF housing
- » 5 bar







available in ASA-GF (5 bar), 7 positions including winter position

## CHARACTERISTICS

- Easy handling
- Multi-lingual non-smudging laser printing
- Optimal flow and pressure loss rates
- Extreme low-noise operation
- Made of high quality UV resistant and impact resistant ASA-GF
- High durable sealing material and pressure springs installed on the valve plate
- Pressure tightnes and operation tests according to nach DIN 3230
  Easy installation on the AQUASTAR® automatic backwash valve actuator
- Additional "winter position" for release for the sealing system

# APPLICATION

Swimming pool, natural pool, aquaristics, fish ponds and water attractions (fountains) with temperatures up to +50°C

Product	G-kg	VE	Prod.No.	Price €
VALVES				
Back wash valve V6 ND SM31 AO 3" ASA-GF nature thread ends R 3" BSP MOP 5 bar EPDM EPDM single packed Praher-label	7.64	1.00	130142	1037.60
Back wash valve V6 ND SM31 AO 3" ASA-GF nature thread ends R 3" BSP MOP 5 bar FPM EPDM single packed Praher-label 2 plugs for backwash valve	7.72	1.00	130201	1172.09
UNION 3"				
Union ocean PVC grey solvent socket-male thread 90-3" BSP EPDM	1.11	1.00	170085	46.75
Union ocean PVC grey solvent socket-male thread 90-3" BSP EPDM	1.76	1.00	170185	105.19
SIGHT GLASS				
Sight glass S4 DN80 PVC transparent PVCu solvent socket ends d90 metric PN16 EPDM	4.01	1.00	123256	189.24



4" Connection

#### ABS housing

## 3.5 bar

# 6-way backwash valve side mount 4"

# 3,5 bar, black

### CHARACTERISTICS

- Easy handling
- Extreme low-noise operation
- High durable sealing material and pressure springs
- Pressure tightness and operation tests according to DIN 3230
- Easy installation on the AQUASTAR® automatic backwash valve actuator
- Additional "winter position" for release for the sealing system

# APPLICATION

Swimming pool, natural pool, aquaristics, fish ponds and water attractions (fountains) with temperatures up to 40  $^{\circ}\mathrm{C}$ 

Product	G-kg	VE	Prod.No.	Price €
Back wash valve black 110-4"	20.70	1.00	78080	2242.29



RELYABLE & ECONOMICAL

# **DESIGNED FOR SAFETY & LONG-TERM USABILITY**

Praher Plastics® produces an extensive range of butterfly valves, ball valves and diaphragm valves for commercial pool construction. The butterfly valves and ball valves are also available in electric and pneumatic versions.

The high-quality fittings offer reliability, durability and economy. Our comprehensive spare parts guarantee (up to 10 years for Praher® products) and an above-average service life, thanks to the use of high-quality materials, ensure many years of use.







Butterfly valve K4 on page <?>



Automatic butterfly valve K4 with pneumatic actuator on page <?>



Automatic butterfly valve K4 24V AC/DC (ER) on page <?>





2-Way ball valve M1 with electric actuator 24 V on page <?>



Automatic 2way ball valve M1 with pneumatic actuator on page <?>



3-way ball valve S4 with electric actuator 24V/230V on page <?>





Automatic diaphragm valve T4 with pneumatic actuator on page <?>



Diaphragm valve T7



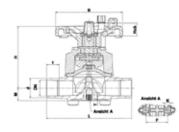
NOTE

Use our CAD parts database for your pool projects. Add our components conveniently to your CAD designs. You save time and can rely on the data quality of the original Peraqua® data.



## » Highest safety

- » Optical position indicator
- » Lockable handwheel



Dimensions of other connection types can be found in the datasheet on the Peraqua webshop.

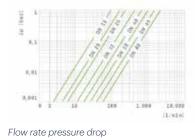


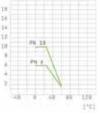


- Operation temperature max. 60 °C
- Safety handle system
   Radial installation and disassembly
- Direction-independent flow
- Full sectional flow (nominal width)
- Floating ball
  4 PTFE ball seating rings
- L or T ball type available
- Easy automation due to valve clamps

# DIMENSIONS

DN	(	k	м	н	В	F	Hub	к	L	т	t <sup>1</sup> ks <sup>1</sup>	t ss <sup>1</sup>	PN
15	20	1⁄2"	17	100	86	25	9	M6	124	12	16	28,5	10
20	25	3⁄4″	21	100	86	25	9	M6	144	12	19	36	10
25	32	1"	21	107	86	25	11	M6	154	12	22	36	10
32	40	1¼"	33	144	136	45	22	M8	174	15	26	38,5	10
40	50	1½"	33	144	136	45	22	M8	194	15	31	46	10
50	63	2"	40,5	170	136	45	28	M8	224	15	38	46	10







Pressure temperature

Flow rate opening

Product	G-kg	VE	Prod.No.	Price €
FIX FLANGE				
Diaphragm Valve T4 DN80 PVC grey fix flange d90 DIN-ANSI-JIS PN10 EPDM	7.20	1.00	120200	628.22
Diaphragm Valve T4 DN80 PVC grey fix flange d90 DIN-ANSI-JIS PN10 PTFE-coated	7.40	1.00	120228	1150.74
Diaphragm Valve T4 DN100 PVC grey fix flange d110 DIN-ANSI-JIS PN10 EPDM	12.89	1.00	120898	899.60
Diaphragm Valve T4 DN100 PVC grey fix flange d110 DIN-ANSI-JIS PN10 PTFE-coated	13.11	1.00	120896	1538.46
Diaphragm Valve T4 DN125 PVC grey fix flange d140 DIN-ANSI-JIS PN10 EPDM	7.02	1.00	120899	1126.59
Diaphragm Valve T4 DN125 PVC grey fix flange d140 DIN-ANSI-JIS PN10 PTFE-coated	7.58	1.00	120897	1981.04
PVC-Diaphragm Valve, operated dircetly pneumatically				
Diaphragm Valve T4 DN15 PVC grey union/PVCu solvent socket d20 metric PN6 EPDM direct pneum. activated	0.58	15.00	122816	65.45
Diaphragm Valve T4 DN15 PVC grey union/PVCu solvent socket d20 metric PN6 FPM direct pneum. activated	0.58	15.00	122848	124.45
Diaphragm Valve T4 DN20 PVC grey union/PVCu solvent socket d25 metric PN6 EPDM direct pneum. activated	0.58	15.00	122817	74.05
Diaphragm Valve T4 DN20 PVC grey union/PVCu solvent socket d25 metric PN6 FPM direct pneum. activated	0.56	15.00	122850	133.32
Diaphragm Valve T4 DN25 PVC grey union/PVCu solvent socket d32 metric PN6 EPDM direct pneum. activated	0.58	15.00	122818	84.39
Diaphragm Valve T4 DN25 PVC grey union/PVCu solvent socket d32 metric PN6 FPM direct pneum. activated	0.62	15.00	122852	148.63
Diaphragm Valve T4 DN32 PVC grey union/PVCu solvent socket d40 metric PN6 EPDM direct pneum. activated	1.40	10.00	122819	111.36
Diaphragm Valve T4 DN32 PVC grey union/PVCu solvent socket d40 metric PN6 FPM direct pneum. activated	1.38	10.00	122854	218.21
Diaphragm Valve T4 DN40 PVC grey union/PVCu solvent socket d50 metric PN6 EPDM direct pneum. activated	0.58	10.00	122820	152.01
Diaphragm Valve T4 DN40 PVC grey union/PVCu solvent socket d50 metric PN6 FPM direct pneum. activated	1.39	10.00	122856	259.33
Diaphragm Valve T4 DN50 PVC grey union/PVCu solvent socket d63 metric PN6 EPDM direct pneum. activated	2.29	8.00	122821	185.73
Diaphragm Valve T4 DN50 PVC grey union/PVCu solvent socket d63 metric PN6 FPM direct pneum. activated	2.37	8.00	122858	358.32



PVC socket available upon request



## » 43-177 m³/h at 10 m

- » High flow rate
- » Flange connection
- » Suitable for countercurrent systems

# Smart filter pump series K

centrifugal pump, suitable for swim jets

# APPLICATION

The pump is designed to move water at a rate sufficient for counter-current swimming, and can also be used in water parks, for fountains, cascades, etc. Features standard connection flanges which together with a broad base make the system extremely robust. Counter-flanges not supplied as standard. Turbine available in 2 versions, Noryl or marine bronze, as per request.

### MATERIAL

Pump body, volute, countervolute and cover made of glass fibre-loaded polypropylene resistant to pool chemicals. Mechanical seal in ceramic carbon and AISI-316 stainless steel (also for use with sea water). Screws and shaft made of AISI-316 stainless steel.

#### MOTOR

Asynchronous motor with external ventilation. Protection grade IP-55. Class F insulation. Frequency (50 and 60 Hz). Motor bearings greased for life to ensure long and silent operation.

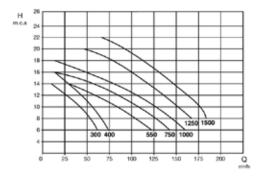
#### **TECHNICAL DATA**

Pump	DN	P2 (kW)	P1 (kW)	Netto Kg.	Brutto Kg.
K300	110	2,2	2,72	36	37,5
K400	110	3	3,63	37	38,5
K550	110	4	4,75	47	48,5
K750	110	5,5	6,42	59,5	61
K1000	110	7,5	8,62	69,5	71
K1250	110	9,2	10,45	78	79,5
K1500	110	11	12,44	79	80,5

#### DIMENSIONS

DIMENSI	0.10											
	Α	В	с	D	E	F	G	н	I	J	к	Verpackung
K300	265	165	255	310	335	300	450	495	370	385	370	385x 595x 840
K400	265	165	255	310	335	300	450	495	370	385	370	385x 595x 840
K550	265	165	255	330	335	300	450	495	370	385	370	385x 595x 840
K750	265	165	255	380	335	300	450	495	370	385	370	385x 595x 840
K1000	265	165	255	380	335	300	450	495	370	385	370	385x 595x 840
K1250	265	165	255	380	335	300	450	495	370	385	370	385x 595x 840
K1500	265	165	255	380	335	300	450	495	370	385	370	385x 595x 840

Product	G-kg	VE	Prod.No.	Price €
Smart Filter Pump Series K 300 230-400V, 1450 rpm 2,2 kW, 3 HP, 43 m3/h at 10m	37.50	1.00	74471	1936.27
Smart Filter Pump Series K 400 230-400V, 1450 rpm 3 kW, 4 HP, 56 m3/h at 10m	38.50	1.00	74472	1987.02
Smart Filter Pump Series K 550 230-400V, 1450 rpm 4 kW, 5,5 HP, 84 m³/h at 10m	48.50	1.00	74473	2274.49
Smart Filter Pump Series K 750 400-690V, 1450 rpm 5,5 kW, 7,5 HP, 107 m3/h at 10m	61.00	1.00	74474	3568.17
Smart Filter Pump Series K 1000 400-690V, 1450 rpm 7,5 kW, 10 HP, 126 $\rm m^3/h$ at 10m	71.00	1.00	74475	3669.62
Smart Filter Pump Series K 1250 400-690V, 2850 rpm 9,2 kW, 12,5 HP, 152 m3/h at 10m	79.50	1.00	74476	4362.95
Smart Filter Pump Series K 1500 400-690V, 2850 rpm 11 kW, 15 HP, 177 $m^{\rm s}/h$ at 10m	80.50	1.00	74477	4430.58





#### NOTE

Compatible flange sets (DIN PN10) can be found in the PVC Products & Adhesives section.

DN = 110 mm ØT = 16 mm Pt = 180 mm





- » 48-175 m³/h at 10 m
- **High flow rate** »
- » Flange connection
- » Self-priming

# **Smart Power filter pump**

self-priming

## APPLICATION

Self-priming pump. High-volume self-priming pump available in 2 and 4 poles versions ideal for larger filter systems. Features large suction-side pre-filter which together with excellent hydraulic performance ensures extremely high filtration capacity. Filter with polycarbonate cover for easy viewing of pre-filter basket content. Features standard connection flanges which together with broad base make the system extremely robust. Turbine available in 2 versions, Noryl or marine bronze, as per request.

# MATERIAL

Pre-filter, body, pump body, volute, countervolute and cover made of glass fibre-loaded polypropylene resistant to pool chemicals. Pre-filter basket in polyethylene. Polycarbonate pre-filter cover with four-pin closure system. Noryl impeller. Mechanical seal in ceramic carbon and AISI-316 stainless steel (also for use with sea water) Screws and shaft stainless steel AISI-316, mechanical seal in ceramic carbon and AISI-316 stainless steel (also for use with sea water), screws and shaft made of AISI-316 stainless steel.

#### MOTOR

Asynchronous motor with external ventilation. Protection grade IP-55. Class F insulation, (50/60 Hz). Motor bearings greased for life to ensure long and silent operation.

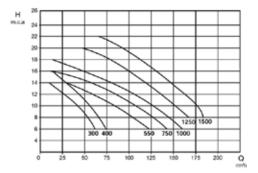
## **TECHNICAL DATA**

Pump	DN	P2 (kW)	P1 (kW)	Netto Kg.	Brutto Kg.
P300	110	2,2	2,72	40,5	42,5
P400	110	3	3,63	42,5	44,5
P550	110	4	4,75	51,4	53,4
P750	110	5,5	6,42	64	66
P1000	110	7,5	8,62	74	76
P1250	110	9,2	10,45	82,5	84,5
P1500	110	11	12,44	83,5	85,5

#### DIME

	Α	В	С	D	E	F	G	H	I	J	к	A1	H1	L1
												V	/erpacku	ng
P300	423	410	525	310	265	500	335	300	450	590	370	385	595	840
P400	423	410	525	310	265	500	335	300	450	590	370	385	595	840
P550	423	410	525	335	265	500	335	300	450	590	370	385	715	1170
P750	423	410	525	380	265	500	335	300	450	590	370	385	715	1170
P1000	423	410	525	380	265	500	335	300	450	590	370	385	715	1170
P1250	423	410	525	380	265	500	335	300	450	590	370	385	715	1170
P1500	423	410	525	380	265	500	335	300	450	590	370	385	715	1170

Product	G-kg	VE	Prod.No.	Price €
Smart Power Filter Pump 300 230-400V, 1450 rpm, 2,2 kW, 3 HP, 43 m3/h at 10m	42.50	1.00	74464	2301.55
Smart Power Filter Pump 400 230-400V, 1450 rpm 3 kW, 4 HP, 56 m3/h at 10m	44.50	1.00	74465	2353.99
Smart Power Filter Pump 550 230-400V, 1450 rpm 4 kW, 5,5 HP, 84 m3/h at 10m	53.40	1.00	74466	2631.31
Smart Power Filter Pump 750 400-690V, 1450 U/min 5,5 kW, 7,5 HP, 107 m3/h at 10m	66.00	1.00	74467	3568.17
Smart Power Filter Pump 1000 400-690V, 1450 rpm 7,5 kW, 10 HP, 126 m3/h at 10m	76.00	1.00	74468	3667.92
Smart Power Filter Pump 1250 400-690V, 2850 rpm 9,2 kW, 12,5 HP, 152 m³/h at 10m $$	84.50	1.00	74469	4362.95
Smart Power Filter Pump 1500 400-690V, 2850 rpm 11 kW, 15 HP, 177 m³/h at 10m	85.50	1.00	74470	4417.07





NOTE Compatible flange sets (DIN PN10) can be found in the PVC Products & Adhesives section.

									-		, .		,	
P	750		110			5,5		6,42	2		64		66	6
P1	000		110			7,5		8,62	2		74		76	6
P1	250		110			9,2		10,4	5		82,5		84,	5
P1	500		110			11		12,4	4		83,5		85,	5
ENS	SIONS													
	Α	В	С	D	Е	F	G	Н	I	J	к	A1	H1	L1
												V	/erpacku	ng
0	423	410	525	310	265	500	335	300	450	590	370	385	595	840
0	423	410	525	310	265	500	335	300	450	590	370	385	595	840
0	423	410	525	335	265	500	335	300	450	590	370	385	715	1170
0	423	410	525	380	265	500	335	300	450	590	370	385	715	1170
00	423	410	525	380	265	500	335	300	450	590	370	385	715	1170



## iQmfort pool control set Skimmerpool Complete

This set is used as an accessory for the following water treatment systems: DOS-Complete REDOX/CLF and SALT-Complete.

- This set allows the full potential of the pool management functions of the dosing systems to be utilised: - Automatic backwash via Aquastar Easy II
- Automatic level control using float switch + solenoid valve
- Temperature control thanks to included temperature sensor
- Filter pump control for Ocean Inver iQ300 (backwash with increased volume flow)
- App function, allowing remote access (read function) to water parameters such as pH value, redox value, CI value, temperature and chemical fill level
  - Notifications via app in the event of a fault
  - Photometer for easy monitoring of automatic water treatment: should be carried out weekly in

accordance with 0v3 recommendation.				
Product	G-kg	VE	Prod.No.	Price €
iOmfort pool control set skimmerpool Complete. Aquastar Fasy II	0.00	1.00	7301813	4710.56

iQmfort pool control set skimmerpool Complete, Aquastar Easy II, 0.00 1.00 7301813 4710.56 float switch, solenoid valve, Ocean Inver iQ300, Lovibond Scuba3s, Transparent vaccination line



## iQmfort pool control set overflow pool Complete

This set is used as an accessory for the following water treatment systems: DOS-Complete REDOX/CLF and SALT-Complete.

This set allows the full potential of the pool management functions of the dosing systems to be utilised:

- Automatic backwash via Aquastar Easy II - Automatic level control using level sensor + solenoid valve
- Temperature control using level sensor + solehold valve
   Temperature control thanks to included temperature sensor
- Filter pump control for Ocean Inver iQ300 (backwash with increased volume flow)
- App function, allowing remote access (read function) to water parameters such as pH value, redox
- value, Cl value, temperature and chemical fill level
- Notifications via app in the event of a fault
- Photometer for easy monitoring of automatic water treatment: should be carried out weekly in
- accordance with ÖVS recommendation.

Product	G-kg	VE	Prod.No.	Price €
iQmfort pool control set overflow pool Complete, Aquastar Easy II, level sensor, solenoid valve, Ocean Inver iQ300, Lovibond Scuba3s, Transparent vaccination line	0.00	1.00	7301814	5588.20







# Smart full inverter heat pump iQ Inver Silence, Commercial

High capacity heat pump with inverter technology for commercial pools.

The pool water can be kept at a pleasant temperature using the heating and cooling function. The infinitely variable speed of the heat pump allows the compressor output to be perfectly adapted to the ambient conditions.

The Modbus RTU capable heat pump allows integration into smart control electronics and smart home systems such as iQnnect.

The heat pump can be controlled automatically via the "Inverter Life" app.

# TECHNICAL DATA

Model	7300720	7300721			
Recommended pool volume (m³)*	130~260	260~520			
Operation temperature (°C)	-7~43				
Operating conditions: Air 26°C, water 26°C, humidity 80%					
Heat capacity (kW)	59,6	109,0			
COP at 50% speed	10,0	9,8			
Operating conditions: Air 15°C, water 26°C, humidity 70%					
Heat capacity (kW)	39,4	80,5			
COP at 50% speed	6,7	6,6			
Operating conditions: Air 35°C, water 28°C, humidity 80%					
Cooling capacity (kW)	26,2	53,7			
Sound pressure at 1m dB(A)	54.0~62.0	56.0~65.0			
Sound pressure at 10m dB(A)	34.0~42.0	36.0~45.0			
Sound pressure 50% speed 1m dB(A)	56,0	58,0			
Compressor	DC In	verter			
Heat exchanger	Tita	nium			
Housing	Aluminium				
Power supply	400V/3 Ph/50Hz				
Rated input power at 15°C (kW)	2.20~8.03	4.69~17.9			
Rated current at 15°C (A)	3.17~11.59	6.77~25.8			
Max. input current (A)	20	40			
Circuit braker (A)	25,0	48,0			
Recommended flow (m³/h)	20~25	40~50			
Water pipe specification in-out (mm)	75	110			
Net dimensions LxWxH (mm)	1000x1110x1260	2100×1090×1280			
Net weight (kg)	212	459			
Gas (g)	5500	11000			
GWP	20	)88			
CO2 equivalent (tonne)	11,48	22,97			

\*Efficient and optimum operation only recommended above freezing point (0  $\mathrm{C}^{\circ}$ ).

Product	G-kg	VE	Prod.No.	Price €
Smart full inverter heat pump iQ Inver Silence, Commercial, 59,6 kW, 400V, 3P, R410A, titanium heat exchanger, modbus-capable, metal housing powder-coated	237.00	1.00	7300720	23436.80
Smart full inverter heat pump iQ Inver Silence, Commercial, 109,0 kW, 400V, 3P, R410A, titanium heat exchanger, modbus-capable, metal	494.00	1.00	7300721	46648.25

housing powder-coated



- » Heating & cooling for commercial pools
- » Compact design with low holding volume
- » Easy cleaning through simple disassembly
- » Suitable for salt electrolysis

## Titanium plate heat exchanger

The plate heat exchanger is an affordable heat management system for heating and cooling commercial pools. Its high efficiency saves energy, reduces costs and minimises the environmental impact.

The compact design maximises the surface area of the heat exchanger without compromising its mechanical robustness. The plate heat exchanger is characterised by a high overall heat transfer coefficient and high performance with a low holding volume.

## TECHNICAL DATA

- •• Plates: Titanium, Frame: P335NH
- Gaskets: EPDM (max. 150° C)
- Hod and cold side connections: stainless steel
- Bolts: N8 M12: A193B7
- Temperature: -10/100° C
- Pressure: 10 bar / Test pressure: 14.3 barHigh overall heat transfer coefficient
- High performance with low hold-up volume
- Versatile, modular design
- Connection: M G1 1/4" AISI 304 thread
- Plate and seal materials available for most fluid types

Product	G-kg	VE	Prod.No.	Price €
Titanium plate heat exchanger 30 kW	24.26	1.00	7301545	1524.47
Titanium plate heat exchanger 50 kW	24.85	1.00	7301546	1762.10
Titanium plate heat exchanger 80 kW	26.04	1.00	7301547	2044.81
Titanium plate heat exchanger 102 kW	31.00	1.00	7301548	2171.33

#### Process data (hot side)

	30 KW	50 kW	80 kW	102 kW
Temp in (°C)	90	90	90	90
Temp out (°C)	70	70	70	70
Flow rate (m <sup>1</sup> /h)	1.3	2.2	3.5	4.5
Pressure drop (kPa)	11.80	17.71	20.17	22.11

#### Process data (cold side)

	30 kW	50 KW	80 kW	102 KW
Temp in (°C)	20	20	20	20
Temp out (°C)	35	35	35	35
Flow rate (m <sup>3</sup> /h)	1.37	2.88	4.61	5.88
Pressure drop (kPa)	23.08	34.62	39.37	42.19
Delta T Log. Mean (°C)	52.46	52.46	52,46	52.46
Heat exchanged own	30	50	80	102

## Construction data

	30 KW	50 KW	80 KW	102 KW
Heat transfer area (m²/h)	0.240	0.336	0.528	0.624
Overall K service (w/m <sup>2</sup> *C)	2381.54	2835.17	2886.72	3114.33
Plate thickness (mm)	0.5	0.5	0.5	0.5
Weight empty (kg)	23.65	24.04	24.82	29.00
Weight full (kg)	24.26	24.85	26.04	31.00
ArtNr.	7301545	7301546	7301547	7301548



NOTE

The plate heat exchanger can be customized according to the customer's requirements.



Available upon request

## **Dosing systeme DOS-GRANUDOS**

Dosing station for calcium hypochlorite granulate and acid for the disinfection and the pH-regulation of swimming pool water.

Chlorine and acid are dosed separately in intervals to the dissolving system and are dissolved completely. Then the chlorine solution is conveyed by a venturi nozzle to the pool water. Dosing manually or linked to an external control system. All functions are permanently monitored.

Optional function: In parallel to the chlorine supply of the main pool, a buffer tank can be filled with chlorine solution with an adjustable concentration to supply further pools with chlorine via dosing pumps.

## **TECHNICAL DATA**

user-friendly 7" graphical Touch Display Electrical supply: 230 V/AC, 50 Hz Power supply: 0,39 kW Connections: DN20 Dimensions: W 60 cm x D 80 cm x H 150 cm Weight: ca. 50 kg Dosing performance chlorine: GR45: 0,1 - 2 kg/h - GR100: 0,2 - 4 kg/h Dosing performance acid: 3 l/h Pre-pressure min.: 0,2 bar Back-pressure max.: 1,2 bar (optional 1,8 bar)



# Ocean® flush shower SNAKE bright polish/matt

with mounting parts V4A, 2" female thread and earthing connection

Product	G-kg	VE	Prod.No.	Price €
Smart shower SNAKE bright finish AISI 316L	19.00	1.00	78539	5122.06
Smart shower Snake matt AISI 316L	23.80	1.00	78540	4273.72



# Ocean® flush shower SAGITTARIUS bright polish/matt

with mounting parts V4A,  $1\!\%''$  female thread and earthing connection

Product	G-kg	VE	Prod.No.	Price €
Smart shower SAGITTARIUS bright finish AISI 316L	5.00	1.00	78541	1803.96
Smart shower SAGITTARIUS matt AISI 316L	5.00	1.00	78542	1224.12



# Ocean® flush shower SCORPIO bright polish/matt

with mounting parts V4A, 2" female thread and earthing connection

Product	G-kg	VE	Prod.No.	Price €
Smart shower SCORPIUS bright finish AISI 316L	7.50	1.00	78543	2079.33
Smart shower SCORPIUS matt AISI 316L	7.50	1.00	78544	1968.72



# Smart suction system for flush showers

for liner pools, female thread 2½", earthing connection

Product	G-kg	VE	Prod.No.	Price €
Ocean Suction for shower, liner, high polish AISI 316L	4.50	1.00	78528	1374.50

- » NF 15836-2 Certificate
- » Stain-resistant
- » Excellent chlorine resistance
- » Phthalate-free
- » Public pool facilities



# Swimming pool liner deluxe ElvaFlex

The unique phthalate-free formula of the ElvaFlex was designed for extreme resistance against UV-irradiation, difficult weather conditions and destructive chemicals. With proper care and maintenance ElvaFlex keeps the resistance, fabric reinforced.

Product	G-kg	VE	Prod.No.	Price €
Swimming pool liner deluxe ElvaFlex white, width 165 cm, thickness 1,5 mm, I=25m coil	2.00	41.25	7300802	67.14
Swimming pool liner deluxe ElvaFlex sand, width 165 cm, thickness 1,5 mm, I=25m coil	2.00	41.25	7300318	67.14





# Lovibond<sup>®</sup> Photometer MD 110 Ö-NORM

Photometer with Bluetooth® Technology

- internal ring memory for 125 data sets
- automatic switch-off
- adjustment function display Bluetooth<sup>®</sup> interface for data transfer

Using the free AquaLX® app, the measurement results are transferred to external devices for quick evaluation and processing, so that all data can be evaluated and assigned directly on site. The App displays all measured values as a clear graphic with min. and max. limits and supports exporting the data as an Excel®-compatible CSV file.

In addition, the device has a real-time clock and date, illuminated display, OTZ (One-Time-Zero, zero value is saved until the device is switched off), waterproof (1 hour at 0.1 m)

## **MEASURING RANGES:**

- 3 in 1: · chlorine T 0.01 - 6.0 mg/l pH 6.5 - 8.4
- · CyA 0 160 mg/l

4 in 1:

- · chlorine T 0.01 6.0 mg/l
- pH 6.5 8.4
- CyA 0 160 mg/l · alkalinity 5 - 200 mg/l CaCO

Product	G-kg	VE	Prod.No.	Price €
3 in 1 photometer MD 110, chlorine, pH value and cyanuric acid, with reagent tablets (except chlorine HR)	1.55	1.00	7301632	965.19
4 in 1 photometer MD 110, chlorine, pH value, cyanuric acid and alkalinity, with reagent tablets (except chlorine HR)	0.99	1.00	7301633	1068.72



# Lovibond® Photometer MD 200 Ö-NORM

Can be used in almost all areas of water analysis.

- $\cdot$  illuminated display
- automatic switch-off
- · Real time clock and date
- · adjustment function display
- waterproof (1 hour at 0.1 m)

The high-precision optics, which, in addition to long-term stable LEDs as a light source, also offer high-quality interference filters, ensure precise and reproducible measurement results at any time. In addition, these components make the photometer low-maintenance.

High operating comfort, ergonomic design and compact dimensions make handling the device easy and safe.

All analyzes are carried out using long-term stable reagent tablets (with a guaranteed minimum shelf life of 5 or 10 years) or with liquid reagents.

Product	G-kg	VE	Prod.No.	Price €
3 in 1 photometer MD 200, chlorine, pH value and cyanuric acid, with reagent tablets (except chlorine HR) $$	1.61	1.00	7301634	965.19
3 in 1 photometer MD 200, with liquid reagents for chlorine and pH, as well as reagent tablets for cyanuric acid	1.47	1.00	7301635	1000.78
4 in 1 photometer MD 200 OTZ, chlorine, pH value, cyanuric acid and acid capacity KS4.3 with reagent tablets (except chlorine HR)	1.47	1.00	7301636	1048.46
4 in 1 photometer MD 200, chlorine, pH value, cyanuric acid and acid capacity KS4.3 with reagent tablets (except chlorine HR)	1.53	1.00	7301637	1068.72



# Reference standard kits for Lovibond® Photometer MD 110 / MD 200

The reference standards are used to check the photometric detection accuracy and reproducibility of measurement results.

When checking the photometers with the reference standard kit, the appropriate method is selected and the measured value in mg/l is compared with the reference value of the standard kit.

The shelf life is 2 years from the date of manufacture if used and stored properly.

Product	G-kg	VE	Prod.No.	Price €
Reference standard kit chlorine 0.2 / 1.0 mg/l	0.55	1.00	7301639	163.26
Reference standard kit pH 7.45	0.54	1.00	7301640	144.24



# Lovibond<sup>®</sup> Photometer PM 630 Ö-NORM

The pool manager: All pool parameters in one device.

- intuitive operation
- illuminated display
- User guidance in multiple languages
- Bluetooth® interface
- OTZ (One-Time-Zero) free App AquaLX®
- waterproof case IP 68 (1 hour at 0.1 m)
- GPS support enables individual information about sampling and location of samples.

The requirements of demanding swimming pool operators are always met with the PM 630 photometer.

Equipped with up to 34 detection methods and a memory for up to 500 data sets. Intuitive operation and an illuminated display make this device particulary user-friendly.

Reagents for:

- · chlorine (free, combined, total)
- pH value
- calcium hardness
- acid capacity KS4.3

Product	G-kg	VE	Prod.No.	Price €
Photometer PM 630	1.99	1.00	7301638	2128.33



# Reagence tablets for Lovibond® Photometer MD 110 / MD 200 / PM 630

Highest accuracy of test results

Easy handling & application

Precise dosage & enormous durability

Product	G-kg	VE	Prod.No.	Price €
Tablets DPD 1 in a pack of 500 $\ensuremath{pcs}$ , slowly soluble, for the determination of outdoor chlorine	0.15	1.00	7301626	66.14
Tablets DPD 3 in a pack of 500 pcs, slowly soluble, for the determination of total chlorine $% \left( {{{\rm{D}}}_{\rm{c}}} \right)$	0.15	1.00	7301627	120.22
Tablets DPD 4 in a pack of 500 $\ensuremath{pcs}$ , slowly soluble, for the determination of total chlorine or ozone	0.15	1.00	7301628	63.12
Tablets pH Phenol Red in a pack of 500 pcs, slowly soluble, for pH measurement	0.15	1.00	7301629	66.14
Tablets Alka-M in a pack of 100 pcs, slowly soluble, for the determination of the acid capacity $% \left( {{{\rm{T}}_{\rm{T}}}} \right)$	0.04	1.00	7301630	80.57
Tablets cyanuric acid in a pack of 100 pcs, slowly soluble, for the de- termination of the cyanuric acid	0.04	1.00	7301631	32.35
Tablets DPD 3 Evo in a pack of 500 pcs, for the determination of total chlorine	0.15	1.00	7301648	66.14





# Liquid reagents

Product	G-kg	VE	Prod.No.	Price €
Liquid reagents DPD 1 Buffer solution 15ml, blue bottle	0.05	1.00	7301707	21.03
Liquid reagents DPD 1 Buffer, 15 ml, green bottle	0.05	1.00	7301708	21.03
Liquid reagents DPD 3 Buffer solution, 15 ml, red bottle	0.01	1.00	7301709	21.03
Liquid reagents Phenol red solution, 15 ml	0.01	1.00	7301710	21.03



# **VARIO** ascorbic acid

- Stick size: 45% less aluminium - High quality standard & resource efficient - Rapid dissolution & precise dosage

Product	G-kg	VE	Prod.No.	Price €
VARIO ascorbic acid powder reagents 100 pcs	0.08	1.00	7301740	70.68





# Accessories for Lovibond® photometer

Product	G-kg	VE	Prod.No.	Price €
Round vials with lid 10 ml, in a pack with 5 pcs, height 48mm, Ø 24mm	0.12	1.00	7301622	75.71
Plastic stirring rod, 13cm length	0.01	1.00	7301623	5.82
Cleaning brush, 11cm length	0.01	1.00	7301624	11.84

#### I. VALIDITY

These General Terms and Conditions apply to the sale and delivery of goods by our company. In particular, they also apply to all transactions made in the online shop. These General Terms and Conditions apply to companies under the Austrian Commercial Code (Unternehmensgesetzbuch, UGB), and to consumers under the Austrian Consumer Protection Act (Konsumentenschutzgesetz, KschG), under the special conditions named in the General Terms and Conditions in this regard. For companies, these General Terms and Conditions also apply as a framework agreement for all future legal transactions between the parties even if these conditions are not explicitly referred to. In that context, we refer to our "General Terms of Sale and Delivery (GTSD)"; those terms form an extract of or supplement these General Terms and Conditions but do not replace them. Unless we have expressly consented to their validity in writing, we do not acknowledge any terms of purchase from customers who are entrepreneurs if those terms oppose, deviate from, or supplement these. We hereby reject any conflicting confirmations of a customer who is an entrepreneur that refer to that customer's terms of business and purchase

# II. PROPOSAL, ORDER PROCEDURE AND SIGNING OF CONTRACT

Our proposals are always subject to change. Third parties must not be advised of the contents of the proposal unless authorized by the seller, neither may the proposal be used for fraudulent purposes. If a proposal does not lead to a contract being signed, the seller reserves the right to reclaim the proposal including all attachments and samples. Samples or drawings submitted by the party making the inquiry will only be returned on request. If no contract is signed, the seller is permitted to destroy the proposal documents (drawings, samples, etc.) after the proposal period (3 months after the proposal date).

If a customer places an order in the online shop, they can select the desired product and add it to their shopping cart by clicking the button "Add to shopping cart". Placing an item in the shopping cart will not establish a contract relationship.

The customer can view the shopping cart's content at any time by clicking the button "Shopping cart". If the customer would like to purchase the products in the shopping cart, they must enter their name and address, select the shipping and payment method, then check and send the order.

In the meantime, the seller reserves the right to sell any objects contained in the proposal that are in stock. The written order confirmation defines the scope and terms of the order delivery. Only written correspondence (including by fax or telex) or orders received by email are binding for us. Please note that orders received by electronic means (e.g. email) are legally valid without a signature. The contract is also concluded when goods ordered by the customer are dispatched. For framework contracts, only the separately agreed contract period will apply. If proposals are submitted to us, the company making the offer is bound to a suitable validity period; this must be at least 8 days from receipt of the proposal.

III. DATA, DOCUMENTATION AND DATA PROTECTION Technical documentation such as drawings, plans, sketches, descriptions, catalogues, brochures, drawings showing dimensions, material properties or weight data, and any samples or models supplied by us remain our intellectual property, are intended for information purposes only, and do not represent an assurance of properties unless this is referred to specifically in writing. Peraqua reserves the right to make changes where deemed necessary due to technical advancement. All technical documents remain the intellectual property of Peraqua and may only be used for the agreed purposes. Peraqua Professional Water Products GmbH collects, processes, and uses personal data even without the customer's express consent if this is necessary to enter into and perform a contract, and those data will be forwarded to commissioned processors for that purpose. They will be treated confidentially in accordance with applicable data protection laws. Furthermore, we refer to our data privacy notice Data Privacv

All information gained and exchanged as part of business partnership is to be treated as secret and must not be passed on to third parties without our

#### authorization.

#### IV. PRICE AND PAYMENT TERMS

Unless agreed otherwise, the prices quoted are excluding VAT, ex works or the stores of the supplier, including standard packaging, in € (euros). All additional costs, such as costs of freight and insurance, are to be borne by the customer. Likewise, the customer has to bear all costs for every kind of tax, dues, fees and customs duty. The prices that apply at the time the contract is signed are those quoted in our current gross price list in the agreed currency, or if this is changed, in the equivalent value of the alternative currency. We reserve the right to make corresponding price adjustments after the contract has been signed if there are changes in wage costs due to collective negotiations applying to the whole industry, or wage increases applying only to our company, or other changes in cost that affect our pricing structures, such as the price of materials, energy, transport, contract work, finance, surcharges, etc. Additional work or activities are invoiced according to the actual wage and material costs used. Fees and costs that arise to fulfil authorities legislation at the place of installation, or are connected with supplies and services, are to be borne exclusively by the customer. Our invoices are to be paid 14 days at the latest after the invoice is submitted, in the amount of the sum indicated. The following applies if nothing else is agreed in the order confirmation:

# The payment by the customer is not valid until the sum has reached our business account and is deemed paid.

Interest and fees for reminders will be invoiced for in the case of late payment, unless exempt payments have been agreed with the seller in writing. The seller is permitted, from the due date onwards, to invoice for interest on arrears at a rate of 6% p.a. above the base rate of the Austrian National Bank, although our minimum rate is set to 12%. In addition, any discount agreements are no longer applicable. This does not affect our right to make a further claim for damages due to default. The full purchase price will be due immediately; if the agreed payment is not made in full, a payment from the customer is overdue after 10 days. The same applies if the customer's payment difficulties become obvious, especially if insolvency or restructuring proceedings are initiated against the customer's assets. The new due date also applies to payments arranged to be made by the customer by bank draft at a later date. In such a case, we are also permitted to implement a delivery stop without being obliged to refund any damages caused as a consequence. Reminder and collection tariffs are to be paid at reasonable/standard rates. In the case that the seller suffers financial damages due to the customer's non fulfilment of the agreed payment obligations, the supplier reserves the right to do as he pleases with moulds, tools, rigs and completed parts.

The customer cannot retain payment or offset costs in our invoices due to any counter claims, regardless of their legal aspect. Adherence to the payment conditions and payment periods form an essential component of the contract for implementing supplies and services.

#### V. DELIVERY PERIODE

We are not obliged to deliver goods or services until the customer has fulfilled all obligations necessary to the extent required in order to perform proper delivery. The delivery period does not apply until all commercial and technical details needed to fulfil the contract have been received and the payment terms clarified. Unless agreed otherwise in writing, delivery periods quoted in proposals or order confirmations are approximate and non-binding and can never be regarded as final deadlines. We are authorized to exceed the agreed dates and delivery periods by a maximum of 20 working days. If the goods are not delivered within this period, the customer may not withdraw from the contract until this period has expired and a reasonable extension has been set.

It is not possible for both contract partners to withdraw from the contract until the delivery date confirmed by us has been exceeded by more than 2 months. This right to withdraw from the contract does not apply, however, if we issue a ready-to-ship note or start shipment of the goods but are unable through no fault of our own to deliver within the non-binding confirmed delivery period. Adherence to the delivery period depends on trouble-free delivery of goods from our suppliers, including any severe disruptions within or outside the company or forms of Force Majeure (strikes, severe damage to machines, fire, flooding, impending war, pandemic diseases, etc.). In the case of such influences we are either totally free or – reflecting the circumstances – partially free from our obligations. Partial deliveries are permissible, may not be rejected if the delivery is otherwise found to be in order, and authorize us to present an invoice for partial payment.

VI. ORDERS, ACCEPTANCE OBLIGATIONS, RETURNS Orders are not binding until the seller has provided written confirmation. This must contain the delivery address and type of shipment. Additional details such as article number and article description inline with our documentation are absolutely essential in order to avoid misunderstandings and ensure timely processing of the order. The seller has the right to deliver up to plus/ minus 5% of any goods ordered in bulk. If the value of an order is below our minimum order value of € 75, we have to invoice a minimum quantity surcharge of € 30 in addition to the order value.

An article-related minimum quantity surcharge will be agreed with the customer if the order does not reach our minimum order quantity set for specific articles for economical and production reasons. From the moment the seller issues an order confirmation, the seller is authorized to start with production at any time independently of the agreed delivery period. Withdrawal from the contract is excluded after the goods have been produced and the customer is obliged to accept and pay for the goods already produced. This acceptance obligation applies also to general contracts and orders controlled by E-commerce systems. The quantity of items agreed in the proposal are manufactured for stock and these are to be accepted by the customer without exception, even if there are any article changes or the article is to be discontinued.

The return of goods already accepted inline with the agreement can only be approved in special cases and following prior confirmation. In such cases we retain a credit of 30% of the value of goods that still posses a commercial value. We will dispose free of charge any goods that due to technical changes or any other reason are of no further use.

#### VII. DELIVERY, PACKAGING, SHIPMENT, DELAYED ACCEPTANCE

Retention of title applies exclusively to all deliveries. Ownership is not transferred to the customer until their entire obligations relating to our goods supplies have been settled. This even applies if the purchase price for certain goods deliveries nominated by the customer has been paid. For ongoing invoices, the retention of title clause serves as security for outstanding payments. Any processing of goods supplied by us and still in our ownership takes place on our behalf without placing us under obligation and without affecting our rights to ownership.

The customer will look after our property, process it for us if required and advise us immediately of attempted seizure by third parties. The customer may use our property in normal business transactions provided they fulfil their obligations to us. As a result of selling on the goods we supplied, the customer hands over to us the right to claim against third parties herewith as security up until payment of all claims, even future claims on our business arrangement – including any financial claims. Our goods are packaged - to the extent this is agreed and confirmed in writing, either as we see fit using standard commercially acceptable methods or as specified by the customer (individual packages, special colours, etc.) - at the customer's expense. Costs of packaging to customer specifications are listed in a separate invoice. In order to simplify deliver-ies it is generally only possible for us to dispatch orders in standard packaging units (see gross pricelists). We have to invoice a packaging surcharge of € 6 per order item for small series that deviate from our standard packaging units. As long as goods are packaged as usual by us, claims cannot be made against us for damage presumed a result of the packaging. Unless agreed otherwise, goods are dispatched using a means of transport deemed the most suitable by us, and at the risk of the recipient. The delivery is deemed completed once the goods are ready for shipping at the works named for delivery and the customer has been advis that the goods are ready for shipping, or the goods have been handed over to a forwarding agent. Transport insurance is only taken out if requested and paid for by the recipient. We accept no responsibility for delays or failure during transport. On receipt, the goods



are to be checked to make sure they are in order since the goods were prepared for shipping. The following points must be checked if part of the consignment is missing or damaged:

Check for damage to pallet or our packaging film. Check carton for quantity and deformation.

#### Check for destroyed and/or damaged products.

Claims of this kind will only be acknowledged if notified in writing within 5 days of receiving the goods. If the ordered goods are not accepted as agreed, the seller can claim compensation after setting a reasonable extension period. If goods are returned, not accepted or the customer withdraws from the contract, we will charge for the relevant goods – in addition to the costs incurred to be determined by the deliverer – a fixed price of 15% of the order value to cover processing costs and loss of profit. If the customer exchanges series articles or other justifiable goods within our product range, we will invoice for the same order value an additional 5% on top of the purchase price to cover the seller's costs. If non justifiable goods are exchanged then the customer has to bear the costs incurred in excess of the fixed price due to loss or expense during reuse.

#### VIII. RETENTION

If not a consumer business, the customer is only authorized to retain a reasonable part – not the entire amount – of the gross invoice sum in the case of a justified claim, except in the case of a reverse transaction.

#### IX. WITHDRAWAL FROM CONTRACT

If acceptance is delayed (clause VII) or there are other substantial reasons prevailing such as, in particular, rejection of a petition in bankruptcy on grounds of insufficient assets, delayed payment, or occurrence of a natural catastrophe, we are entitled to withdraw from the contract providing it has not been fully fulfilled. In the event of a withdrawal where the Client is at fault, we may demand a fixed rate of damages of 15% of the gross invoice amount or compensation for the loss actually incurred by the withdrawal and be released from all agreed obligations to perform and deliver. We are entitled to hold back outstanding deliveries or services and to demand payment in advance and/or deposits, or to withdraw from the contract after setting a reasonable extended time limit. If the customer withdraws from the contract without just cause, or demands its cancellation, we shall have the right to choose between insisting on the fulfilment of the contract and cancellation of the contract.

In the latter case, the customer shall be obliged at our discretion to pay either a fixed rate of damages of 15% of the gross invoice amount or compensation for the loss actually incurred due to withdrawal. Under the KschG, a consumer may withdraw from or rescind the contract within 14 days without giving reasons. That 14-day period for withdrawal or rescission will begin to run when the customer or its delegate takes possession of the goods (or for partial deliveries, when the last part is delivered). To exercise this right of withdrawal or rescission, the customer must issue its statement using a clear declaration via letter, fax, or email.

#### X. FORCE MAJEURE

The seller is released entirely or partly from fulfilling the contract on schedule if prevented from doing so by an event of force majeure. Such events are exclusively those that are unforeseeable and unavoidable for an experienced supplier. (Strikes, severe machine damage, fire, floods, threat of war, pandemics, etc.). Deadlines and delivery periods that cannot be met due to the influence of the force majeure are extended by the duration of the effect of the force majeure.

#### XI. WARRANTY, GUARANTEE, OBLIGATION TO IN-SPECT AND REGISTER COMPLAINTS

Our products are covered by a warranty as laid down by law. Claims are assessed based on the current national laws (Austrian law – "Allgemeines Bürgerliches Gesetzbuch" – ABGB). However, alternative agreements can be made if required. These need to be clarified in writing. The warranty period is 2 years and starts on the date the goods are dispatched ex works. Peraqua guarantees that the products are free of fabrication and material flaws. However, the warranty does not include parts that, due to their function, have a normal service life shorter than the guarantee period specified by law for moving parts. The warranty also excludes: damage due to natural wear, insufficient maintenance, disregard of operating and instruction manuals, excessive stress, unsuitable utilities, chemical or electrolytic influences, incorrect installation by the customer or third parties, modifications performed by customer and incorrect handling as well as the consequences of other reasons that cannot be traced back to us or are not within our scope of responsibility. We decide on how to settle customers' warranty claims, either by replacement, repair within a reasonable period or price reduction. The customer may only withdraw from the contract if the problem is severe and cannot be rectified through replacement or repair and a price reduction is not reasonable to the customer. The customer's right to claim damages in relation to rectifying a fault through improvement or replacement cannot be implemented unless we have defaulted on fulfilling our warranty obligations.

Warranty claims for moving parts must be made legally valid within one year of shipment. The one year period also applies to hidden faults, although the period does not start until the hidden fault is discovered. If the customer maintains that a fault is evident, claims resulting as a consequence, especially relating to warranty or damages, can only be made valid within the first 6 months after shipment of the goods to the customer if the customer can prove that the fault was already present at the time the goods were shipped or handed over. For goods supplied that cannot be installed in a plant component due to their condition, a warranty period of 2 years is agreed. Our obligation to provide a warranty expires if the customer or a third party changes or repairs the goods supplied without our written permission, or if the customer does not take immediate suitable action to limit the extent of damage so we are able to rectify the fault. Our obligation expires in any case when the warranty period expires; special cases involving the customer claiming an extension to the warranty period because the customer has fulfilled warranty obligations themselves are excluded.

If an order is produced based on the customer's design specifications, drawings, raw material instructions or models, then we are not liable for the correctness of the design or selection of materials, but merely that the contract has been fulfilled in accordance with the customer's instructions. The customer is to hold us harmless and indemnify us without restriction in the case of infringement of third party property rights. We assume no liability of any kind whatsoever for repairs performed by the customer, or modifications made to old goods or goods not supplied by us. Old goods are those for which the warranty period of 2 years specified above has already expired or where the customer knows the part was already used by us or a third party. In all other cases the legal grounds of the current Austrian warranty laws for consumer business will be used as a basis. In addition, the customer is to imme-diately check the goods after handover in accordance with the Austrian Business Enterprise Code, or within 6 working days at the latest. We are to be advised of any faults discovered during the check immediately in writing – within 3 working days of their discovery at the latest – specifying the type and extent of the fault.

Hidden faults are to be registered immediately on their discovery. If faults are not reported, or they are not reported in time, then the goods are deemed accepted. The assertion of warranty claims or claims for damages or the right to claim innocent misrepresentation based on faults is excluded in these cases.

#### XII. DAMAGES AND PRODUCT LIABILITY

All claims for damages are excluded in cases of slight negligence. This does not apply to personal injury and in consumer business for damage to parts taken on for further processing. The presence of slight or gross negligence is to be proven by the injured party unless it concerns a consumer business contract. If it is not a consumer business contract, the absolute statute of limitation of damage claims is 3 years from the transfer of risk. The regulations on damages in these T&Cs or any other terms agreed only apply if the claim for damages is made separately or instead of a warranty claim. Recourse claims as specified in § 12 of Austrian product liability law are excluded, unless the party justified for recourse proves that the fault and as a consequence the damage resulting from the original association of this fault can be attributed to stem from our area of control and are a result of gross negligence or intent. Moreover, if the goods are supplied to resellers, the liability for damages deduced from product liability law, and any product liability claims deduced

from other regulations, are excluded.

In turn, resellers are obliged to state in contracts with their customers this exclusion of liability for damages as mentioned above (except in the case of end consumers). If this contractual obligation is not fulfilled, the receiver is liable for all damages that occur jointly and separately. The goods supplied offer only the level of reliability that can be expected based on the content of standards, permits, descriptions in technical datasheets, user manuals, instructions from the supplier's works on handling and range of applications or application conditions as well as maintenance and other information provided at the time the contract is signed.

#### XIII. PROTECTIVE RIGHTS

For goods supplied that the seller manufactures according to instructions made available by the cus-tomer or under contract from the customer where the customer confirms the fabrication documentation, the customer provides exclusive guarantee that through the manufacture of the goods supplied no protective rights of any kind or trade secrets of third parties are infringed. If any protective rights of third parties are then claimed, the seller is not obliged to check the correctness of the claim, but is entitled under exclusion of all damage liability claims from the customer to stop production of the goods and demand payment of the costs incurred. The customer is fully liable for non-consequential and consequential damages arising as a result of infringement or protective rights claims and the seller is entitled to demand a suitable advance on costs to cover all process costs. The seller is free to release at will all goods covered by the contract or goods manufactured by the seller.

XIV. CHANGES TO PERFORMANCE/CONTRACT If the contract is not with a consumer business, then minor or other changes to our performance or delivery obligation that are acceptable to our customers are deemed approved. This applies in particular to certain necessary deviations (e.g. dimensions, colours, changes in material, etc.). If the customer requests changes to the scope of performance in the contract after the contract has been signed, then all costs incurred in connection with the changes implemented and to be implemented by Peraquago will be borne by the contract party that requested the changes. Peraqua is not obliged to implement the change in contract until written confirmation has been provided and all costs arising in connection with the change in contract have been settled, or can be deemed settled, by the other contract party.

# XV. CHOICE OF LAW, LOCATION OF FULFILMENT AND JURISDICTION

Austrian law will apply. The contract language is German. The forum will be within Austria. The place in which the delivery is taken over is expressly agreed as the place of performance. Any disputes arising from this contract will be decided by the court having subject matter jurisdiction at the registered office of Peraqua Professional Water Products GmbH. If the customer is a consumer under the KschG and has its residence or customary abode in Austria or works in Austria, any actions against that customer must be brought in the court in whose district that residence, customary abode, or place of work is located.

#### XVI. FINAL CLAUSES

The customer grants his permission that the data handed over in the course of fulfilling this contract, including data relating to personnel, can be saved and processed electronically by us. The customer is obliged to advise us of changes to their residential or business address and email address as long as the business specified in the contract has not been completely fulfilled by both parties. If this advice is not provided, then any correspondence and information sent to the last known postal and email address will be classed as received. Sub-agreements or amendments to these general terms and conditions are to be in written form. All preceding contracts or other agree ments are no longer valid. Finding individual provisions of these General Terms and Conditions to be fully or partially ineffective due to compulsory statutory provisions (including without limitation the KschG and Product Liability Act) will not render ineffective its remaining provisions

Peraqua Professional Water Products GmbH Jan 2025

#### I. VALIDITY

Deliveries, services and offers provided by our company are based exclusively on these "Peraqua- General Sales and Delivery Conditions", abbreviated "GSDCs", which apply as part of our General Terms and Conditions (T&Cs), but do not substitute them. These GSDCs represent a general agreement between the contract parties, even if no reference is made explicitly to these delivery conditions, and are always to be read in connection with the latest issue of the Praher T&Cs. We do not recognize contradictory, alternative or supplementary conditions used by the party placing an order unless we have expressly agreed to their validity in writing. Counter confirmations by the party placing the order with reference to their business terms or purchasing conditions are expressly rejected herewith.

II. PROPOSAL AND SIGNING OF CONTRACT Our proposals are always subject to change. The written order confirmation defines the scope and terms of the order delivery and only becomes legally binding after it has been signed.

#### III. PRICE

Unless agreed otherwise, the prices we have quoted are excluding VAT, ex works or stores, including standard packaging, in  $\in$  (EURO). All additional costs such as costs of freight and insurance are to be borne by the customer. Likewise, the customer has to bear all costs for every kind of tax, dues and customs duty.

Additional work is invoiced according to the actual wage and personnel costs used. Fees and costs that arise to fulfil authorities' legislation at the place of installation or are connected with supplies and services, are to be borne by the customer. Our prices are the prices that are valid at the time the contract is signed. In case, after the contract has been signed but before the goods are shipped to the customer, costs that are outside our control change and affect the calculation of our prices, we are entitled to adjust the price correspondingly

#### IV. PAYMENT TERMS / DEFAULT

Unless agreed otherwise, our requests for payment are to be paid on schedule against handover of the goods. Any agreements regarding discounts expire as soon as payment or part payment is delayed. The payment by the customer is not valid until the sum has reached our business account and is deemed paid. If the customer defaults on payment we are entitled to choose between demanding reimbursement of the actual damage incurred or – providing the contract is not for credit business with an end consumer – or to invoice for interest on arrears at a rate of 6% p.a. above the discount interest rate of the Austrian National Bank, where our minimum rate is set to 12%.

#### V. DELIVERY PERIOD

The delivery periods specified are always ex-works and can never be regarded as final deadlines unless other wise expressly agreed. The delivery period does not apply until all commercial and technical details needed to fulfil the contract have been received and the payment terms clarified. Consequential damages due to non-timely delivery or non delivery are excluded. The customer is entitled to withdraw from the con tract if the goods are not delivered within the delivery period, a reasonable extension period has been set. and the extension period has also expired without the goods being delivered. This right to withdraw from the contract does not apply, however, if we issue a readyto-ship note or start shipment of the goods but are unable through no fault of our own to deliver within the non-binding confirmed delivery period. If the customer or a forwarding agent picks up the goods then they must arrive punctually at the agreed time. If the appo-intment for picking up ready-to-ship goods is not kept to we are entitled to do as we please with the goods the next day. The customer bears all costs arising from delayed pickup or preparation of freight material. If the contracts or deliveries involve several delivery periods/dates agreed for partial consignments and these are not adhered to by the customer, nor is there any success within an extension period, then we are entitled to deliver the remaining goods or to retain the non-delivered part of the contract or to demand damages for non-compliance with the contract.

VI. DELIVERY, PACKAGING, SHIPMENT, DELAYED ACCEPTANCE

Retention of title applies exclusively to all deliveries. Ownership is not transferred to the customer until their entire obligations relating to our goods supplies have

been settled. Partial deliveries are permissible, may not be rejected if the delivery is otherwise found to be in order, and authorize us to present an invoice for partial payment. Our goods are packaged - to the extent this is agreed and confirmed in writing, either as we see fit using standard commercially acceptable methods or as specified by the customer (individual packages, special colours, etc.) - at the customer's expense. Costs of packaging to customers specifications are listed in a separate invoice. Packaging material will not be taken back, except in the case of reusable containers. If reusable containers are returned to the seller's works within 2 months of the date the goods were delivered the costs invoiced will be credited to the customer's records. Returns are to be accompanied with the invoice date and invoice number with which the reusable containers were originally invoiced. The seller is entitled to deduct part of the price if the reusable containers are returned damaged to the extent that they cannot be used again or not all of the containers are returned. Claims cannot be made against us for packaging faults if the goods are packaged by us using our standard packaging methods. Unless agreed otherwise, goods are dispatched using a means of suitable transport and at the risk of the recipient. A processing fee of € 19.00 is invoiced if the goods are to be delivered to an address that is different from the address of the customer. On receipt, the goods are to be checked to make sure they are in order. Any damage or loss is to be immediately reported on the shipping note when the goods arrive before they are unloaded so that a claim for damages can be made to the forwarding agent. If the ordered goods are not accepted as agreed, the seller can claim compensation after setting a reasonable extension period. If goods are returned, not accepted or the customer withdraws from the contract, we will charge a fixed price of 15% of the order value to cover processing costs and loss of profit for the relevant goods – in addition to the costs incurred to be determined by the deliverer. If the customer exchanges series articles or other justifiable goods within our product range, we will invoice for the same order value an additional 5% of the value of the goods on top of the purchase price to cover the seller's costs. If non justifiable goods are exchanged then the customer has to bear the costs incurred in excess of the fixed price due to loss or expense during reuse.

#### Surcharges.

In case of order value less than  ${\ensuremath{\mathbb C}}$  75,--, surcharge per order  ${\ensuremath{\mathbb C}}$  30,--.

Surcharge for order quantity less than packing unit surcharge  $\in$  6,-- per order item.

Minimum freight charges for destination Austria € 15,-- per order, for destinations in the European Union € 20,-- per order.

#### VII. RETENTION OF OWNERSHIP

The goods supplied remain our property until the invoice has been paid in full. Moreover, our customers may only resell goods still under our ownership in normal business transactions under retention of ownership.

#### VIII. WARRANTY

We guarantee that our goods at the time of acceptance possess the contractually agreed properties, that the materials used have been processed correctly, that they comply with the recognized laws applicable to engineering and technology and do not possess flaws that reduce their value or cancel or reduce their capability to be used as normal or as specified in the contract. The warranty period starts on the date the goods are dispatched ex works and lasts for 2 years. The warranty does not include parts that, due to their function, have a normal service life shorter than the guarantee period specified by law for moving parts. The warranty also excludes: damage due to natural wear, insufficient maintenance, disregard of operating and instruction manuals, excessive stress, unsuitable utilities, chemical or electrolytic influences, incorrect installation by the customer or third parties, modifications performed by customer and incorrect handling as well as the consequences of other reasons that are not within our scope of responsibility. The customer's right to claim damages in relation to rectifying a fault through improvement or replacement cannot be implemented unless we have defaulted on fulfilling our warranty obligations. If the customer maintains that a fault is evident, claims resulting as a consequence, especially relating to warranty or damages, can only be made valid within the first 6 months after shipment of

the goods to the customer if the customer can prove that the fault was already present at the time the goods were dispatched.

Providing the installation of the goods supplied in a plant component is not excluded due to its condition. a warranty period of 2 years is agreed. For goods supplied that cannot be installed in a plant component due to their condition, a warranty period of 2 years is agreed. Our obligation to provide a warranty expires if the customer or a third party changes or repairs the goods supplied without our written permission, or if the customer does not take immediate suitable action to limit the extent of damage so we are able to rectify the fault. Our obligation expires in any case when the warranty period expires; special cases involving the customer claiming an extension to the warranty period because the customer has fulfilled warranty obligations themselves, are excluded. We assume no liability of any kind whatsoever for repairs performed by the custo mer, or modifications made to old goods or goods not supplied by us. Old goods are those for which the warranty period of 2 years specified above has already expired or where the customer knows the part was already used by us or a third party. If the seller damages a work-piece due to incorrect processing of the material and a claim is made within the legal warranty period, the seller may choose to provide replacement through credit or by physically replacing the part returned to the works. Claims for replacement of any kind over and above this will not be recognized, unless the seller has displayed gross negligence in non-professional processing.

In all other cases the legal grounds of the current Austrian warranty laws for consumer business will be used as a basis. In addition, the customer is to immediately check the goods after handover in accordance with the Austrian Business Enterprise Code, or within 6 working days at the latest. We must be notified of any defects in writing immediately, within 3 working days of being discovered at the latest, stating the nature and extent of the defect. If no complaint relating to a defect is made, or it is not made in time, the goods shall be deemed approved.

IX. DESCRIPTION OF GOODS, SAMPLE DELIVERIES, STARTING SERIES PRODUCTION

Descriptions and prices in our pricelists are not binding. We reserve the right to make changes at any time if they represent an improvement to our products. If an order is produced based on the customer's design specifications, drawings, raw material instructions of models, then we are not liable for the correctness of the design or selection of materials, but merely that the contract has been fulfilled in accordance with the customer's instructions. The customer is to hold us harmless and indemnify us without restriction in the case of infringement of third party property rights. Samples and initial sample test reports of "O" series of pressed parts and injection moulded parts will be made available to the customer before the start of series production. These samples will be produced free-of-charge until the tool capability and sample clearance have been established. When the samples are approved, the seller will receive the confirmed initial sample test report back from the customer. Accepted deviations from the specifications must be confirmed in writing by the customer. The seller cannot start series production until the samples have been approved in writing.

NOTE: If no other arrangement has been made, the agreed article price will be invoiced for initial series before starting series production. The seller is obliged to carry out the supply according to the confirmed samples and the accuracy of the sample dimensions is guaranteed to the extent technically possible for the type of materials used and the type of work piece involved as well as for the quality-related features laid down in the tolerances. The seller assumes no liability for the selection of the material itself or for the mate rial-related form of the work piece if the customer did not provide all critical details on the use of the work piece and the demands expected of it in good time, i.e. at the time of the initial project meeting. This also applies in the situation that suggestions for the choice of material and the design of the work piece suitable for the material are made by the supplier or prompted by the seller in the drawings, specifications or samples provided by the customer. Dimensions and tolerances of the work pieces are to be expressly agreed when the contract is awarded to the seller

Dimensions without tolerance specifications will be maintained with the dimensional accuracy possible for the material and shape of work piece in question, or according to the largest size without tolerance specified in the standard concerning dimensional variation. Special tests to be performed on the finished parts (in addition to standard checks), are to be especially agreed and the costs of these tests are to be borne exclusively by the Buyer. The seller accepts no liability for the suitability of the goods supplied for the use intended, except with regard to the correct processing of the material.

#### X. DAMAGES AND PRODUCT LIABILITY

All claims for damages are excluded in cases of slight negligence. This does not apply to personal injury and in consumer business for damage to parts taken on for further processing. The presence of slight or gross negligence is to be proven by the injured party, unless it concerns a consumer business contract. If it is not a consumer business contract, the absolute statute of limitation of damage claims is 3 years from the transfer of risk. The regulations on damages in these GSDCs, or any other terms and conditions agreed, only apply if the claim for damages is made separately or instead of a warranty claim. Recourse claims as specified in § 12 of Austrian product liability law are excluded, unless the party justified for recourse proves that the fault and as a consequence the damage resulting from the original association of this fault can be attributed to stem from our area of control and are a result of gross negligence or intent. Moreover, if the goods are supplied to resellers, the liability for damages deduced from product liability law, and any product liability claims deduced from other regulations, are excluded. In turn, resellers are obliged to state in contracts with their customers this exclusion of liability for damages as mentioned above (except in the case of end consumers). If this contractual obligation is not fulfilled, the receiver is liable for all damages that occur jointly and separately.

#### XI. TECHNICAL SUPPORT

Advice given by our employees in customer care and sales is provided to the best of our knowledge, inline with the state-of-the art and are based on normal operating and application conditions. The customer is obliged to advise us in writing if the operating and application conditions change in the period between issuing our proposal and shipping the goods. The goods supplied offer only the level of security that can be expected based on the content of standards, permits, descriptions in technical datasheets, compatibility lists, operator/user manuals, instructions from the seller's works on handling and range of applications or application conditions as well as maintenance and other information provided at the time the contract is signed.

XII. TOOLS, SAMPLES, PLANS, DRAWINGS PROVIDED For moulds, apparatus, instruments and other fabrication equipment provided by the customer or made but not delivered by the Supplier, the seller will assume responsibility for fabrication equipment provided and tools left for safekeeping and treat them with the necessary professional care. Further liability will not be assumed. In particular, the seller is not liable for loss of, or damage to, the equipment provided, regardless of which event is the cause. Insurance against all cases of damage (e.g. fire, storm damage or other risk) while the equipment is located on the seller's premises is the responsibility of the customer. The seller is obliged to ensure that no finished part of tools belonging to the customer is made available to other customers without the prior knowledge of the owner. Drawings, samples and all other documentation which have been submitted to the seller by the customer for implementing the contract are to be protected by the seller as well as possible against access by third parties without, however, the seller or their subcontractors assuming liability. If no follow up order or other inquiry is received within 2 years of the last shipment, the customer will be advised of this situation and requested to make a clear statement within a period of 6 months regarding what

statement within a period of 6 months regarding what is to be done next. If the customer allows this period to expire without making a statement, all documents and objects (drawings, plans, test specifications, reference samples, models and other technical documentation) can be used for another purpose at the seller's discretion. Existing tools can be supplied without charging for tool maintenance costs as long as the condition of the tools allows trouble-free operation. Maintenance costs for damage due to the natural wear of the tools or equipment are to be borne by the customer, who is also to bear the costs of tool modifications they ordered. For tools of all kinds that the customer makes available to the Seller, the customer is to bear all costs incurred by the seller for servicing and maintaining the tools provided.

#### XIII. PROTECTIVE RIGHTS

For goods supplied that the seller manufacturers according to instructions made available by the cus tomer or under contract from the customer where the customer confirms the fabrication documentation, the customer provides exclusive guarantee that through the manufacture of the goods supplied no protective rights of any kind or trade secrets of third parties are infringed. If any protective rights of third parties are then claimed, the seller is not obliged to check the correctness of the claim, but is entitled under exclusion of all damage liability claims from the customer to stop production of the goods and demand payment of the costs incurred. The customer is fully liable for non-consequential and consequential damages arising as a result of infringement or protective rights claims and the seller is entitled to demand a suitable advance on costs to cover all process costs. The seller is free to release at will all goods covered by the contract or goods manufactured by the seller.

#### XIV. MINOR CHANGES IN PERFORMANCE

If the contract is not with a consumer business, then minor or other changes to our performance or delivery obligation that are acceptable to our customers are deemed approved. This applies in particular to certain necessary deviations (e.g. dimensions, colours, changes in material, etc.).

# XV. CHOICE OF LAW, LOCATION OF FULFILMENT AND JURISDICTION

Austrian law applies. The contract language is German. The parties to this contract agree to Austrian jurisdiction. The location of fulfilment is expressly agreed as the place the delivery is handed over. The law court having jurisdiction at the address of the relevant company location will preside over any conflict resulting from this contract. If the contract is for consumer business, the law court having jurisdiction at our company's address will preside exclusively over any conflict resulting from this contract.

#### XVI. FINAL CLAUSES

Sub-agreements or amendments to these General Sales and Delivery Conditions are to be in written form. All preceding contracts or other agreements are no longer valid.

Peraqua Professional Water Products GmbH Jan 2025

# **HEAD OFFICE & EXPORT**



PERAQUA Professional Water Products GmbH Handelsstraße 8 4300 St. Valentin Austria

# **DISTRIBUTION LOCATIONS**





Praher Plastics Canada Ltd 101 Saunders Rd, Barrie ON L4N 9A7 Canada



Peraplas Deutschland GmbH Regensburger Ring 12 91154 Roth Germany



Peraplas Česko s.r.o. Zděbradská 62/62 251 01 Říčany u Prahy-Jažlovice Czech Republic



Peraplas Praher Middle East FZE PO Box 122435 | SAIF Zone Sharjah, Dubai UAE





