# wisy <br> PRODUCT CATALOGUE Filtration | Building Services | Rainwater 

4-STAGE RAINWATER CLEANSING PRINCIPLE Harvesting rainwater reduces mains water consumption by:

## $50 \%!$

STAGE 1 Vortex Finefilter p. 12

STAGE 2
Smoothing inlet p. 53
made
in
Germany

## Bird's eye view of the production



## WHO WE ARE

WISY AG has its company headquarters in the Hessian nature recreation area of Vogelsberg. In 1989 Norbert Winkler developed here the first filter collector. This was the beginning of the production of low-maintenance filters with vertical filter mesh.

Today, they are used worldwide in production processes as well as in modern rainwater harvesting systems.

WISY's energy-saving automatic switchgear for water pumps set a new standard for energy consumption in standby mode and can thus contribute to a considerable saving of $\mathrm{CO}_{2}$

emissions. Separating stations for the connection of process water to the public drinking water network are also part of our range of products. In the use of of rainwater, we are the technological leading. We offer the complete system for filtering and storage in four purification stages, as well as all components for pumping and ensuring an uninterrupted water supply.

WISY-quality - Made in Germany.

EXAMPLES OF OUR REFERENCE PROJECTS


A rainwater harvesting system has been installed at IKEA's premises in Rothenburg (near Lucerne, Switzerland). The harvested rainwater is used not only to flush toilets, but can also be extracted from taps at various locations in order to irrigate outdoor areas. Collected from around one third of the roof area, the rainwater is piped to three WFF 300 vortex finefilters, cleansed and then stored underground ready for use.


Six pressure-tight WISY vortex filters 300 made of stainless steel filter the rainwater falling on the roof surfaces of the new Google headquarters in Manhattan. The former Railway station is converted into a 12 storey office building. The height is about 70 meters. The harvested Rainwater is used to maintain the greenery and for Air conditioning.

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## WISY FILTERS FOR EVERY APPLICATION

WFF 100
for pipe diameter DN 110


TEST ACHAIS
WFF 100
Testsieger
LINEAR 100
for pipe diameter DN 110


Family Homes

## STANDPIPE FILTER

 COLLECTOR STFSfor pipe diameter DN 76 to 110 mm



FILTER COLLECTOR FS
for pipe diameter 76 to 110 mm

Page 6


RainCatcher RC for pipe diameter 102 to 110 mm Page 45

The roof area that can be connected to a rainwater harvesting system depends on the precipitation rate in the local area. The precipitation values in the tropics, for example, can differ significantly from those in temperate climate zones. The diameter of the drainage pipes specified by the planner is crucial.

## RAINCOLLECTOR RS

for pipe diameter 102 to 110 mm


# The WISY filter systems installed in a downpipe, underground or in the tank are an integral component of rainwater harvesting systems. 

As a general rule, the roof drain is installed as a „gravity drain system". The rainwater flows towards the storm drain or soakaway system through gutters, downspouts/downpipes, collecting and underground pipes. It is therefore important to ensure that the cross section of piping in the flow direction of the water is not restricted.
The WISY filter systems installed in the downspout/downpipe or
underground pipe guarantee that water can drain safely away from the roof areas of the building.
At the same time, the drainage pipes and the installed filter systems must be dimensioned to handle the flow rates (or „volumetric flow") of drainage water from the connected roof areas.

DN 110 Filter collector FS/STFS, WFF 100,
LineAr 100, garden rainwater collector, RainCollector RS $4.2 \mathrm{I} / \mathrm{s}$
DN 160 (WFF 150) $12.8 \mathrm{I} / \mathrm{s}$

DN 300 (WFF 300)
80.6 1/s

For horizontal pipes: The max. flowrates apply at a gradient of $1 \%$ slope of the connection pipes and a max. pipe filling level of $70 \%$.

## Important:

Special installation measures must be taken when WISY filters are installed in pressure drainage systems. Please contact our technical support for further advice!

| RainCollector RS | $4.2 \mathrm{I} / \mathrm{s}$ |
| :--- | ---: |
| DN 160 (WFF 150) | $12.8 \mathrm{I} / \mathrm{s}$ |
| DN 300 (WFF 300) | $80.6 \mathrm{I} / \mathrm{s}$ |

Using the drainage capacity of collecting and underground pipes as a basis, it is also possible to calculate the max. roof area which can be connected to the system.

## Efficiency of WISY filter systems

According to WISY's own research, the average efficiency (or "hydraulic efficiency") of WISY‘s filter systems is over 0.9 or $90 \%$, i.e. more than $90 \%$ of the water flowing into the filter from the roof is filtered before it flows into the storage tank. The remaining water passes into the storm drain or soakaway system with any dirt particles separated out during the cleansing process.
The specified level of hydraulic efficiency refers to around $99 \%$ of all rainfall events in Germany and Central Europe. The filter efficiency is lower (around 40-60\%) owing to the increased volumetric flow of water in only about $1 \%$ of rainfall events.

The majority of individual rainfall events fill the drainage pipes to less than 0.3 or $30 \%$.

## Example:

A building with a projected roof area of $500 \mathrm{~m}^{2}$ (5382 sq. ft.) for which a WFF 150 is installed. The volumetric flow of water into the WFF is $2.78 \mathrm{l} / \mathrm{s}$ during a rain shower of average intensity, i.e. $5 \mathrm{~mm} / \mathrm{m}^{2}$ in 15 minutes (the same as 5 litres $/ \mathrm{m}^{2}$ in 15 minutes). In the chart below, this flow rate corresponds to a hydraulic efficiency of over $95 \%$.

Hydraulic efficiency of WISY filter systems


## FILTER COLLECTOR FS

- Drainage safety according to DIN
- For rainwater or process water
- Made of stainless steel or copper
- Easy to retrofit
- For downspouts/ downpipes in all standard diameters
- Low maintenance
- Extra large filter surface
- Meshsize only $0,28 \mathrm{~mm}$


Rainwater filters for installation in downpipes made of metal or plastic. Consisting of upper housing, housing pot and filter insert. Housing available in stainless steel (VA) or copper (CU). Filter Insert made of stainless steel, filter mesh size $0,28 \mathrm{~mm}$ ( 0.011 in .), low maintenance. We recommend inspecting the filter insert of the FS filter collector twice a year and clean it in a dishwasher if necessary. Outlet to the rainwater storage tank: DN 50.
Drainage safety according to DIN EN 12056 / EN 752, complies with DIN 1989.

- Stainless-steel housings can be installed in zinc or copper downpipes without risk of galvanic action

DN 70 bis DN 110


| For Metal Downpipes | Nominal Size | Outside-ø Downpipe | Item No. |
| :---: | :---: | :---: | :---: |
| - Stainless steel housing |  |  |  |
| FS 100 VA | DN 100 | 102 mm | FS 0303 |
| FS 87 VA | DN 87 | 89 mm | FS 0302 |
| FS 80 VA | DN 80 | 82 mm | FS 0301 |
| FS 76 VA | DN 76 | 76 mm | FS 0305 |
| - Copper housing |  |  |  |
| FS 100 CU | DN 100 | 102 mm | FS 0203 |
| FS 87 CU | DN 87 | 89 mm | FS 0202 |
| FS 80 CU | DN 80 | 82 mm | FS 0201 |
| FS 76 CU | DN 76 | 76 mm | FS 0205 |

- Zinc housing on request

| For plastic downpipes | Nominal Size | Outside- $\varnothing$ Downpipe | Item No. |
| :--- | :--- | :--- | :--- |
| Stainless steel housing    <br> FS 110 VA DN 110 110 mm FS 0304 <br> FS 76 VA DN 70 75 mm FS 0305 <br> Copper housing    <br> FS 110 CU DN 110 110 mm FS 0204 <br> FS 76 CU DN 70 75 mm FS 0205. |  |  |  |



## Accessories

Item No.

- Upper housing, (please state nominal size) made of stainless steel (VA) FO 0300 made of copper (CU) FO 0200
- Housing pot, (please state nominal size) made of stainless steel (VA) FT 0300 made of copper (CU) FT 0200
- Filter insert coated in titanium nitride for protection against high levels of abrasive stress Mesh size 0.28 mm

Mesh size 0.44 mm FE 0401

## Spare parts

Item No.
Filter insert made of stainless steel, (for all nominal sizes FS / STFA, height $17.5 \mathrm{~cm} / 6.89$ in.) Mesh size 0.28 mm ( 0.011 in .)

FE 0300
Mesh size 0.44 mm ( 0.017 in .) FE 0301

## Accessories

Item No
Blind insert made of stainless steel (VA), for all nominal sizes
BE 0301 Ensures the direct flow of water to the sewer or to infiltration, during winter operation or during maintenance work

- Rainwater barrel connecting hose, $11 / 4^{\prime \prime}$.

Connects Filter Collector FS to a rainwater barrel,
UV-resistant plastic spiral hose with tension ring
(for black color) or hose clamp (for white and grey color)

black, 75 cm 15803 black, 150 cm 15814 white, 45 cm 15813 grey, 75 cm 15823


Mount Fuji Mautstation: The Hakone Skyline View Road offers a magnificent view of Japan's sacred mountain Mount Mount Fuji. For only eight months of the year the road is opened. At the beginning of the highest section is a toll station, connected with rest- and toilet facilities. Water is supplied by rainwater. Six FS filter collectors are installed


- Drainage safety according to DIN
- For rainwater or process water
- Stainless steel
- Standpipe and filter in a single unit
- For downspouts/ downpipes in all standard diameters
- Low maintenance
 concrete tank


Rainwater filter and standpipe in one component for installation in the rainwater downpipe or underground, functions as both standpipe and filter collector, prevents backflow. Consisting of upper housing, housing pot and filter insert. All parts made of stainless steel. Filter mesh size 0.28 mm ( 0.011 in .), extreme low maintenance. Outlet to the rainwater storage tank: DN 50. Outlet to storm drain for sewer pipe: DN 100. Inspection is recommended 2 times per year. When necessary it is easiest to clean the filter insert in a dishwasher.
Drainage safety according to DIN EN 12056 / EN 752, complies with DIN 1989.

## DN 70 to DN 110



Standpipe Filter Collector (STFS)
 housing


Blind insert (accessory)

Housing bottom half Item No.

SF 0303
SF 0302
SF 0301
SF 0305
For plastic downpipes Nominal Size Outside $\varnothing$-Downpipe Item No.

| STFS 110 VA | DN 100 | 110 mm | SF 0304 |
| :--- | :--- | :--- | :--- |
| STFS 76 VA | DN 70 | 75 mm | SF 0305 |

## Accessories

Item No.

- Stainless-steel standpipe clip with screw ( $\varnothing 10 \mathrm{~mm} \times 120 \mathrm{~mm}$ ) and 2 x dowel. For secure attachment.

SF 0310


## REFERENCES

## LEED-Gold-Certified:

## Bishop Building

on the south campus of Saint Francis Hospital in Tusla (Oklahoma, USA) is awarded by the U.S. Green Building Council with LEED Gold Certification (Leadership in Energy and Environmental Design). The local rainwater is cleansed by three WFF 300 vortex finefilters, stored in a $190 \mathrm{~m}^{3}$ cistern and used for irrigation.

The WFF $\mathbf{3 0 0}$ vortex finefilter.
The rainwater flows into the filter unit through an above ground pipe that exits directly from the building wall. The outlets for the filtered water and the residual dirty water are installed below ground.


## Setia Headquarters,

## Kuala Lumpur, Malaysia.

This building is the administrative headquarters of a major construction company. Rainwater is collected on the top floor, immediately below the roof of the building. It is filtered by three WFF 300 vortex finefilters. The filtered water then flows into a 240 $m^{3}$ tank which is also located on the top floor. The water harvested by this system is used to irrigate the gardens and flush toilets. It is also used to supplement the cooling water for the air-conditioning system.


## LINEAR FILTER 100 STAINLESS STEEL

- Drainage safety according to DIN
- Only 5 cm height difference between inlet and outlet
- For installation in storage tank
- Made of stainless steel
- Easy to retrofit
- Low maintenance thanks to vertical filter mesh


The filter insert is easy to remove for cleaning.

(1) Stainless steel housing
(2) Stainless steel filter insert
(3) Rainwater inlet socket DN 100
(4) Outlet to rainwater tank
(5) Soakaway or storm drain outlet

## Sophisticated design

WISY‘s LineAr 100 rainwater filter has a vertical filter mesh. Leaves, moss and other suspended particles are simply flushed past the filter into the drain outlet. The pipe diameter is not narrowed throughout the LineAr 100 rainwater filter. Even a tennis ball washed off the roof by rain can pass unhindered through the filter housing.


## LineAr filter

Item No.

- LineAr 100 rainwater filter. 5 cm (2 in.) height difference between rainwater inlet and rainwater outlet. Filter body and filter element made of stainless steel 1.4301,
filter mesh size 0.44 mm ( 0.017 in .).
LF 1100


## Spare parts

Item No.

- Filter insert made of stainless steel, mesh size 0.44 mm (0.015 in)

LE 0301


Technical data
Height difference between rainwater inlet and soakaway or storm drain outlet $5 \mathrm{~cm}(2 \mathrm{in}$.)
Filter mesh size
0.44 mm ( 0.017 in .)

Water yield at $1.4 \mathrm{l} / \mathrm{sec}$
$>90$ \%
Maintenance intervals
2 to 3 times per year
Diameter of connecting pipes inlet socket, drain pipe
DN 100

## LINEAR FILTER 100 K

- Drainage safety according to DIN
- Only 5 cm height difference between inlet and outlet
- For installation in storage tank
- Self-cleaning, vertical filter mesh
- Horizontally aligned pipes DN 100
- Rainwater for toilet flushing, washing machine and garden


The filter insert is easy to remove for cleaning.
(1) Filter housing
(2) Filter insert
(3) Rainwater inlet DN 110
(4) Outlet to rainwater tank (filtered water) DN 110
(5) Outlet DN 110 to soakaway or storm drain
(6) Housing cover

## Minimum height difference, straight piping

Whether for new builds or retrofits: The space-saving LineAr filter 100 K is easy to plan and can be installed without any extra excavation work. There are just five centimeters height difference between the rainwater inlet and the dirty water outlet.
Thanks to this minimal height difference, the LineAr filter 100 K is extremely easy to integrate into existing pipework. It can even be placed directly inside a rainwater storage tank without changing the gradient of existing piping.


## LineAr-Filter

Item No.
LineAr Filter 100 K. 52 mm (2 Inch) height Difference between Rainwater Inlet and rainwater outlet. .
Filter element made of stainless steel,
meshsize $0,44 \mathrm{~mm}$.
LF 1200

## Spare parts

Item No.

- Filter element made of stainless steel, meshsize $0,44 \mathrm{~mm}$

LE 0303


| Technical data | 52 mm |
| :--- | ---: |
| Height difference between rainwater inlet and soakaway or storm drain outlet | $0,44 \mathrm{~mm}$ |
| Filter mesh size | $>90 \%$ |
| Water yield at $1,4 \mathrm{l} / \mathrm{sec}$. | 2 to 3 times per year |
| Maintenance intervals | DN 110 |
| Diameter of connecting pipes Inlet socket Drain pipe |  |

## VORTEX FINEFILTER WFF 100

- Drainage safety according to DIN
- For rainwater or process water
- With extension tube and cover
- Self-cleaning
capability reduces
maintenance


30 vehicle-duty capacity
Tested to German standard ATV: Vehicle-duty capacity up to 30t (DIN 1072/SLW 30)


Rainwater filter for installation in horizontal rainwater pipes underground or in the open air (e.g. for industrial applications). Optionally available with 50 cm ( 1.6 ft .) extension tube for raising the inspection opening to ground level. Freely rotatable rainwater inlet. Tested to German standard ATV: Vehicle-duty capacity up to 30 t. Polypropylene housing (PP). Stainless steel filter insert, low-maintenance. Inspection is recommended 2 times per year. When necessary it is easiest to clean the filter insert in a dishwasher. Filter mesh size 0.28 mm ( 0.011 in .) (basic version) or 0.44 mm ( 0.017 in .). Drainage safety according to DIN EN 12056 / EN 752, complies with DIN 1989.

## WFF 100 without extension tube



WFF 100 with extension tube


Vortex Fine Filter WFF 100
Item No.
consists of housing, end ring with housing cover and lifting
handle ( $30 \mathrm{~cm} / 11.8 \mathrm{in}$.) in the following versions:
$\begin{array}{lll}\text { With extension tube } & \text { filter insert } 0.28 \mathrm{~mm}(0.011 \mathrm{in} .) & \text { WF } 2011 \\ \text { With extension tube } & \text { filter insert } 0.44 \mathrm{~mm}(0.017 \mathrm{in} .) & \text { WF } 2012 \\ \text { Without extension tube } & \text { filter insert } 0.28 \mathrm{~mm}(0.011 \mathrm{in} .) & \text { WF } 2002 \\ \text { Without extension tube } & \text { filter insert } 0.44 \mathrm{~mm}(0.017 \mathrm{in} .) & \text { WF } 2001\end{array}$

- Drainage safety according to DIN
- For rainwater or process water
- Direction of inlets and outlets can be freely rotated
- With extension tube and cover
- Self-cleaning capability reduces maintenance


WFF 150 without extension


Item No.
consists of housing, end ring with housing cover and lifting
handle ( $30 \mathrm{~cm} / 11.8 \mathrm{in}$.) in the following versions:

- With extension tube filter insert 0.28 mm ( 0.011 in .)

WF 1011

- With extension tube filter insert 0.44 mm ( 0.017 in .)

WF 1012

- Without extension tube filter insert 0.28 mm ( 0.011 in .)

WF 1002
WF 1001




Stainless-steel soakaway strainer
For trapping the fine and coarse dirt from the rinsing and excess water if the water is released into an underground soakaway system rather than a storm drain. meshsize 3 mm ( $0,12 \mathrm{in}$.)
for WFF 100, height 8.5 cm (3.3 in.)
for WFF 150, height 18.5 cm (7.28 in.)


## VORTEX FINEFILTER WFF 300

- Drainage safety according to DIN
- For rainwater or process water
- Optionally with sealed plastic cover
- Optional vehicle duty up to 60t
- DN 300 pipe connection


## - Self-cleaning capability reduces maintenance



60t vehicle-duty capacity
Tested to German standard ATV: Vehicle-duty capacity up to 60t (DIN 1072/SLW 60)



## VORTEX FINEFILTER WFF 300, SHORT VERSION

- Drainage safety according to DIN
- For rainwater or process water
- Optionally with sealed plastic cover
- Optional vehicle duty up to 60 t
- DN 300 pipe connection
- Self-cleaning capability reduces maintenance
- Difference in height (between inlet and horizontally deflected outlet) is 145 mm less than on the standard version

The difference in elevation between the rainwater inlet and outlet is only 800 mm , i.e. 145 mm less than the standard WFF 300 model. The short version of the WFF 300 is available with two different cover designs.


Comparison - short version on left and standard version on right

## Vortex finefilter short

Item No.

- WFF 300 short, with sealed plastic cover, recommended in all cases of indoor installation

WF 3020

- WFF 300 short with steel cover, vehicle duty capacity up to 12 t acc. to DIN 1072 to (acc. to DIN 1072) recommended for outdoor and underground Installation

WF 3022

- WFF 300 short with steel Cover, Vehicle duty, for vehicles with a weight of max. 60 tons. (acc. to DIN 1072) recommended for outdoor and underground Installation

WF 3023
For accessories see previous page, WFF 300.
Straight tube section.
Minimum: 1.5 åm ( 4.9 ft .)


## VORTEX FINEFILTER CLEANING NOZZLE

## - For industrial applications

- Designed for continuous duty
- No additional water consumption, filtered water is used in cleaning process


A vortex fine filter equipped with the fully automatic cleaning nozzle is capable of performing extremely challenging tasks in water recycling or separation plants. This nozzle cleans the filter with a fine water spray. The filter surface is kept clean for long periods without any need for maintenance.
The spraying device for the WFF 100 and WFF 150 vortex finefilters is installed in an external shaft extension above the filter. The spraying device for WFF 300 can be installed directly in the filter housing.
The cleaning nozzle operates fully automatically. In terms of cleaning, the filter is virtually maintenance-free. The service life of the filter is extended, while the consumption of fresh and wastewater and the energy usage associated with the process are minimized. For operating the cleaning nozzle, the submersible pressure pump Multigo is suitable. (page 32, not included in the scope of delivery). The cleaning nozzle has an 1" Outside thread for the connection to pressurized water.

Cleaning nozzle for Vortex Finefilter WFF 300


| Cleaning Nozzle | Item No. |
| :--- | ---: |
| WFF 100 cleaning nozzle | SC 1000 |
| WFF 150 cleaning nozzle | SC 2000 |
| WFF 300 cleaning nozzle | SC 3000 |

Cleaning of water coming from the manufaction of concrete blocks
located in Clermond Ferrand, France


## VORTEX FINEFILTER WFF 300 STAINLESS

## - Drainage safety according to DIN

- For Rainwater or industrial process water
- Applicable everywhere where overflowing of fluids must be prevented


## - In- and outgoing

 pipes with $\varnothing$ 300mm flanges

Our rainwater and industrial Vortex finefilters WFF 300 VA are made of stainless steel. stainless steel. Due to the unique arrangement of the filter fabric, they have a high self-cleaning effect and can be self-cleaning effect and can therefore be operated almost continuously without the need to the process has to be interrupted cyclically.
They are designed for unpressurised flowing media and can be used everywhere where filtered or solids have to be concentrated in liquids.

## Capacity

The filter is designed for a flow velocity of up to $1.6 \mathrm{~m} / \mathrm{s}$. The nominal flow rate is 13 litres per second and results in $90 \%$ filtered water and $10 \%$ residual and rinsing water. The rinsing water is used to clean the screen and to continuously remove the solids. The maximum flow rate is 80.6 litres per second.

## Housing

The housing of the filter WFF 300 stainless consists of consists of an upper and a lower part. This allows easy adjustment of the direction between the liquid inlet and filtrate outlet in $15^{\circ}$ steps. Flange connections according to DIN or ANSI are provided for the pipe. Housing and filter insert are made of stainless steel V2A. For foodgrade conditions or for acidic media a version made of V4A is available.

## Cover

The Cover is made of the same stainless steel as the housing. It is leak-proof up to a up to a pressure of 6 bar. By help of two gassprings the lid can be easily be operated with one hand..

## Filter insert

The filter insert is made of stainless steel In the standard version it has a mesh size of 0.38 mm ; other widths are available. Particles larger than the the mesh size are carried by the rinsing water downwards to the outlet.
For special applications e.g. with abrasive solids the filter insert can be coated with titanium nitride
 coating. This increases the service life and material strength.


| filtration rate at $1,6 \mathrm{~m} / \mathrm{s}$ und $13 \mathrm{l} / \mathrm{s}$ | > 90 \% |
| :---: | :---: |
| Meshsize | 0,18 mm meshsize |
|  | 0,38 mm meshsize |
|  | Others on request |
| Connections |  |
| Horizontally incoming water: | DN 300 PN 10 DIN 2632/C EN 1092-1/B1 Typ 11 |
| Horizontally outgoing filtered water: | DN 200 PN 10 DIN 2632/C EN 1092-1/B1 Typ 11 |
| Vertically outgoing dirt and rinsing water: | DN 300 PN 10 DIN 2632/C EN 1092-1/B1 Typ 11 |
| Material |  |
| Housing, Cover, Filter Insert Stainless steel: | 1.4301 optional 1.4571 |
| Filter insert for abrasive application: | optional coating with Titan-Nitrite |



Vortex finefilter WFF $\mathbf{3 0 0}$ stainless

- 6 bar, $380 \mu \mathrm{~m}$, two part housing

WF 3031
Other model sizes and connection diameters on request

## 4-STAGE RAINWATER CLEANSING PRINCIPLE



Filtering with WISY vortex finefilter with separation of dirt particles and oxygen enrichment

STAGE 2
WISY smoothing inlet prevents resuspension of sediment and distributes the fresh, oxygenrich water in the storage tank

STAGE 3
Water is extracted with the WISY floating suction filter suspended at the optimum height

## STAGE 4

Overflow with skim effect odour seal, vermin guard and backflow prevention with WISY multisphon

## RAINWATER UNITS

|  | MULTIMAT | SIGMA | OPTIMA | OPTIMAPLUS | MAXIMA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ADVANTAGES | No pump noises | Easy installation | Increased pressure | Strong tank pump | For big buildings |
| PIPE BETWEEN STORAGE <br> TANK AND RAINWATER UNIT | up to 20 m | up to 12 m | up to 20 m | up to 50 m | Acc. to requirements |
| PUMP CONTROLLER ZETA 02 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| PUMP IN THE TANK | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| PUMP IN RAINWATER UNIT | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| INTEGRATED TANK VOLUME | - | 9 litres | 9 litres | 9 litres | 350 litres |
| MAINS WATER TOP-UP INTO | Storage tank | $\begin{aligned} & \text { Top-up } \\ & \text { tank } \end{aligned}$ | $\begin{aligned} & \text { Top-up } \\ & \text { tank } \end{aligned}$ | Top-up tank | Top-up tank |
| PRESSURE INDICATOR <br> AII WISY Rainwater units including efficient ZETA 02 pump controller | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  |  |  |  |  |  |

OPTIMA (PLUS) Operating characteristic at 2900 rpm


SIGMA
Operating characteristic at 2900 rpm


MAXIMA Operating characteristic at 2850 rpm


- Extremely compact


## - No pump noise indoors

- High-performance submersible pressure pump for pumping water from the storage tank directly to the appliances
- Regulation-compliant mains water top-up of storage tank with type AA open outlet
- With ZETA 02 pump controller: Less than 0.2 watts in standby mode

The Multimat rainwater unit uses a submersible pressure pump to pump rainwater out of the storage tank and feed it under pressure into the rainwater supply circuit. It controls the rainwater system, monitors the fill level of the storage tank and automatically tops up the rainwater storage tank with mains water when required.

Control unit and mains water top-up indoors


Item No.

- Multimat with submersible pressure pump Multigo 205, max. delivery rate $80 \mathrm{l} / \mathrm{min}$., max. delivery head 48 m

RW 9025

- Multimat with submersible pressure pump Multigo 407, max. delivery rate $125 \mathrm{l} / \mathrm{min}$., max. delivery head 49.4 m

RW 9047

## The scope of supply consists of:

Wall unit in the house with:

- Pump controller Zeta 02, cut-in pressure 1.5 bar with pressure gauge and operating state indicator
- Open mains water outlet with solenoid valve, $1 / 2{ }^{\prime \prime}$ connecting hose made of special-purpose rubber with stainless-steel braiding, ball valve with dirt trap
- Wall bracket made of stainless-steel with fixings
- Labelling set
- Cover

Storage tank equipment with floating fine suction filter:

- Multi-stage submersible pressure pump Multigo with stainless-steel baseplate ( $22 \mathrm{~cm} \times 22 \mathrm{~cm} / 8 \mathrm{in} . \times 8 \mathrm{in}$.), 20 m connecting cable and 3 m lifting strap. With 1" nozzle and backflow prevention valve at discharge end
- Float switch, with switch lever and clamp with 20 m cable
- Adapter plug
- Floating suction filter made of stainless steel, mesh size 0.3 mm ( 0.01 in .), with 1 m ( $3,3 \mathrm{ft}$.) highly flexible suction hose. Diameter 1"


## Recommended Accessories

Item No.

- Tank connection Set for Multimat and Optima
- Pressure hose 1" flexible Length 3 m (in tank)
- $2 \times$ PE pipe connection in brass $90^{\circ} 32 \mathrm{~mm} \times 1^{\prime \prime}$ Nozzle ( 1 x in tank, 1 x in house)
- $4 \times$ Hose clamp stainless steel 1 "
- connection hose 50 cm with stainless steel braiding,

1" Nozzle and 1" union nut. (in house)
additionally required on site: PE pipe from tank to house
OA 1002

- Hose connection Set wit two stainless steel braided hoses 3/4" with pressed fittings ready to connect to the wall unit. Length $0,5 \mathrm{~m}(1,64 \mathrm{ft}$.) 2 ball valves with $3 / 4$ " inside thread, one of them with dirt trap.

RW 7800
flexible tube DN 50 25m roll WD 2000

- Adapter for flexible tube to tundish

WD 2021

- Wall bushing with seven bores: for pressure 33 mm , for mains water feed 50 mm , for electric cable $1 \times 16 \mathrm{~mm}$, $3 \times 10 \mathrm{~mm}, 1 \times 6 \mathrm{~mm}$

WD 2110

## SIGMA RAINWATER UNIT

## - Compact and economical

## - Suction pump in wall unit for pumping water from rainwater storage tank to appliances

- Automatic switchover between rainwater and mains water depending on availability (manual switchover possible)
- Regulation-compliant mains water top-up with open outlet in the integral top-up tank
- With ZETA 02 pump controller: Less than 0.2 watts in standby mode

Fully automatic rainwater unit for supplying a single-family home with rainwater.
The unit draws rainwater from a storage tank and feeds it under pressure into the rainwater supply circuit. The unit controls the entire rainwater supply system, checks the fill level of the storage tank and automatically switches over to mains water operation when required. Supplied ready to connect.

Sigma with cover


Item No.

## Sigma rainwater unit

Sigma 3, delivery head max. 34 m, delivery rate max. 661/min without level indicator

RZ 1003

- Sigma 4, delivery head max. 44 m , delivery rate max. 661/min. without level indicator

RZ 1004

## The scope of supply consists of:

- Self-priming Aspri Plus pump and pump controller, available in two different versions (3 or 4 bar), with optional level indicator
- Pressure gauge (pressure indicator)
- DIN-compliant mains water top-up function, integral 9-litre top-up tank
- Cover
- Float switch for controlling top-up with mains water, cable length 15 metres
- Labelling set


## Recommended accessories

Item No.

- SIGMA Cistern Connection Set (1")

Consists of floating fine suction filter SAFF with non-return valve,
10 m flexible suction hose, 2 stainless steel hose clamps and 1 hose connector.

SA 1002

- Hose connection Set wit two stainless steel braided hoses $3 / 4$ " with pressed fittings ready to connect to the wall unit. Length $0,5 \mathrm{~m}(1,64 \mathrm{ft})$.2 ball valves with $3 / 4$ " inside thread, one of them with dirt trap

RW 7800

- Wall bushing WD 100 contains four bores:
$1 \times 36 \mathrm{~mm}$ ( 1.4 in .) / $2 \times 10 \mathrm{~mm}$ ( 0.4 in .) / $1 \times 6 \mathrm{~mm}$ ( 0.2 in .)
WD 1100


## OPTIMA PLUS RAINWATER UNIT

- For large distances or height differentials from rainwater storage tank to wall unit
- Doubly reliable: Separate pumps for rainwater or mains water operation
- Regulation-compliant mains water top-up with open outlet in integral top-up tank
- With ZETA 02 pump controller: Less than 0.2 watts in standby mode


Included in the scope of supply: hose protecting nozzle


The rainwater unit combines all components essential for operation in a single device.
Pumps the rainwater out of the storage tank over long distances and large height differentials and feeds it under pressure into the rainwater supply circuit.
Controls the entire rainwater system, monitors the fill level of the storage tank and automatically tops up with mains water in the wall unit when required.

OptimaPlus with cover


OptimaPlus Item No.

- OptimaPlus, max. delivery $70 \mathrm{l} / \mathrm{min}$, max. delivery height 47 m , max pressure 4,7 bar (see diagram page 23) with 25 m cable extension

RW 9825
with 50 m cable extension
RW 9850
The scope of supply consists of:
Wall unit in the house with:

- Non-self-priming, multi-stage centrifugal pump, max. feed pressure 4.7 bar
- Pump controller Zeta 02, cut-in pressure 1.5 bar with pressure gauge and operating state indicator
- Automatic mains water top-up
- Operating state indicator for mains
- Cover, wall-mounting bracket
- Labelling set


## Storage tank equipment with:

- Multigo 205 multi-stage submersible pressure pump, max. feed pressure 4.7 bar with 3.5 m connecting cable (4-core), 1" nozzle with non-return valve at discharge end, 3 m lifting strap
- Stainless-steel baseplate $22 \mathrm{~cm} \times 22 \mathrm{~cm}$ (8 in. $\times 8$ in.) for Multigo
- Stainless-steel float switch with switch lever and clamp
- Stainless-steel fine suction filter, mesh size 0.3 mm ( 0.01 in .)
with $0.75 \mathrm{~m}(2.46 \mathrm{ft}$.) highly flexible suction tube
- 22 m (72.9 ft.) cable extension (4-core) with connector and coupling IP 68
- Convenient solution for single-family/two-family homes
- Pressure stabilized by two pumps: Loading pump in the rainwater storage tank. and pressure pump in the wall unit
- Automatic switchover between rainwater and mains water depending on availability
- Regulation-compliant mains water top-up with open outlet in the integral top-up tank
- With ZETA 02 pump controller: Less than 0.2 watts in standby mode

Loading pump Provedo VX


The rainwater unit combines all components essential for operation in a single device. Pumps the rainwater out of the storage tank and feeds it under pressure into the rainwater supply circuit. Controls the entire rainwater system, monitors the fill level of the storage tank and automatically tops up with mains water in the wall unit when required.
Optima rainwater unit with cover


Dimensions of the
Optima wall unit (in mm):
W 500 x H $510 \times$ D 315
Optima
without cover


## Optima with loading pump and floating filter SAFF

Item No.
Optima 4 , with 4 bar system pressure, max. delivery rate $701 / \mathrm{min}$. without level indicator

RW 9924

- Optima 5, with 5 bar system pressure, max. delivery rate $70 \mathrm{l} / \mathrm{min}$. without level indicator

RW 9925

## The scope of supply consists of:

Wall unit in the house with:

- non-self-priming, multi-stage centrifugal pump
- Pump controller Zeta 02, cut-in pressure 1.5 bar with pressure gauge
- Automatic mains water top-up by 9 I top-up tank
- Cover, wall-mounting bracket
- Labelling set


## Storage tank equipment with:

- Provedo VX submersible pressure pump with fixed vertical float switch, 20 m connecting cable, 1 " nozzle at discharge end with non-return valve, 3 m lifting strap and hook with screw thread
- Stainless-steel baseplate $22 \mathrm{~cm} \times 22 \mathrm{~cm}$ (8 in. $\times 8$ in.) for submersible pressure pump
- Stainless-steel floating fine suction filter, mesh size 0.3 mm ( 0.01 in .), with $1 \mathrm{~m}(3,3 \mathrm{ft}$.) flexible suction tube


## Accessories for all Optima units

Item No.

- Tank connection Set for Multimat and Optima
- Pressure hose 1" flexible Length 3 m (in tank)
$-2 \times$ PE pipe connection in brass $90^{\circ} 32 \mathrm{~mm} \times 1^{\prime \prime}$ Nozzle ( 1 x in tank, 1 x in house)
- $4 \times$ Hose clamp stainless steel $1^{\prime \prime}$
- connection hose 50 cm with stainless steel braiding, 1" Nozzle and 1 " union nut. (in house)
additionally required on site: PE pipe from tank to house
OA 1002
- Hose connection Set wit two stainless steel braided hoses $3 / 4$ " with pressed fittings ready to connect to the wall unit. Length $0,5 \mathrm{~m}(1,64 \mathrm{ft}$.) 2 ball valves with $3 / 4$ " inside thread, one of them with dirt trap.

RW 7800

- Wall bushing WD 100 contains four bores:
$1 \times 36 \mathrm{~mm}$ (1.4 in.) / $2 \times 10 \mathrm{~mm}$ ( 0.4 in .) / $1 \times 6 \mathrm{~mm}$ ( 0.2 in .)
WD 1100


## Using harvested rainwater reduces $\mathrm{CO}_{2}$ emissions: 560,000 tonnes in Germany



800


[^0]- Extremely reliable water supply thanks to 350 litre buffer volume
- System supplied ready to connect, no electrical work required
- Automatic regulationcompliant mains water top-up with type AA open outlet in hybrid tank
- With ZETA 02 pump controller: Less than 0.2 watts in standby mode


Submersible loading pump in storage tank



## Large hybrid unit ensures high supply capacity

Combines all components required to operate the rainwater supply system according to the two-pressure-pump principle.
Rainwater is pumped by the submersible loading pump out of the storage tank to the buffer tank of the indoor hybrid unit. A submersible loading pump inside the buffer tank supplies rainwater to appliances. The buffer tank of the unit is directly topped up with mains water, buffer storage volume 350 I for high consumption peaks. Complies with DIN 1989 and DIN EN 1717

| Maxima | No. of consumers <br> (guide value) | Maximum <br> delivery rate | Maximum <br> delivery head |
| :---: | :---: | :---: | :---: |
| 205 | 2 to 4 households | $80 \mathrm{l} / \mathrm{min}$. | $48 \mathrm{~m}(480 \mathrm{kPa})$ |
| 407 | 4 to 8 households | $120 \mathrm{I} / \mathrm{min}$. | $49 \mathrm{~m}(480 \mathrm{kPa})$ |
|  | Commerce + <br> industry |  |  |

## The scope of supply consists of:

## Indoor hybrid unit with:

- Capacity 350l (92.5gallons with emergency overflow110 mm (3.9 in.)
- Multigo 205 or 407 multi-stage submersible loading pump with rubber feet
- Pump controller Zeta 02/V with pressure gauge
- Electronic control unit
- Automatic mains water top-up
- Open mains water outlet ( $1 / 2$ " for Maxima 205, $3 / 4$ " for Maxima 407), with solenoid valve, ball valve and dirt trap
- Drain valve $1 / 2^{"}$
- Non-return valve in rainwater inlet
- hose connection Set for Maxima, consists of connection hose 0,5m with 1 "union nut, brass ball valve
- Labelling set


## Storage tank equipment with:

- Provedo VX submersible loading pump with fixed vertical float switch, 20 m connecting cable, $11 / 4$ " nozzle at discharge end with non-return valve (ST1011), stainless steel base plate, 3 m lifting strap and hook with screw thread
- Stainless-steel baseplate $22 \mathrm{~cm} \times 22 \mathrm{~cm}$ ( 8 in . x 8 in .) for submersible loading pump
- Stainless-steel floating fine suction filter, mesh size 0.3 mm ( 0.01 in .), with $0,75 \mathrm{~m}(2.5 \mathrm{ft}$.) flexible suction tube all necessary connection parts.


## Accessories

Item No.

- Non-return valve for the event that the water level in the storage tank can rise above the centre line of the indoor buffer storage tank. The non-return valve closes the inlet to the buffer storage tank. The inlet is opened again only if the storage tank pump is switched on. This system prevents the unintentional inflow of rainwater from the storage tank into the buffer storage tank through the full inlet hose, comprises: Solenoid valve $11 / 4$ " cable, $1.5 \mathrm{~m}(4.92 \mathrm{ft}$.) long and adapter

SV 1501

- Connection socket with output to the building management system gives signal in case of malfunction, overflow or lack of water. switches 12-230 Volt
-     + PLUS +++ Dirt trap, screw connection and rubber feet
- Preassembled ready for installation
- Pump technology with 30-year successful track record
- Energy-efficient: Less than 0.2 watts in standby mode


Self-priming, multi-stage centrifugal pump for pumping rainwater out of storage tanks. Models: AspriPlus 15/3 (3-stage), AspriPlus 15/4 (4-stage), AspriPlus 15/5 (5-stage).


All Aspri Plus pumps have a maximum delivery rate of 66 litres per minute. The maximum delivery head is model-dependent as indicated below:

| AspriPlus | Maximum <br> delivery head |
| :---: | :---: |
| $15 / 3$ | $34,0 \mathrm{~m}(340 \mathrm{kPa})$ |
| $15 / 4$ | $45,0 \mathrm{~m}(450 \mathrm{kPa})$ |
| $15 / 5$ | $53,0 \mathrm{~m}(530 \mathrm{kPa})$ |



Self-priming pump
Item No.

- AspriPlus without pump controller 15/3 SP 1203
15/4 SP 1204
15/5 SP 1205
- AspriPlus with pump controller ZETA 02

15/3
SP 1293
15/4
SP 1294
15/5
SP 1295

- AspriPlus with pump controller ZETA 02/V, cut-in pressure adjustable between 1.5 bar and 2.8 bar 15/4

SP 2294
$15 / 5$

Dimensions:
without pump controller W $420 \times \mathrm{H} 180 \times \mathrm{D} 150 \mathrm{~mm}$ (16.5 x $7.1 \times 5.9$ )
with pump controller W $420 \times$ H $420 \times D 150 \mathrm{~mm}$ ( $16.5 \times 16.5 \times 5.9$ )


ASPRI PLUS
Operating characteristic at 2900 rpm


PROVEDO Operating characteristic at 2850 rpm


MULTIGO
Operating characteristic at 2850 rpm


BETA
Operating characteristic at 2800 rpm


## MULTIGO SUBMERSIBLE PRESSURE PUMP

## - Noiseless indoors!

- Made of solid
- Ideal for indoor use of harvested rainwater
- Hose nozzle or inside thread for connecting suction filter


Non-self-priming, multi-stage submersible pressure pump with connections for fixed or floating finesuction filters for pumping rainwater out of storage tanks.
Basic model with directly-integrated hose 1" hose nozzle or with $11 / 4$ " suction inlet (inside thread) at suction end. Discharge end $1 \frac{1 / 4 "}{}$ inside thread.

## Fully equipped with:

3 m lifting strap, 20 m connecting cable, pump controller ZETA 02, cut-in pressure 1.5 bar, with pressure gauge and electric socket, $2 \times 1$ " outside thread, operating state indicator (LEDs). Stainless-steel wall-mounting bracket WH 0305 with fixings and lock nut. Stable baseplate $22 \mathrm{~cm} \times 22 \mathrm{~cm}$ (8 in. $\times 8$ in.).

Multigo with suction-end hose nozzle and baseplate

Dimensions for models with suction-end nozzle (in mm):
Multigo 205 Ø 127 x H 496
Multigo 407 Ø 127 x H 511
Multigo 207 Ø $127 \times$ H 536

| Multigo | Maximum <br> delivery rate | Maximum <br> delivery head |
| :---: | :---: | :---: |
| 205 | $80 \mathrm{I} / \mathrm{min}$. | $48 \mathrm{~m}(480 \mathrm{kPa})$ |
| 407 | $120 \mathrm{I} / \mathrm{min}$. | $49 \mathrm{~m}(490 \mathrm{kPa})$ |
| 207 | $80 \mathrm{I} / \mathrm{min}$. | $61 \mathrm{~m}(610 \mathrm{kPa})$ |



## Multigo complete with pressure switch with fixed 1,5 bar cut in pressure

Item No.
With pump controller ZETA 02, wall-mounting bracket, lifting strap, baseplate.

- Cut-in pressure fix at 1.5 bar, with 1 " hose nozzle at suction end Multigo 205


UP 1302
Multigo 207
UP 1305

- Cut-in pressure fix at 1.5 bar, with $11 / 4$ " connector (inside thread) at suction end Multigo 205
Multigo 407


UP 1102
UP 1103 Multigo 207

Multigo complete, with adjustable pressure switch from 1,5 to 2,8 bar cut in pressure

Item No.
Cut-in pressure adjustable from 1.5 to 2.8 bar, with 1 " nozzle at suction end Multigo 205


Multigo 207
UP 1302

Cut-in pressure adjustable from 1.5 to 2.8 bar, with $1 \frac{1}{4} 4^{\prime \prime}$ connector (inside thread) at suction end
Multigo 205
UP 1102
Multigo 407
UP 1103
Multigo 207
UP 1105


To operate the Multigo pump, a hose nozzle with non-return valve is recommended.
Connecting hose VS 9953

- Large delivery volume with small height differential ( $150 \mathrm{I} / \mathrm{min}$ at height of 3 m )
- Durable design made of stainless steel


## - For direct suction or with connection for the suction filter (depends on model)

## - Baseplate and float switch (depends on model)

Submersible pump with fixed level switch or float switch. For pumping clean water, e.g. out of rainwater storage tanks. With connections for fixed or floating suction filters.

Models with either 1" nozzle, 1 1/4" inside thread or direct suction.
High suction flow with low head. All parts in contact with water are made of stainless steel. Automatic startup and shutdown by float switch. 20 m ( 65.6 ft .) connecting cable and large, extremely stable stainless-steel baseplate. Maximum delivery rate $170 \mathrm{l} / \mathrm{min}$, maximum delivery head: 9 m . Mit 3 m Tragseil.


## Submersible feed pump

Item No.

- Provedo VX for Optima

Special version für Optima rainwater unit. 1" Inside thread at suction side. 1" nozzle with integrated non-return valve at pressure side. Ready assembled baseplate $22 \mathrm{~cm} \times 22 \mathrm{~cm}$ ( $8 \mathrm{in} . x 8$ in.). 20 m electric connection cable

UP 1322 VX

- Provedo VX for Maxima

Special version für Maxima rainwater unit. 11/4" nozzle at suction side.
$11 / 4$ " nozzle with integrated non-return valve at pressure side.
Ready assembled baseplate $22 \mathrm{~cm} \times 22 \mathrm{~cm}$ ( $8 \mathrm{in} . \times 8 \mathrm{in}$.).
20 m electric connection cable
UP 1342 VX

- Provedo B-1

Model with 1" nozzle at suction side and ready assembled baseplate $22 \mathrm{~cm} \times 22 \mathrm{~cm}$ ( 8 in. $x 8$ in.) 20 m electric connection cable


Provedo B-1
Model with $11 / 4$ " connector (inside thread) at suction side and ready assembled baseplate $22 \mathrm{~cm} \times 22 \mathrm{~cm}$ (8in. $\times 8 \mathrm{in}$.) 20 m electric connection cable


UP 1322

- Provedo B-1
with direct suction, 10 m electric connection cable, loose floatswitch

UP 1113

## Accessories

Item No.
Stainless steel switch lever for precise control of the float switch, universal fit. Defines switching points precisely.

- With clamp 140-160 mm (5.5-6.3 in.)

SH 0300
(Further sizes on demand)

## ZETA 02 PUMP CONTROLLER

- Pump cuts in and out automatically
- For all standard pumps, easy to retrofit
- Energy savings of up to 128 kWh per year thanks to WISY's unique innovative electronics
- Cost savings of up to 32.00 € per year
- Reduces $\mathrm{CO}_{2}$ emissions by up to $97 \%$
- Less than 0.2 watts in standby mode
- Dry run protection when water runs low
- Active protection of pump against overfrequent starting or continuous operation
- backflow protection integrated



## New electronics

Thanks to its innovative electronic circuitry, the controller consumes only 0.2 watts in standby mode, a significant reduction when compared to other commercially available controllers which draw between 6 and 15 watts from the grid. This saves up to 128 kWh per year and reduces $\mathrm{CO}_{2}$ emissions by up to $97 \%$ or 70 kg per year.

## Programmable functions

1. Adjustable run-on time: unnecessary pump operation can be limited. This helps to reduce power consumption.
2. Overfrequent starting detection: more than 25 pump starts per hour are unusual. Often they are a sign of a continually flushing toilet or a dripping garden watering tap and could harm the pump. Therefore, ZETA 02 pump controller can shut down the pump in this case.
3. Unwanted continuous pump operation: A great deal of water can be lost if a pipe ruptures or a garden hose bursts. For this reason, the pump controller is programmable to detect continuous pump operation lasting more than ten minutes and can shut down the pump. In case a longer running time is needed, e.g. for lawn watering this function can be adjusted.


## Zeta 02 pump controller

Item No.
$\rightarrow$ ZETA 02 ZT 0200

- ZETA 02 with wall-mounting bracket ZT 0206
- ZETA 02/V cut-in pressure adjustable between 1.5 bar and 2.8 bar ZT 0210
- ZETA 02/V with wall-mounting bracket

Adjustable between 1.5 bar and 2.8 bar ZT 0207

- ZETA 02 for Optima Plus ZT 0211
$\rightarrow$ ZETA 02 for Multimat 5 pin plug (before 2012) ZT 0212
- ZETA 02 for Optima 4/5 with level indicator (before 2012) ZT 0213
$\rightarrow$ ZETA 02 for Optima 4/5 without level indicator (before 2012) ZT 0214
- ZETA 02 for Sigma 3/4 with level Indicator ZT 0215
- ZETA 02 for Sigma 3/4 without level indicator ZT 0216
- ZETA 02 for Optima $4 / 5$ with level indicator with 1" outside thread at incoming side (after 2013) ZT 0223
- ZETA 02 for Optima $4 / 5$ without level indicator with 1" outside thread at incoming side (after 2013) ZT 0224
- ZETA 02 for AspriPlus with $11 / 4$ " outside thread at inlet ZT 0250
- ZETA 02/V for AspriPlus with $11 / 4$ " outside thread at inlet, Cut in pressure is adjustable between 1.5 and 2.8 bar

ZT 0260

## Technical Data

| Voltage | $110-240$ |
| :--- | ---: |
| Frequency | $50 / 60 \mathrm{~Hz}$, single-phase |
| Cut-in pressure ZETA 02 | 1.5 bar |
| Cut-in pressure ZETA 02/N | adjustable between 1.5 and 2.8 bar |
| Maximum pressure | 10 bar |
| Connections | Incoming: 1 " or $11 / 4 "$, outgoing: 1 " all outside thread |
| Consumption in Standby mode | less than 0,2 Watt |

## For pressure

 pumpsFINE filtering
with 0.3 mm
(0.01 in.) mesh size


COARSE filtering with 1.2 mm ( 0.05 in .) mesh size

The floating suction filters for submersible pressure pumps are available as a fine filter (SAFF) with mesh size 0.3 mm ( 0.01 in .) or as a coarse filter (SAGF) with mesh size 1.2 mm ( 0.05 in .). The fine filters are suitable for water which has not been pre-filtered, e.g. from open waters, storage tanks or fountains. Coarse suction filters are recommended for safe pump operation when pumping prefiltered water, especially rainwater, from storage tanks or other containers. The models for submersible pressure pumps do not have a non-return valve. By contrast, the models for suction pumps are equipped with a non-return valve in order to maintain the suction column in the suction hose.

To aid selection of the correct filter type:
Suction pumps: with non-return valve
Pressure pumps: without non-return valve

## Connection set for submersible pumps consisting of:

- Floating coarse or fine suction filter 1" without non-return valve
- Float diameter: 15 cm (5.91 in.)
- Highly flexible suction hose, length 1 m ( 3.28 ft .)
- Available for 1" nozzle or with screw connections for $11 / 4$ " connector (inside thread)


Floating suction filter sets without non-return valve Item No.

## FINE

- Set for submersible pumps with 1" nozzle, floating coarse or fine suction filter $1^{\prime \prime}$, high-flexibility hose 1"

SS 9935

- Set for submersible pumps with 1 1/4" inside thread connector, floating coarse or fine suction filter 1", high-flexibility hose $1^{\prime \prime}$, with screw connection

SS 9931

- Set for submersible pumps with $11 / 4^{\prime \prime}$ inside thread connector, floating coarse or fine suction filter $1 \frac{1}{4}{ }^{4}$, high-flexibility suction hose $1 \frac{11 / 4 ", ~ w i t h ~ s c r e w ~ c o n n e c t i o n ~}{\text { a }}$

SS 9932

## Floating suction filter sets without non-return valve

Item No.

## COARSE

- Set for submersible pumps with 1 " nozzle, floating coarse or fine suction filter 1 ", high-flexibility hose 1" SS 9905
- Set for submersible pumps with $1 \frac{114 "}{}$ inside thread connector, floating coarse or fine suction filter 1", high-flexibility hose 1", with screw connection SS 9901
- Set for submersible pumps with $11 / 4$ " inside thread connector, floating coarse or fine suction filter $1 \frac{1}{4}{ }^{4}$, high-flexibility suction hose $1 \frac{1 / 4 " \text { ", with screw connection }}{}$ SS 9902


## FLOATING SUCTION FILTER SETS WITH NON-RETURN VALVE

For suction
pumps


FINE filtering
with 0.3 mm (0.01 in.) mesh size

Coarse filter body

SAGF-
suction pump connection

Filter body with stainless-steel filter mesh, mesh size 0.3 mm ( 0.01 in .), with non-return valve. Float made of environmentally friendly polyethylene.

## Connection set for suction pumps consisting of

- Floating coarse or fine suction filter 1" with non-return valve
- Float diameter: 15 cm (5.91 in.)
- Highly flexible hose, or optional suction and pressure hose, steel hose clamps
- $90^{\circ}$ PE elbow connector to PE pipe $32 \times 3 \mathrm{~mm}$ (1")



FINE filtering
with 0.3 mm ( 0.01 in.) mesh size


For extracting rainwater from rainwater storage tanks and other containers or from ponds and fountains. Float made of environmentally friendly polyethylene. All other parts made of stainless steel. The nozzles at the floating filters are rounded in order to protect the hoses. The hose remains fully functional and durable even when the float frequently changes position in the tank. The nozzles are also equipped with a flared collar to allow secure attachment of the hose. Fine filter mesh size $0,3 \mathrm{~mm}$ ( 0.01 in .).

| Connection | Fllter <br> surface | Height $x$ dia. | Float |
| :---: | :---: | :---: | :---: |
| $1^{\prime \prime}$ | $380 \mathrm{~cm}^{2}$ | $120 \mathrm{~mm} \times 120 \mathrm{~mm}$ | dia. 15 cm |
| $11^{\prime \prime} 4^{\prime \prime}$ | $380 \mathrm{~cm}^{2}$ | $120 \mathrm{~mm} \times 120 \mathrm{~mm}$ | dia. 15 cm |
| $1 \frac{1}{2 \prime}$ | $800 \mathrm{~cm}^{2}$ | $170 \mathrm{~mm} \times 220 \mathrm{~mm}$ | dia. 22 cm |
| 2 " | $1100 \mathrm{~cm}^{2}$ | $235 \mathrm{~mm} \times 220 \mathrm{~mm}$ | dia. 22 cm |

## Floating fine suctionfilter (SAFF)

Item No.

- SAFF with float dia. 15 cm ( 5.91 in .)

With integrated non-return valve
With 1" hose nozzle
SZ 9924
With $111 / 4 "$ hose nozzle SZ 9925

- SAFF with float dia. 15 cm (5.91 in.)

Without non-return valve
With 1" hose nozzle
SZ 9935
With $11 / 4$ " hose nozzle SZ 9936
With 1" outside thread SZ 9926

- SAFF with float dia. 22 cm (8.66 in.) for large installations

With 1 1/2" outside thread
SZ 9930
With 2" outside thread
SZ 9931

## Accessories and spare parts for large installations

Item No.

- Hose nozzle made of stainless steel,
with non-return valve
With 1 ½" nozzle (for Item No. SZ 9930)
RT 0330
With 2" nozzle (for Item No. SZ 9931)
RT 0331
- Stainless-steel hose clamp
$11 / 2^{"}, 45-60 \mathrm{~mm}$ clamping range SS 0305
2", 55-70 mm clamping range SS 0306
- 2/3-part brass hose fitting, flat-sealing $11 / 2^{\prime \prime}$ nozzle, $11 / 2^{\prime \prime}$ union nut

ZV 0464
2" nozzle, 2" union nut

## FLOATING COARSE SUCTIONFILTER (SAGF)



For extracting clean rainwater from storage tanks and other containers. With float made of environmentally friendly polyethylene. All other parts made of stainless steel.
Filter mesh size 1.2 mm ( 0.05 in .)

| Connection | Filter surface | Height x dia. | Float |
| :---: | :---: | :---: | :---: |
| 1" | $165 \mathrm{~cm}^{2}$ | $110 \mathrm{~mm} \times 60 \mathrm{~mm}$ | dia. 15 cm |
| $11 / 4$ " | $165 \mathrm{~cm}^{2}$ | $110 \mathrm{~mm} \times 60 \mathrm{~mm}$ | dia. 15 cm |
| 11/2" | $380 \mathrm{~cm}^{2}$ | $150 \mathrm{~mm} \times 100 \mathrm{~mm}$ | dia. 15 cm |
| 2" | $380 \mathrm{~cm}^{2}$ | $150 \mathrm{~mm} \times 100 \mathrm{~mm}$ | dia. 15 cm |

## Floating coarse suctionfilter (SAGF)

Item No.

- SAGF with float dia. 15 cm ( 5.91 in .) with hose nozzle.

With integrated non-return valve for suction pump
With 1" hose nozzle
SZ 9915
With $111 / 4$ " hose nozzle SZ 9916
With $1 ½^{\prime \prime}$ hose nozzle for large installations SZ 9917
With 2" hose nozzle for large installations SZ 9918

- SAGF with float dia. 15 cm (5.91 in.) with hose nozzle.

Without non-return valve for submersible pump
With 1" hose nozzle
SZ 9927
With $11 / 4$ " hose nozzle SZ 9928
With $1 \frac{1}{2 \prime}$ " hose nozzle for large installations SZ 9990
With 2" hose nozzle for large installations SZ 9991

## FIXED-MOUNTED SUCTIONFILTERS FOR SUBMERSIBLE PUMPS

FINE filtering


SF 9921

## FINE suctionfilter for fixed mounting

Filter made entirely of stainless steel, with connector 1" outside thread or $1 \frac{1}{4}$ " inside thread, filter mesh size 0.3 mm .

- FAFF finefilter body with 1 " outside thread

SF 0300

- FAFF submersible pump connection with $11 / 4$ " brass elbow and screw connections $\varnothing=120 \mathrm{~mm} \mathrm{~L}=120 \mathrm{~mm}$

SF 9921

| COARSE suctionfilter for fixed mounting | Item No. |
| :---: | :---: |
| Filter made entirely of stainless steel, with connection with outside thread. Filter mesh size 1.2 mm ( 0.05 in .). |  |
|  |  |
| FAGF submersible pump connection |  |
| with $1^{"}-90^{\circ}$ Brass elbow and $1^{\prime \prime}$ double nipple, suitable for WISY Beta pumps | SG 0320 |
| - with $111 / 4^{\prime \prime}-90^{\circ}$ brass elbow and $11 / 4$ " double nipple | SG 0321 |
| - 1 " connection outside thread $\varnothing=60 \mathrm{~mm} \mathrm{~L}=100 \mathrm{~mm}$ | SG 0331 |
| - $11 / 4 /$ connection outside thread $\emptyset=60 \mathrm{~mm} \mathrm{~L}=100 \mathrm{~mm}$ | SG 0332 |
| - $11 / 2^{\prime \prime}$ connection outside thread $\emptyset=100 \mathrm{~mm} \mathrm{~L}=140 \mathrm{~mm}$ | SG 0333 |
| - 2" connection outside thread $\varnothing=100 \mathrm{~mm} \mathrm{~L}=140 \mathrm{~mm}$ | SG 0334 |

Item No.
.

SG 0320

- with $11 / 4^{\prime \prime}-90^{\circ}$ brass elbow and $1 \frac{1}{4}$ " double nipple SG 0321
- 1 " connection outside thread $\varnothing=60 \mathrm{~mm} \mathrm{~L}=100 \mathrm{~mm}$

SG 0331

SG 0333
SG 0334

## SIGURA 9 BREAK TANK

- Regulation-compliant separation of appliances from mains water supply
- Complies with DIN EN 1717 and DIN 1988-100
- Fully automatic, compact unit
- Integral 4-stage centrifugal pump
- Delivery rate of $35 \mathrm{I} / \mathrm{min}$ with 30 m delivery head
- Energy-efficient: Less than 0.2 watts in standby mode
(1) Mains water connection
(2) ZETA 02 pump controller (covered, with display and operator panel)
(3) Operating pressure indicator (pressure gauge)
(4) Domestic water supply outlet
(5) Screw plug for venting/filling
(6) Non-self-priming centrifugal pump
$(7$ Base frame


## Applications

The SIGURA 9 break tank separates the process water circuit from the mains water supply. It is designed to protect the public supply of potable water against contamination. The mains water top-up system is implemented as an open outlet in accordance with EN 1717 (formerly DIN 1988/4). The SIGURA 9 break tank is installed in a frost-free utility room, draws mains water out of the mains water circuit and feeds it under pressure into the process water circuit. The break tank maintains a water pressure of up to 4.5 bar in the process water circuit. It is also suitable for boosting the pressure in buildings with up to three storeys. It is also designed for use with irrigation systems, car washes, livestock watering installations and any process in general that may not be directly connected to the mains water supply system.
SIGURA 9
with cover


Dimensions:
SIGURA 9 break tank W $500 \times$ H $510 \times$ D 315 mm
(19.7 x $20.1 \times 12.4 \mathrm{in}$.)

SIGURA 9
without cover


Sigura 9 Break Tank
Item No.
Sigura 9 Break Tank
TR 5009

## Included in the scope of supply:

- Open outlet with float valve according to EN 1717
- 9-litre top-up tank
- Prisma non-self-priming multi-stage centrifugal pump
- Zeta 02 pump controller
- Cover with wall-mounting bracket


## Accessories

Item No.

- Hose connection Set with two stainless steel braided hoses $3 / 4$ " with pressed fittings ready to connect to the wall unit. Length $0,5 \mathrm{~m}(1,64 \mathrm{ft})$.2 ball valves with $3 / 4^{\prime \prime}$ inside thread, one of them with dirt trap.

RW 7800
SIGURA 9 Operating characteristic at 2900 rpm


## BREAK TANK SIGURA 350

- Domestic water break tank with open outlet for large installations
- Type AF safety device compliant with DIN EN 1717 and DIN 1988-100
- Optionally 80 or 120 I/min
- Energy-efficient: Less than 0.2 watts in standby mode


## Applications:



## Applications

The Sigura 350 break tank reliably separates the domestic water system from the mains water supply and generates the required operating pressure. The regulation-compliant type AF open outlet separates the mains water supply from the domestic water. The buffer tank has a storage capacity of 350 litres, and acts as a buffer to generate the required volumetric flow rate in the domestic water system. The system uses the Zeta 02 pump controller that uses only 0.2 watts in standby mode. The pressure in the domestic water system is generated by the Multigo 205 or 407 submersible pump. The Multigo 205 supplies 80 litres per minute, the Multigo 407120 litres per minute.


Sigura 350 Break Tank

Item No.

- Break Tank 350-205

TR 5355

- Break Tank 350-407

TR 5357

## The scope of supply consists of:

- tank with 350 Liter capacity and emergency overflow DN 100
- Multistage submersible pressure pump Multigo 205 or 407
- pump Controler Zeta 02 with pressure meter
- automatic mains water top up with float valve $3 / 4$ "
- connecting hose length 50 cm
- ball valve $2 \times 1$ " inside thread

Technical Data
Delivery rate, max
$80 \mathrm{l} / \mathrm{min}(205)$ oder $120 \mathrm{I} / \mathrm{min}(407)$
Delivery Rate at 2,5 bar
$50 \mathrm{I} / \mathrm{min}(205)$ oder $90 \mathrm{I} / \mathrm{min}(407)$
Delivery head, max.
4,8 bar (480 kPa)
Buffer tank volume
350 Liter
Complies with
DIN EN 1717:2011-08
DIN 1988-100:2011-08
Safety Device (DIN)
AF (optional on request Type AB)
Dimensions
$\varnothing 700 \mathrm{~mm}$, Height of tank 1255 mm , Height over all 1530 mm


For mains water top-up, tops up the rainwater storage tank with mains water as required during prolonged dry spells (daily requirement for single-family home). Complies with EN 1717.

## Top-up set comprising:

- Open mains water outlet 1/2" (Item No. TW 9901)
- Adapter plug (Item No. SS 0149)
- Float switch for top-up, with retaining clamp, 3 m , 10 m or 20 m ( 9 ft ., 32 ft . or 65 ft .) connecting cable (see item numbers SS 1001, SS 1002 or SS 1003)

Top-up set
Top-up set

- with 3 m ( 9 ft .) connecting cable

TW 8803

- with 10 m ( 32 ft ) connecting cable

TW 8810

- with 20 m ( 65 ft .) connecting cable



## OPEN MAINS WATER OUTLET



Mains water top-up with open outlet, ready to install. Electrically controlled. Comprises a stainless steel tundish with nozzle for splash-free inflow, solenoid valve with connecting cable and electric plug, connecting tube with stainless steel braiding and brass ball valve with stainless steel dirt trap (mesh width $0,25 \mathrm{~mm}(0,001 \mathrm{in})$.

- Available from ½" to 2". Complies with EN 1717.


| Connection | Water top-up rate <br> with 3 bar system pressure | Connecting <br> hose | Tundish |
| :---: | :---: | :---: | :---: |
| $1 / 2^{\prime \prime}$ | $2.64 \mathrm{~m}^{3} / \mathrm{h}$ | 50 cm | DN 50 |
| $3 / 4^{\prime \prime}$ | $6.48 \mathrm{~m}^{3} / \mathrm{h}$ | 50 cm | DN 50 |
| $1^{\prime \prime}$ | $8.64 \mathrm{~m}^{3} / \mathrm{h}$ | 75 cm | DN 70 |
| $1 /{ }^{\prime \prime}$ | $20.52 \mathrm{~m}^{3} / \mathrm{h}$ | 75 cm | DN 100 |
| 2 " | $34.92 \mathrm{~m}^{3} / \mathrm{h}$ | 100 cm | DN 100 |


| Open mains water outlet | Item No. |
| :---: | :---: |
| - $1 / 2{ }^{\text {c }}$ | TW 9901 |
| - $3 / 4{ }^{\prime \prime}$ | TW 9909 |
| -1" | TW 9903 |
| - $11 / 2^{\prime \prime}$ | TW 9905 |
| - $2^{\prime \prime}$ | TW 9907 |
| Components/spare parts | Item No. |
| Stainless-steel tundish with nozzle |  |
| - $112{ }^{\text {c }}$ | TW 9902 |
| - 3/4" | TW 9910 |
| - 1 " | TW 9904 |
| - $11 / 2{ }^{\prime \prime}$ | TW 9906 |
| - $2^{\prime \prime}$ | TW 9908 |

## RAINCOLLECTOR RS

## complies with DIN EN 1989

- Clean rainwater for home and garden
- Integrated filter element with 0.28 mm mesh size
- Effective separation of dirt particles
- For installation in vertical downspout/ downpipe
- 5-year guarantee
- Easily accessible filter insert
- Low maintenance
- High oxygen enrichment



The RainCollector RS is installed in the vertical rainwater downpipe. It filters the runoff rainwater from the roof before discharging the filtered water to a storage tank. Its filter insert is made of a fine stainless-steel mesh with a mesh size of only 0.28 mm . Leaves, moss and other debris entrained in the rainwater are reliably filtered out and flushed away to the soakaway or drain. The filter element is made entirely of stainless steel. Inspection is recommended 2 times per year. When necessary it is easiest to clean the filter insert in a dishwasher. For round downpipes with 102 or 110 mm outer diameter. 5 -year guarantee. Guarantees safe drainage in accordance with DIN.


RainCollector RS
Item No.

- For round downpipes with outer diameter of 100-102 mm or circumference of $314-320 \mathrm{~mm}$.
white KF 4510
grey KF 4511
brown KF 4512
- For round downpipes with outer diameter of 103-105 mm or circumference of 323-330 mm.
white KF 4550
grey KF 4551
brown KF 4552
- For round downpipes with outer diameter of 108-111 mm or circumference of 339-349 mm.
white KF 4500
grey KF 4501
brown KF 4502
Accessories, see next page: RainCatcher RC


## Example application:

The RainCollector RS installed in a rainwater downpipe and connected to a 500 litre Stabilix rainwater barrel by a WISY connecting hose

## - Complies with DIN EN 1989

- Automatic separation of rainwater out of downpipe to rainwater barrel
- For installation in a downpipe
- 5-year guarantee
- Simple device for collecting rainwater
- Minimum maintenance required
- Automatic overflow protection for rainwater barrel


The RainCatcher RC is installed in the vertical rainwater downpipe. It passes runoff rainwater from the roof to the storage tank. Large dirt particles are filtered out of the water and flushed down into the drain or soakaway. Installed at the correct height, the RainCatcher RC automatically flushes excess rainwater into the drain or soakaway. The housing is made of UV-resistant polypropylene (PP). Can be mounted in round downpipes with 102 or 110 mm outer diameter. 5-year guarantee. Guarantees safe drainage in accordance with DIN.


## RainCatcher RC

Item No.

- For round downpipes with outer diameter of 100-102 mm or circumference of $314-320 \mathrm{~mm}$
white RC 0520
grey RC 0521
brown RC 0522
- For round downpipes with outer diameter of 103-105 mm or circumference of $323-330 \mathrm{~mm}$.
white RC 0550
grey RC 0551
brown RC 0552
- For round downpipes with outer diameter of $108-111 \mathrm{~mm}$ or circumference of $339-349 \mathrm{~mm}$.
white RC 0510 grey RC 0511 brown RC 0512


## Accessories for RainCatcher RC and RainCollector RS

Item No.

- Rainwater barrel connecting hose, $1 \frac{11 / 4}{}$.

Connects Filter Collector FS to a rainwater barrel,
UV-resistant plastic spiral hose with tension ring
(for black color) or hose clamp (for white and grey color)
black, 75 cm 15803


## Example application:

The RainCatcher RC installed in a rainwater downpipe and connected to the 420 litre Rainwater Pear by a WISY connecting hose

## - Complies with DIN EN 1989

## - For easy retrofitting in rainwater downspouts/ downpipes

- Completely stainless steel
- Fits in any downpipe diameter

Largely self-cleaning



## With automatic overflow protection, frost-proof, made of stainless steel.

Specially designed for garden rainwater barrels. For installation in rainwater downspouts/downpipes. Made entirely of stainless steel. Outlet to rainwater barrel: DN 50.
Drainage safety according to DIN EN 12056 / EN 752, complies with DIN 1989.
$\downarrow$ Available with or without filter insert (mesh size 0.44 mm (0.017 in.), very low maintenance.

We recommend to inspect the filter insert of the Garden Rainwater Collector twice a year and clean it in a dishwasher if necessary.

Garden rainwater collector (GRS)

## Garden Rainwater Collector GRS <br> Item No.

For metal downspouts / downpipes

- with filter insert, height 10.5 cm (4 in.)

GRS 100 VA for nominal size DN 100 (3.9 in.) 15711
GRS 87 VA for nominal size DN 87 (3.4 in.) 15712
GRS 80 VA for nominal size DN 80 (3.1. in.) 15713
GRS 76 VA for nominal size DN 76 (2.9 in.) 15714

- without filter insert

GRS 100 VA for nominal size DN 100 (3.9 in.) 15701
GRS 87 VA for nominal size DN 87 (3.4 in.) 15702
GRS 80 VA for nominal size DN 80 (3.1. in.) 15703
GRS 76 VA for nominal size DN 76 (2.9 in.) 15704
For plastic downspouts / downpipes

- with filter insert, height 10.5 cm (4 in.)

GRS 110 VA for nominal size DN 100 ( 3.9 in.), with outside diameter 110 mm (4.3 in.) 15715
GRS 76 VA for nominal size DN 70 (2.8 in.), with outside diameter 75 mm (3 in.) 15714

- without filter insert

GRS 110 VA for nominal size DN 100 ( 3.9 in.), with outside diameter 110 mm (4.3 in.) 15705
GRS 76 VA for nominal size DN 70 (2.8 in.), with outside diameter 75 mm (3 in.) 15704
Spare Parts and Accessories Item No.

- Blind insert of stainless steel, fits all nominal sizes. Ensures direct flow of rainwater into storm drain. 15802

Spare Parts Item No.

- Filter insert of stainless steel, fits all nominal sizes. Filters the rainwater from the roof. Height 10.5 cm (4 in.) Mesh size 0.44 mm ( 0.017 in .)

15801


## - 500 litre storage volume

## - Seamless onepiece unit made of environmentally friendly PE

## - Enclosed design protects stored water

- Completely frost resistant
- NEW: Now available in colour stonegrey


For collecting rainwater. Tanks manufactured without seams from environmentally friendly and physiologically harmless polyethylene.
The solid wall thickness guarantees long life and frost resistance.
The storage volume of a Stabilix barrel of 500 I (US: 132 gallons) can be enlarged by connecting an optional number of Stabilix rainwater barrels to form one unit. The opaque colour (dark green) prevents the formation of algae. The cover closes tightly to prevent flying insects from laying eggs inside the barrel.
The rainwater barrel has a connection for a watering can tap and a free standing external pump. Thanks to its compact dimensions (dia. $70 \mathrm{~cm} / 27.6 \mathrm{in}$.), the Stabilix garden rainwater barrel fits through any standard basement door and can be used in the utility area.

## Stabilix rainwater barrel

Item No.

- Stabilix rainwater barrel

Rainwater collector inlet with seal for inlet connection $11 / 4$ ", with blind plug, suitable for connecting hose 15803, pump connection/drain outlet $3 / 4$ inside thread with $3 / 4$ " sealing plug, with prepared tap connection for watering can $3 / 4$ " (tap optional), rainwater barrel with screw cover DN 400
colour green GT 5100 colour stonegrey GT 5150


Accessories for Stabilix rainwater barrel

- 3/4" drain tap
- Rainwater barrel connecting hose, $11 / 4$ ".

Connects the garden rainwater collector with a rainwater barrel.
UV resistant spiral hose in three different colors, see page 7, with tension ring. Length $75 \mathrm{~cm}(29,5 \mathrm{in})$.

15803

- Stabilix connection Set 1" for connecting two Rainwater barrels. With two brass hose connections ZV 0462, two stainless steel clamps SS 0303 and 0,5 m EPDM pressure hose DS 2003


## Connecting parts for rainwater barrels

 Item No.- Rainwater barrel link hose, $11 /$ " $^{\prime \prime}$.

For connecting two rainwater barrels.
UV-resistant plastic spiral hose, length 42 cm (12.5 in.).
15804

- Hose coupling $1 \frac{114}{4}$ ", for connecting the hose directly to the barrel.

Straight
15805
$90^{\circ}$ angle 15806

- Hose coupling, for connection of two hoses.

15807

- Tank connector $1 \frac{1}{4}$ " suitable for tanks with wall thickness up to 25 mm ( 1 in .) Fitting for hole with $42 \mathrm{~mm}(1,8 \mathrm{in})$ Diameter. For use with straight or angled adapters.

15808

- Adapters $11 / 4$ " for tank connector 15808.

Straight
15809
$90^{\circ}$ angle 15810

15804


15807


GARDEN RAINWATER SET


Garden rainwater set
Item No.

- Stabilix rainwater barrel
- Garden rainwater collector (GRS) DN 100 VA
- Rainwater barrel connecting hose
- Tap

Reference Shah Alam, Malaysia The Raincollector RS is part of each house of this 1000 unit housing area.


with direct suction

- The floating suction filter is ideal for use with the Beta pump


SG 0320
Set for suction side Item No.

- Set for submersible pumps with 1" nozzle, SAGF 1", high-flexibility hose 1"

SS 9905

- with $1^{\prime \prime}-90^{\circ}$ Brass elbow and $1^{\prime \prime}$ double nipple, suitable for WISY Beta pumps

SG 0320

## MULTISIPHON

- Odour seal
- Vermin guard
- Backflow prevention device


## - Overflow with skim effect

- Gas barrier


## Multi-functional overflow for rainwater storage tank

Made of impact-resistant ABS plastic. For connection to the tank overflow (DN 100). Surface debris removed by skimming effect. Prevents storm drain odours from reaching the storage tank. Brace pipe prevents tilting or tipping. Large siphon volume 61 ( 1.5 gallons).

- Available in different versions:

With or without drain backflow prevention with or without vermin guard

The version with integrated drain backflow prevention is delivered with a retaining clamp for connection to a DN 100 pipe.

The passive vermin guard is made of stainless steel and is easy to remove for maintenance.


Multisiphon and retaining clamp


| Multisiphon | Item No. |
| :--- | :---: |
| with drain backflow prevention with vermin guard | US 1002 |
| without drain backflow prevention with vermin guard | US 1003 |
| with drain backflow prevention without vermin guard | US 1004 |
| without drain backflow prevention without vermin guard | US 1005 |

## Accessories

Item No.

- Stainless-steel retaining clamp for connection to a DN 100 pipe

with drain backflow prevention with vermin guard

with drain backflow prevention
without vermin guard

without drain backflow prevention with vermin guard

without drain backflow prevention without vermin guard


## OVERFLOW SIPHON DN 200

- Ready to install in rainwater storage tank
- For combination with WFF 300 vortex finefilter
- Odour seal and vermin guard

Overflow siphon DN 200
Item No.

- Overflow siphon DN 200 made of stable polyethylene for storage tanks. Suitable for combination with vortex finefilter WFF 300. With odour seal, vermin guard, brace pipe, $2 \times 1 \mathrm{~m}$ ( 3.28 ft .). Including stainless-steel chain for the attachment to ceiling or wall.


Telescopic pull-out and smoothing inlet, e.g. suitable for LineAr 100 rainwater filter


The smoothing inlet made of stainles steel prevents resuspension of sediment and distributes fresh, oxygen-rich rainwater in the storage tank.


| Smoothing inlet | Item No. |
| :--- | :---: |
| $\rightarrow$ Smoothing inlet for DN 110 | EB 0300 |
| $\rightarrow$ Smoothing inlet for DN 200, inside diameter $204 \mathrm{~mm}(8.03 \mathrm{in})$. | EB 0303 |
| - Telescopic pull-out and smoothing inlet DN 125 | EB 0304 |

- No battery or power connection required

Maintenance-free, sound technology

Easy to handle

Indicates the fill level of the storage tank in per cent. Pneumatic measuring instrument for remote measurement at distances up to 50 m . Steplessly adjustable for tanks with maximum fill levels from 1 to 2.5 metres. Impact-resistant plastic casing. With 20 m measuring lead and fixings.


## Level indicator

Item No.
Level indicator
with manual actuation pump mit with 20 m sensor hose
FA 9910

## Accessories

Item No.

- Measuring hose for longer distances to the cistern, length 50 m incl. all necessary connection parts, incl. 3 m flexible cable with weight.


# RETENTION REGULATOR FOR INSTALLATION IN CISTERNS 

- High degree of functional safety thanks to stainlesssteel, floating coarse filter
- Made of stainless steel
- Flexible special hose with steel spiral
- Constant Discharge quantity, independent of the water level in the tank


Further sizes on demand.

## Retention Regulator

Item No.

- Retention regulator with float, stainless steel ring, floating coarse suction filter 1" nozzle, 1 m flexible suction hose 1", $2 x$ hose clamp 1", $2 / 3$ hose connection fitting, flat-sealing, nozzle 1 " and 1" union nut, tank connector and nut 1", with fitted diaphragm plate, restricted outlet pipe bung $110 \times 3.2 \mathrm{~mm}$ see table
- Retention regulator with 1" ball valve, floating coarse suction filter 1" nozzle

RD 4020

- Retention regulator with float valve dia. 22 cm , stainless steel ring, floating coarse suction filter 2" nozzle, 1m flexible suction hose 2", $2 x$ hose clamp 2", hose connection fitting, nozzle 2" tank connector and nut $2^{\text {" }}$, with fitted diaphragm plate, restricted outlet pipe bung $110 \times 3.2 \mathrm{~mm}$

RD 2040

## - Economical mains water top-up

- Switching cycle of only 9 cm
- Quick and easy to attach to submersible pump



## Quick to install:

Float switches can be safely fitted to the pump housing of the Multigo submersible pressure pump!


## Float switch for mains water top-up (yellow)

Item No.
Float switch for controlling top-up with mains water. For attachment to the inlet pipe or the submersible pump. The switch lever defines the switching points so precisely that the water level rises by only 9 cm (daily requirement for single-family home). Switch lever and retaining clamp (for pipe diameter of $110-130 \mathrm{~mm} / 4-5 \mathrm{in}$.) made of stainless steel.
Float housing (yellow), butt-spliced, made of polypropylene.
With flexible connecting cable $3 \times 1 \mathrm{~mm}^{2}$. (without adapter plug).

| Components/spare parts | Item No. |
| :--- | ---: |
| with $3 \mathrm{~m}(9.8 \mathrm{ft}$.) connecting cable | SS 1001 |
| with $10 \mathrm{~m}(32.8 \mathrm{ft})$ connecting cable | SS 1002 |
| with $20 \mathrm{~m}(65.6 \mathrm{ft})$ ) connecting cable | SS 1003 |

Components/spare parts
Item No.
Float switch (mains top-up),
without switch lever and clamp
with $3 \mathrm{~m}(9.8 \mathrm{ft}$.) connecting cable SS 1021
with 10 m ( 32.8 ft ) connecting cable SS 1022

- with 20 m ( 65.6 ft .) connecting cable SS 1023

Float switch for dry run protection (red)
Item No.
Float switch to turn off pump when water level in tank is too low. For attachment to the inlet pipe or the submersible pump. When the water level in the tank reaches the minimum required level again, the pump is released for operation again by the float switch. With switch lever for precise definition of switching points, only 9 cm ( 1.6 in.) switching cycle. Switch lever and retaining clamp (for pipe diameter of 110-130 mm / 4-5 in.) made of stainless steel. Float housing (red), butt-spliced, made of polypropylene. With flexible connecting cable $3 \times 1 \mathrm{~mm}^{2}$. (without adapter plug).

| Components/spare parts | Item No. |
| :--- | :---: |
| with $3 \mathrm{~m}(9.8 \mathrm{ft}$.) connecting cable | SS 1011 |
| with $10 \mathrm{~m}(32.8 \mathrm{ft})$ connecting cable | SS 1012 |
| with $20 \mathrm{~m}(65.6 \mathrm{ft})$ connecting cable | SS 1013 |

Components/spare parts
Item No.
Float switch (dry run protection), without switch lever and clamp

- with 3 m ( 9.8 ft .) connecting cable

SS 1031
with 10 m ( 32.8 ft .) connecting cable SS 1032
with 20 m ( 65.6 ft ) connecting cable SS 1033
Accessories Item No.

- Adapter plug for connection of float switch control cable



## Suction hose with push-fit connections 1"

High-flexibility suction hose in pre-cut lengths for pumping water. Made of polyurethane (PU) with integral steel spiral. Maximum vacuum -0.8 bar ( -11.6 psi ). Both ends with push-fit connection to fit hose nozzles.

| High-flexibility suction hoses | Item No. |
| :---: | :---: |
| Suction hose in pre-cut lengths |  |
| - Length 1.00 m ( 3.3 ft .) 1" DN 25 | AS 3002 |
| - Length 2.00 m ( 6.5 ft .) 1" DN 25 | AS 3004 |
| - Length 3.00 m (9.8 ft.) 1" DN 25 | AS 3006 |
| - Length $42 \mathrm{~cm} 11 / 4$ " DN 32 | 15804 |
| - Length 1.00 m (3.3 ft.) 11⁄4" DN 32 | AS 4002 |

## HOSE NOZZLES



Hose nozzle made of stainless steel
Item No.
with non-return valve
-1"nozzle, direction of flow from thread to nozzle
ST 1010

- $11 / 4$ " nozzle, direction of flow from thread to nozzle

ST 1011
Without non-return valve mit 1 1/4"AG

- 1" nozzle
ST 1100
-11/4" nozzle

ST 1101
Hose nozzle made of polyamid
Item No.

with non-return valve $1 \frac{1}{4} 4^{\prime \prime}$ AG

- 1"nozzle, direction of flow from thread to nozzle ST 2010
- $11 / 4$ " nozzle, direction of flow from thread to nozzle ST 2011

Without non-return valve mit 1 1/4" AG

- 1" nozzle

ST 2012

- $11 / 4 "$ nozzle ST 2013


## SUCTION AND PRESSURE HOSES



## Suction and pressure hose

Item No.
Spiral suction and pressure hose with synthetic reinforcing and spring steel spiral. The suction and pressure hose is suitable for pumping water. Material: PVC Compound (synthetic granulate); free of pores and smooth; abrasion-resistant, weatherproof, ozone-resistant, resistant to ageing. Max. temperature resistance from $-25^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$. Max. vacuum -0.8 bar. Burst pressure of 2" hose: 30 bar, burst pressure of 1" hose: 36 bar.

| 1" $11 / 4^{\prime \prime}$ | max. operating pressure 12 bar. | by the meter | AS 2003 |
| :--- | :--- | :--- | :--- |
| 11/2" | max. operating pressure 11 bar | by the meter | AS 2004 |
| $2^{\prime \prime}$ | max. operating pressure 10 bar | by the meter | by the meter 2006 |

## Pressure hose

Item No.
Pressure hose made of EPDM. For pumping water.
Flexible, with synthetic textile reinforcing of high tensile strength.
-1"
3/4"
max. operating pressure 15 bar
by the meter
DS 2003
by the meter
DS 2002

Connecting hoses with stainless-steel braiding and pressed fittings. Brass connections. Flat-sealing.

| Connecting hoses | Item No. |
| :---: | :---: |
| - 1" connecting hose, 1" nipple, 1 " union nut |  |
| Length 0.5 m (1.6 ft.) | VD 9928 |
| Length 0.75 m ( 2.5 ft .) | VD 9929 |
| Length 1.0 m (3.3 ft.) | VD 9930 |
| Length 1.50 m ( 5.0 ft .) | VD 9931 |
| Length 2.00 m ( 6.6 ft .) | VD 9932 |
| - 3/4" connecting hose, length 0.5 m (1.6 ft.) |  |
| with $90^{\circ}$ elbow, $1^{\text {" }}$ union nut and $3 / 4$ " nipple | VD 9934 |
| with $3 / 4$ " union nut and $3 / 4$ " nipple | VD 9950 |
| with $2 \times 1$ " union nut | VD 9951 |
| with 1" union nut and 3/4" nipple | VD 9953 |
| $3 / 4$ " connecting hose with $3 / 4$ " ball valve, 1 " union nut and $3 / 4$ " inside thread, length 0.5 m ( 1.6 ft .) | VS 9953 |
| 1 " connecting hose with $2 \times 1$ " union nut, length 0.5 m ( 1.6 ft .) | VD 9935 |

## FLEXIBLE TUBES AND CONNECTING PARTS



## For fast, easy and inexpensive installation.

All parts are connectable.

## Flexible tubes

Item No.
Flexible tube (PE) flexible with wire to pull the cable through. Inside diameter $=40 \mathrm{~mm}$ ( 1.57 in .), outside diameter $=50 \mathrm{~mm}$ ( 1.97 in .)

- 25 m (82 ft.) roll

WD 2000


## Connecting parts

Item No.

- Adapter flexible tube - sewer pipe (PE) ), to connect the DN 50 flexible tube (for example for mains water top-up) to DN 100 sewer pipe.

WD 2020

- Adapter flexible tube - HT (PE) tube, to connect the DN 50 flexible tube to DN 50 HT tube. D =50

Flexible tube connector (PE), connects two DN 50 flexible tubes.

- PE tube connectors, made of brass. To connect PE tube to hose.

(1)
PR 1010

PE tube connector, $90^{\circ}$, $32 \mathrm{~mm} \times 1^{\text {" }}$ nozzle
PE tube connector, $90^{\circ}, 32 \mathrm{~mm} \times 1^{\text {" }}$ inside thread
PE tube connector, straight, $32 \mathrm{~mm} \times 1$ " nozzle
PE tube connector, straight, $32 \mathrm{~mm} \times 1$ " inside thread

## WALL AND TUBE BUSHINGS



Seals ducts at cable and pipe penetration points through tank and building walls. Consists of a 30 mm ( 1.2 in .) thick rubber disk with two stainless-steel plates and clamp bolts. With integrated electric cable seal. Can be used only for „non-pressurized" water. Unused holes remain closed with the supplied plug.

- When a standard sewer pipe with DN 100 is used, the wall bushing WD 1100 fits exactly into the pipe and the wall bushing WD 2110 into the collar.

Wall bushings
Item No.

- Wall bushing WD 2110 with seven bores:
$1 \times \varnothing 36 \mathrm{~mm}$, for pressure or suction hose
$3 \times \varnothing 10 \mathrm{~mm}$, for electric cable
$1 \times \varnothing 6 \mathrm{~mm}$, for electric cable
WD2110
- Wall bushing WD 1100 with Outer Diameter 100 mm contains four bores:
$1 \times$ dia. 36 mm , for pressure or suction line (1" PE pipe)
$2 \times 10 \mathrm{~mm}$ ( 0.4 in .) diameter for electric cable
$1 \times 6 \mathrm{~mm}$ ( 0.2 in .) diameter for electric cable
WD1100

Seals sewer pipe at penetration points, e.g. in rainwater storage tanks. For wall thickness $5-16 \mathrm{~mm}$ ( $0.2-0.6 \mathrm{in}$.) or $5-10 \mathrm{~mm}$ ( $0.3-0.4 \mathrm{in}$.), diameter DN 100 ( 3.9 in .), to fit bore hole diameter 127 mm ( 5 in .). For pipe outside diameter: 110 mm (4,33 in.).
Tank seal Item No.
for tank wall thickness 5-16 mm (0.2-0.6 in.)
RS 1050

## FITTINGS, SPARE PARTS



## Hook with screw thread

Item No.

- Stainless-steel hook, plastic dowel.

To fix pump lifting straps in concrete or plastic storage tanks. 6 mm hookscrew

HS 0301

## Carrying and lifting strap

Item No.

- Polypropylene strap, dia. 8 mm , for attachment to submersible pumps and floating filters. Rot-proof. 8 mm ( 0.3 in .) diameter, per m TS 3002
- Can be cut to required length



## Spring safety hook

Item No.

- Stainless-steel spring safety hook, $6 \times 60 \mathrm{~mm}(0.2 \times 2.4 \mathrm{in}$.)

KB 0300

| Hose connectors | Item No. |
| :---: | :---: |
| - 2-part brass hose connector, flat sealing |  |
| 1" nozzle, 1" union nut | ZV 0462 |
| 1" nozzle, $11 / 4$ " union nut | ZV 0414 |
| $11 / 4$ " nozzle, $11 / 4$ " union nut | ZV 0463 |
| $11 / 2$ " nozzle, $11 / 2{ }^{\prime \prime}$ union nut | ZV 0464 |
| 2" nozzle, 2" union nut | ZV 0465 |


| Hose nozzles | Item No. |
| :---: | :---: |
| - 1-part brass hose nozzle, with hexagon flange |  |
| $1 / 2$ " nozzle, $1 / 2$ " outside thread | ZV 0431 |
| $3 / 4$ " nozzle, 3/4" outside thread | ZV 0432 |
| 1 " nozzle, 1 " outside thread | ZV 0433 |
| 1" nozzle, $11 / 4$ " outside thread | ZV 0415 |
| $11 / 4$ " nozzle, $11 / 4$ " outside thread | ZV 0434 |
| $11 / 2$ " nozzle, $1^{11 / 2}$ " outside thread | ZV 0435 |
| 2 " nozzle, 2" outside thread | ZV 0436 |

Nipple Item No.

- Brass double nipple, $2 \times$ outside threads, with hexagon flange $1 / 2$ "
3/4"
1"
ZN 0402
$11 / 4 "$
ZN 0401
- Brass reducing nipple, 2 x outside threads, with hexagon flange

1/2", 3/4"
ZN 0405
3/4", 1"
ZN 0404
1", 1 1/4"
ZN 0403

- Brass reducing nipple, $1 \times$ inside thread, $1 \times$ outside thread with hexagon flange
$1 / 2$ " inside thread, $3 / 4$ " outside thread
ZN 0408
3/4" inside thread, 1 " outside thread
1" inside thread, $11 / 4$ " outside thread
ZN 0406
* 1 " $(1$ Zoll $)=25,4 \mathrm{~mm}$

Hose clamps Item No.

- Stainless-steel hose clamps, clamp width 12 mm ( 0.5 in .).

Inch Clamping range
3/4" $22-30 \mathrm{~mm}$ (0.9-1.2 in.) SS 0302
1" $30-40 \mathrm{~mm}$ (1.2-1.6 in.) SS 0303
11/4" $35-50 \mathrm{~mm}$ (1.4-1.9 in.) SS 0304
1½" $45-60 \mathrm{~mm}$ (1.8-2.4 in.) SS 0305
2" $55-70 \mathrm{~mm}(2.2-2,8 \mathrm{in}$.) SS 0306

## Drain tap <br> Item No.

- Brass drain tap with hose nozzle.
1/2" tap
ZA 0401
3/4" tap ZA 0402


## Ball valves/dirt traps

Item No.
Brass full-bore ball valve, $1 / 4$ " drain valve and extra $1 / 4$ " connection for pressure gauge. Aluminium lever.

3/4" inside thread ZK 0402
1" inside thread ZK 0403
Brass full-bore ball valve.
Aluminium lever.
3/4" inside thread ZK 0412
1" inside thread ZK 0413
Brass full-bore ball valve with dirt trap, stainless-steel strainer, mesh size $0.25 \mathrm{~mm}(0,001 \mathrm{in}$.), aluminium lever.

| $1 / 2 "$ " inside thread | ZK 0421 |
| :--- | :--- |
| $3 / 4^{\prime \prime}$ inside thread | ZK 0422 |
| $1 "$ inside thread | ZK 0423 |

Solenoid valve
Item No.

- Brass solenoid valve, forced servo membrane control valve, operates without pressure difference. 230 V , 1.50 m ( 5 ft .) connecting cable, electric plug.

| $1 / 2 "$ inside thread | Nominal size 13 mm | MV 0401 |
| :--- | :--- | :--- |
| $3 / 4$ " inside thread | Nominal size 20 mm | MV 0402 |

1" inside thread Nominal size 20 mm MV0403

## CABLE COUPLING SETS

Cable coupling sets for water-pressure-tight connection of flexible electric cables in rainwater storage tanks, e.g. for submersible pump installations.

- Degree of protection IP 68 for long-term submersed application.

| Cable coupling sets | Item No. |
| :--- | :---: |
| Cable coupling set (5-pin) with terminal block | KV 3000 |
| $\rightarrow$ Cable coupling set (3-pin) with terminal block | KV 4000 |

Cable coupling set

## Accessories

Item No.

- Flexible cable $3 \times 1.0 \mathrm{~mm}^{2}$, specially for cable coupling sets, can be cut to length on request, price per metre

KV 3005

## LABELS



For proper labelling of rainwater pipework and system components (according to DIN 1988). To ensure clear identification and prevent cross connections during expansion, modification or repair work.

Labelling set
Item No.
Labelling set (in german language), contains all the labels required for a household. Consists of:
1 unit utility room label
5 units toilet label
5 units extraction point label
10 units rainwater label
$10 \mathrm{~m}(32.8 \mathrm{ft}$.) underground pipework tape
ZS 5000

Label for utility room


Label for toilet


Water extraction point label


Rainwater label

Underground pipework tape

## 1. General

Our supplies are solely based on the following terms of sales, supply and payment. Additions of a buyer only become effective with our explicit agreement.
2. Offer, conclusion of a contract, writing
2.1. All terms of a contract have to be specified finally in writing. Verbal special agreements do not become part of the contract.
2.2. Our offers are always without obligation. After the buyer places the order, the contract will be reached by the supply and/or by our written confirmation of order, if desired by the buyer.
3. Prices, terms of delivery
3.1. Supplies for which not expressly fixed prices are agreed upon, are charged in Euros at the list price which is valid on the day of the delivery.
3.2. Our prices and the supplies are ex works Kefenrod plus the value ad ed tax prescribed by law. Packing and transport costs and other additional expenses are charged to the buyer.
4. Terms of payment, compensation, retention
4.1. If the fixed payment periods are exceeded, we are entitled to claim default interest starting from first day of delay at rate of $5 \%$ over the respective basic interest rate of the European central bank and expenses without proof. The proof of further damage remains reserved to us.
4.2. Bills of exchange are taken by us only with a special agreement. All expenses and other costs are charged to the buyer. The taking in of bills of exchange and cheques takes place always only in execution.
4.3. If a substantial degradation of the financial circumstances of the buyer happens, we are entitled to refuse further supplies until all of our claims whether due or not, are paid or security for them is given.
4.4. If a substantial degradation of the financial circumstances of the buyer happens, we are entitled to quit all credits of goods and require the immediate payment of all unpaid goods deliveries. The same is valid if the buyer stops his payments, moves for a judicial agreement, files for bankruptcy proceedings, or if he asks for an agreement out of court. The same is valid if the buyer stops his payments, moves for a judicial agreement, files for bankruptcy proceedings, or if he asks for an agreement out of court.
4.5. The buyer can charge or withhold payments only on undisputed or juridical stated demands. In case of the refusal of payments the demand must be based on the same contractual relation.
5. Delivery and delivery times
5.1. Periods and dates for delivery are only approximate. We try to deliver as punctually as possible. No claim for damages is entitled to the buyer because of late supply. The execution of delivery presupposes the punctual issue of all necessary permissions and releases as well as the punctual receipt of all documents to be supplied by the buyer. If these conditions are not fulfilled without justifiable reasons, periods and dates extend accordingly.
5.2. The period and/or the date are considered set if the shipment is delivered to the dispatch within the agreed period and/or to the agreed date. If dispatching is delayed for reasons of the buyer's responsibility, the period is considered set if we announced the shipment is ready for delivery to the buyer within the agreed period.
5.3. If the non-compliance of one period or date is due to force majeure or to other unforeseeable obstacles concerning our factory, which are not justifiable from our side or which took place and/or we received knowledge of the situation after the contract conclusion, then the period and/or the date extend appropriately. This is valid also in cases of unforeseeable events, which have an effect on the enterprises of our pre-suppliers and which neither of them nor from us has to be justified.
5.4. If for reasons, which are not due to our responsibility, the delivery does not take place in time or the execution of the delivery is interrupted, disturbed or made more difficult, we can demand replacement of our costs which may result from this.
5.5. Partial deliveries are permissible if they are not expressly contradicted.
6. Guarantee
6.1. We guarantee that our deliveries are faultless at the time the transition of the risk in the sense of the legal requirements
6.2. The rebuke of defect prescribed due to $\S \S 377$ and 378 HGB (duty for investigation and rebuke) is to report in writing immediately, at the latest within 10 days after receipt of the goods at the place o destination.
6.3. In case of a rebuke of defect reported in time or a complaint and an entitled protest the defect products or not as agreed delivered commodities are taken back and replaced by perfect commodities at our expense or, due to our choice, the defects are repaired at our expense.
6.4. In case of absence of an assured characteristic the claim for damages is limited on the commodity value, unless rough fault or intent is given.
6.5. Further claims of guarantee in the sense of the legal requirements are excluded. In the context of the warranty in particular any costs of freight, packing and/or of the installation of the delivered articles are charged to the buyer.
6.6. Goods which are returned for reasons for which WISY bears no responsibility can be accepted after inspection of the returned goods only if the products are unused and are in a visually and technically perfect condition. WISY will always charge $30 \%$ of the invoice amount to cover the costs incurred in receiving returned goods.

## 7. Retention of title

We maintain possession of the sold goods (retention commodities) until complete payment is received, including future demands and additional expenses incurred from the current business relation with the buyer.

The buyer is authorized to resell and/or to process the retention commodities following proper business guidelines. For security purposes, the claims against others as a result of reselling are handed over to us by the buyer in total or at the height of the share of our co-ownership. For security purposes - in case of a delay of payment, a termination of payment, a judicial agreement or bankruptcy proceedings - claims against others from the resale at the height of the original invoice amounts are handed over to us, without demand for a special agreement in individual cases.

## 8. Folders, designs, models

8.1. The reproduction of our folders and designs as well as the rebuilding of our models, also partially, is only permitted with our written permission For designs, models and other documents, excluded folders, we reserve ourselves the property and copyright. The data in the folders, designs and models concerning performances, load capacities, dimensions, weights and similar data are noncommittal approximate values. We reserve ourselves modifications in measurement and construction due to further technical development.
8.2. On the date of publication of the valid price list, all previous price lists are fully superseded and made invalid with respect to their pricing, technical descriptions, explanations and quantified data. Only the currently valid price list is legally valid with respect to the price list contents stated above.

## 9. Place of delivery, area of jurisdiction

9.1. The international competence of the German courts is agreed. Place of delivery is Kefenrod, place of jurisdiction is Friedberg. We reserve ourselves however the right to file a suit at the place of the buyer.
9.2. It is valid per the right of the Federal Republic of Germany
10. Final clauses
10.1. In case of legal inefficacy of individual points, the contract remains obligatory in its remaining parts. Any ineffective regulation has to be replaced by new regulations, which join the desired economic success as good as possible.
10.2. All contractual agreements require writing. Confirmed correspondence is sufficient.
10.3. In case of doubt German Original Text shall prevail.
01.04.2024

## WISY AG

## Filtration | Building Services | Rainwater

Oberdorfstraße 26
63699 Kefenrod-Hitzkirchen
Germany
Telephone +49 605491210
Telefax $\quad+496054912128$
Email info@wisy.de
Internet www.wisy.de
Ordering/Billing
Telephone +496054912125
Telefax +496054912128
E-Mail bestellungen@wisy.de

## Technical Support

Telephone +496054912178

# Made in Germany - <br> With WISY you choose quality and Iong lasting utility! 


[^0]:    ${ }^{1}$ Public Water Supplies by Federal State, German Federal Statistical Office, 2012
    ${ }^{2}$ Towards efficient use of water resources in Europe, page 21, European Environment Agency, 2012
    ${ }^{3}$ WISY AspriPlus rainwater unit 15/3, power consumption: 600 watts, delivery rate: 65/min.
    ${ }^{4}$ German energy mix 2010: 546g CO2 per kWh. Development of specific carbon dioxide emissions of the German energy mix over the time period 1990 to 2012, page 1, Federal Environment Agency

