

Product range

Backwater protection

KESSEL



Make the right choice

Backwater protection

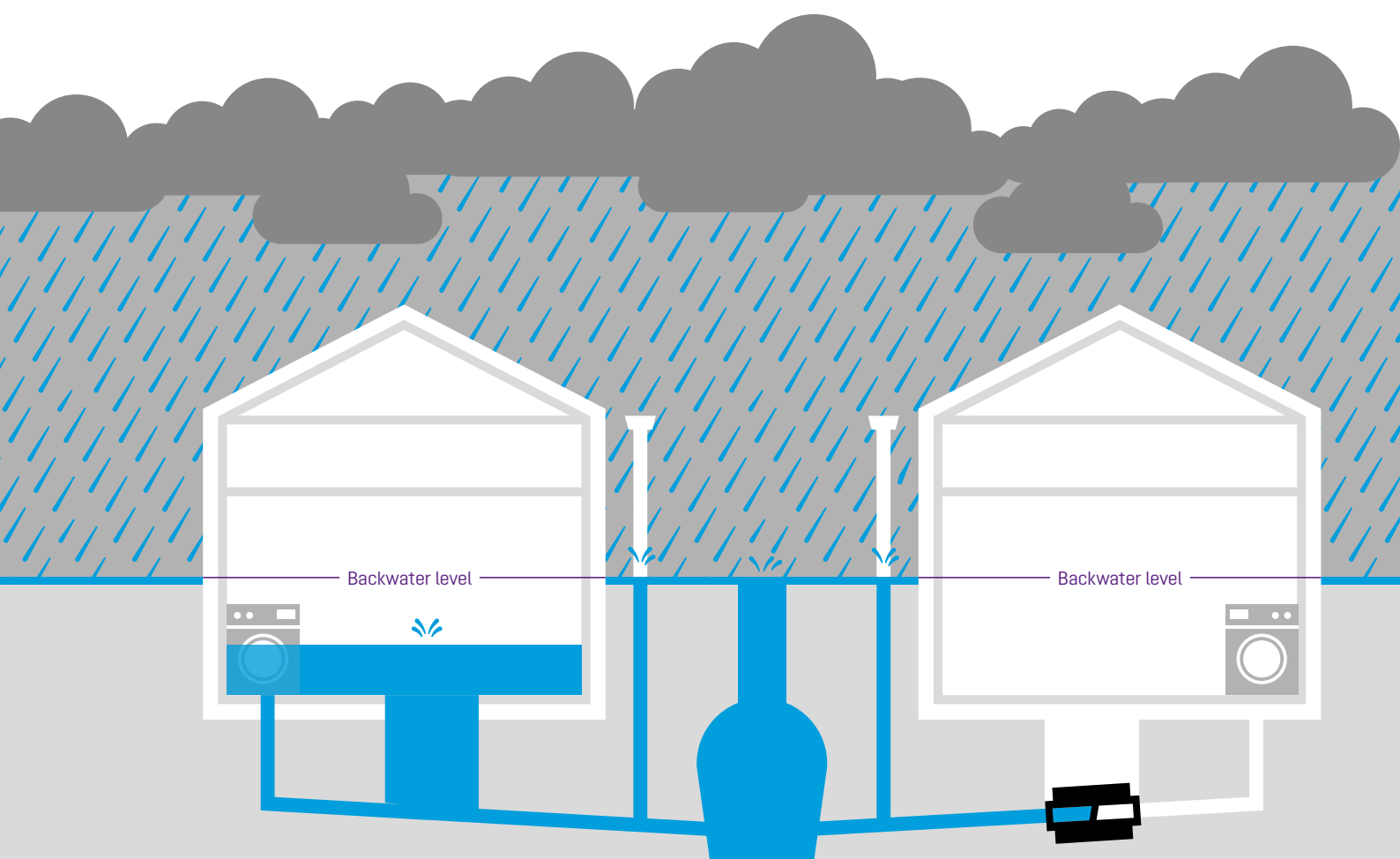


Made in Germany

Leading in drainage

Everything specialists need to know

What is backwater and what criteria must be noted for the correct product choice?



Water drainage system without backwater protection

During heavy rain, the water level rises above the so-called backwater level. This term is usually used to mean street level. Rooms in the basement or cellar quickly become flooded. The results are significant damage and costs.

Water drainage system with backwater protection

Wastewater that flows with a slope to the sewer will be protected by a backwater valve. In the event of backwater, the flap closes so that no wastewater can enter the building. If the public sewer is higher than the drainage spot in the building, the wastewater must be pumped above the backwater level, for example via an Aqualift lifting station from KESSEL.

KESSEL backwater valves according to EN 13564

With mechanical flap system

Staufix, *StaufixControl* and *Staufix SWA* backwater valves are available with one or two vertically hanging flaps. Additionally they can be equipped with a flap locking lever.

Type 0 Backwater valve for use in horizontal pipes with one closure flap.

Type 1 Backwater valve for use in horizontal pipes with one automatic closure and one emergency closure, whereby this emergency closure may be combined with the automatic closure.

Type 2 Backwater valve for use in horizontal pipes with two automatic closures and one emergency closure, whereby this emergency closure may be combined with one of the two automatic closures.

Type 4 Floor drain with a self-actuating closure and an emergency closure.

Type 5 Backwater valve installed in drain fittings or floor drains, with two automatic closures and one emergency closure, whereby this emergency closure may be combined with the automatic closure.



With electronic open flap system

The *Staufix FKA* has two open flaps. One closes electrically during backwater and additionally it has a back-up manually closable flap. This is the ideal product for use with raw sewage.

Type 3 Backwater valve for use in horizontal pipes with one automatic closure operated by external energy (electric, pneumatic or other) and one emergency closure which is independent of the automatic closure.



With electronic open flap system and sewage pump

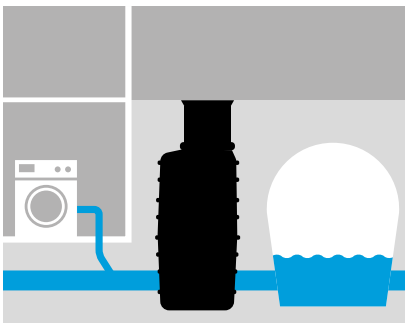
The flap of the *Pumpfix F* closes electrically and the integrated sewage pump discharges the building's wastewater into the sewer during backwater.

Type 3 Backwater valve for use in horizontal pipes with one automatic closure operated by external energy (electric, pneumatic or other) and one emergency closure which is independent of the automatic closure.



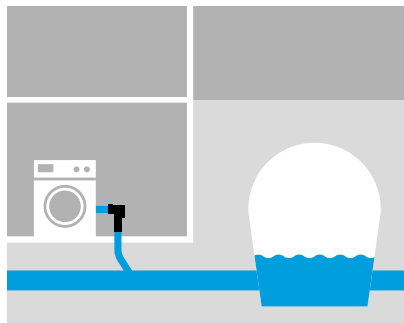
Installation situation

There are three options for installing backwater protection.



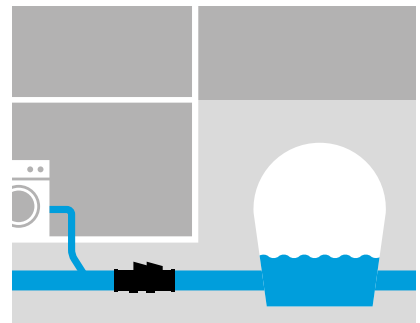
Outdoor, underground installation

This is the most practical solution. Products to protect against water ingress are installed in a chamber in the ground in front of the building. This saves space in the basement, noise nuisance can be practically ruled out and the installation is functionally secure and maintenance-friendly.



Exposed installation

This is the simplest solution as it does not require a great deal of structural rework. This means that the installation is quick and that the backwater protection unit is always easily accessible for maintenance and cleaning. Particularly with retrospective installations or in the renovation of older buildings, an exposed installation is often the only alternative.



Floor slab installation

This is the most convenient solution. With floor slab installation, the backwater valve takes up no living space as it is unobtrusively installed in the underfloor. However, it is still accessible for maintenance or repair via the cover with a single step. Ideal for new-builds.

Types of wastewater

In principle, we differentiate between two different types of wastewater. Different backwater protection devices can be considered depending on the type of wastewater being dealt with.

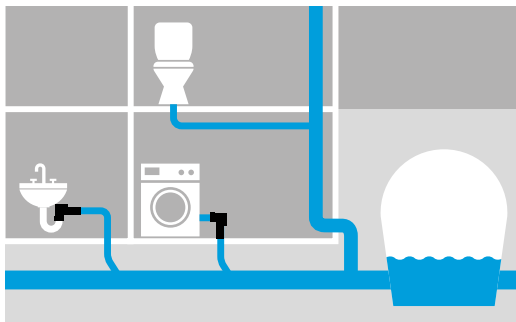


Wastewater with sewage is water with faecal content coming from urinals or toilets to the sewer. This is termed "black water".



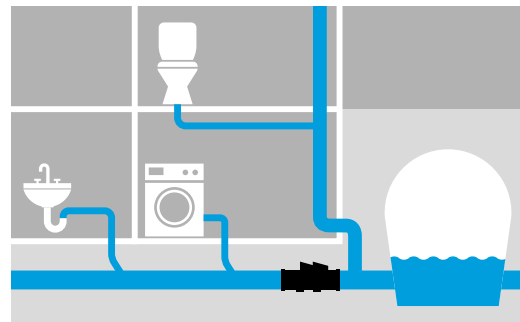
Wastewater without sewage is water without faecal content, for example shower water or water from a washing machine. This is termed "grey water".

Protection strategy



Individual protection

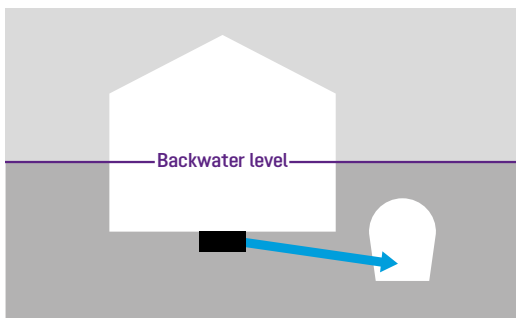
Each drainage location, such as washbasins, showers or washing machines, is protected with its own backwater protection.



Central protection

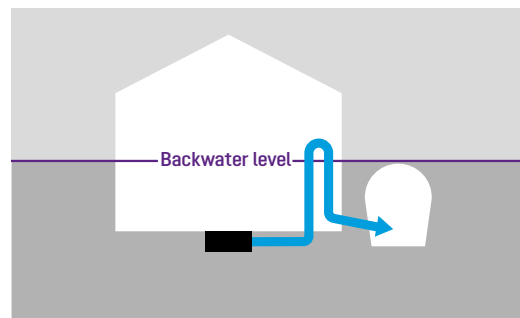
Backwater valves or lifting stations installed in the main wastewater pipe, protecting all drainage fixtures.

Slope to the main sewer



Slope to the main sewer

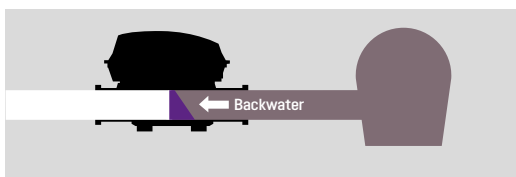
If the sewage pipe lies below the backwater protection, the domestic wastewater will be disposed of via the natural slope. Backwater valves and hybrid lifting stations can be used here.



No slope to the sewage pipe

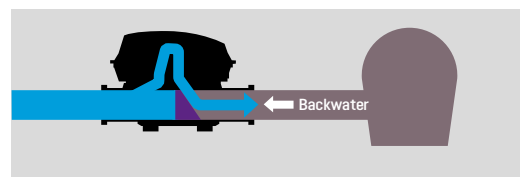
If the sewage pipe is higher than the backwater protection, the wastewater must be lifted to the sewage pipe with a lifting station via a backwater loop.

Function



Protects in the event of backwater

The backwater flap prevents wastewater from the sewage pipe pushing into the building.



Disposes in the event of backwater

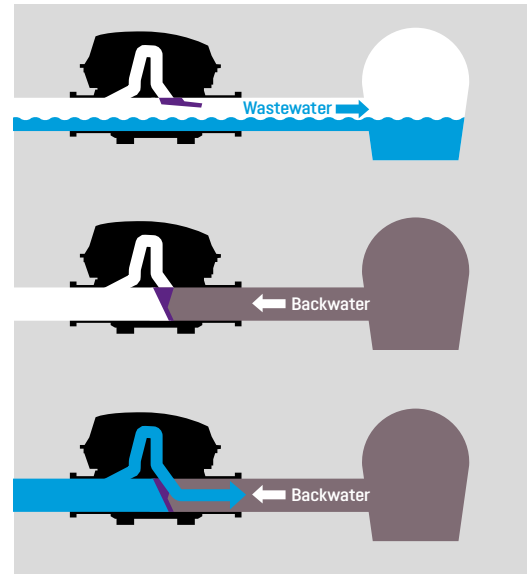
Despite backwater from the sewage and closed backwater flap, domestic wastewater can be disposed of via a pump. This ensures that the drainage system would remain functionally capable.

Backwater pumping station *Pumpfix F*

The unique backwater solution.

More than a backwater valve: *Pumpfix F* is the only backwater valve that pumps against the backwater. In normal operation, the backwater pumping station continuously disposes of the wastewater via the slope to the main sewer, making it energy-neutral. In the event of backwater, the backwater flap closes automatically and when wastewater arises this is pumped against the backwater pressure. The integrated cutting system shreds solids meaning the *Pumpfix F* can be used with wastewater containing sewage. It can also drain basement staircases up to 5 m².

Pumpfix F is available in two variants – for installation in an exposed drainage pipe and for floor slab installation, where you can choose between a black cover or tileable cover.



How it works

Pumpfix F is the only backwater valve with hybrid function: In normal operation it uses the natural slope to the sewage pipe. In the event of backwater from the sewage pipe, the pump is automatically switched on in order to reliably pump the building's wastewater against the backwater pressure.



1 Backwater pumping station 2 Control unit 3 Sealing gasket set



1 Backwater pumping station 2 Control unit

Ventilation

Integrated ventilation eliminates the requirement for costly roof ventilation pipes

Motor

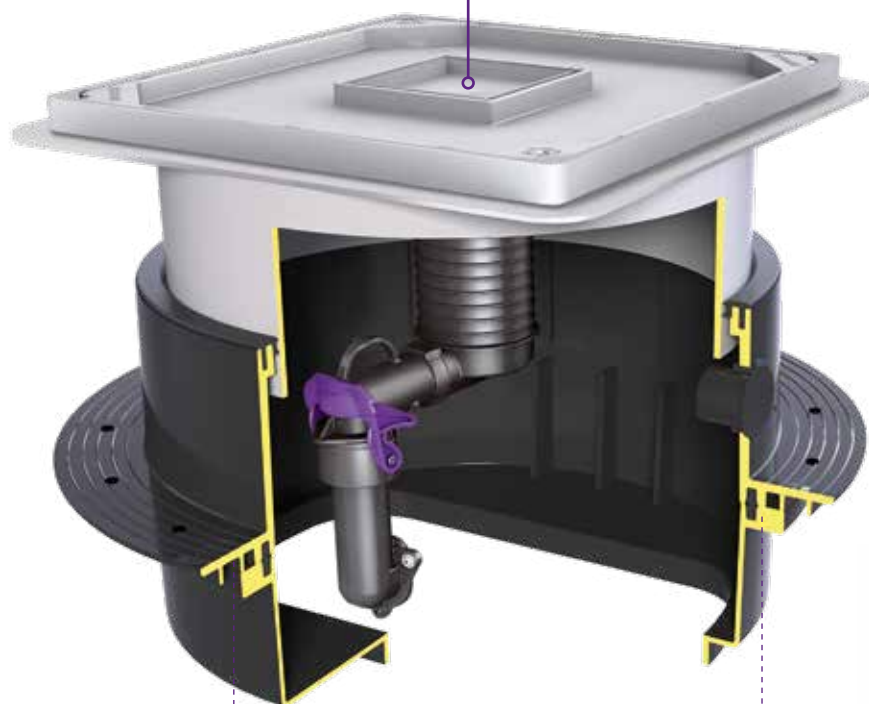
Automatically closes the backwater flap in the event of backwater

Body with only 9 mm gradient

Ideal for renovation work

Installation kit for the floor slab with integrated drainage function

The backwater valve is available for floor slab installation and can also be installed in waterproof concrete by using an extension piece with central flange and an elastomer waterproofing membrane. The integrated drainage function ensures that any surface water, for example due to a pipe break, will be pumped into the sewer even during times of backwater.



New Comfort version
with multilingual
(EN, DE, FR, IT, PL, NL)
digital display for
operating state and
servicing instructions
as well as connection
option for building
management system



Plug & Play control unit
with self-diagnosis system SDS
for maximum safety



Motorized Flap

Closed backwater flap with integrated gasket provides secure and reliable protection during backwater

Removable inlet / outlet connections – also in Ø 200

- Flange/spigot for customized connections
- Variable inlet and outlet sizes available

Backwater pumping station *Pumpfix F*

Installation in a concrete slab/floor



Z-53.2-388

Made of polymer, with telescopic upper section for continuous height- and level adjustment.

For installation depth (D) from 486 – 640 mm,
Installation area 750 × 750 mm

With surface water tight polymer cover plate class A 15 and integrated floor drain.

Installation kit with choice of cover.

Backwater pumping station according to EN 13564 Type 3 with pump (1kW/230V) and backwater valve, pump activates during backwater, suitable for wastewater with or without sewage.

Plug-and-Play control unit with connection option to building management system and alarm, display for operating status and battery back-up, protection type IP 54, with integrated self diagnosis system SDS, motorized backwater flap, *Pumpfix F* body rated protection type IP 68 (3 m, 24 h).

Power cable length: 5 m (15 m available on request).

Note:

With S1-pump, without macerator, capable for continuous operation: on request

Accessories:

Extension sections for installation in waterproof concrete see page 16



Outer diameter Ø (mm)	L × H in mm	Art. no.
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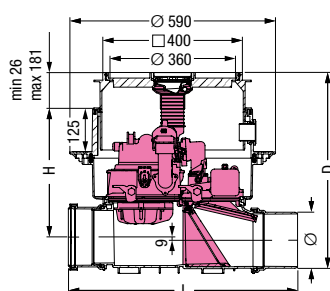
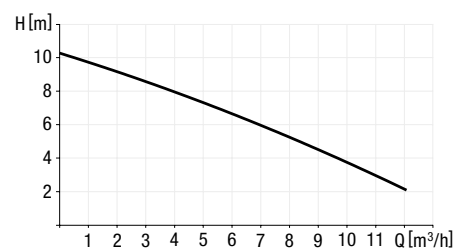
With recessed cover for on-site tiling and drain

Ø 110	642 × 394	24 100X
Ø 125	645 × 387	24 125X
Ø 160	656 × 370	24 150X
Ø 200*	720 × 348	24 200X

With black cover and drain

Ø 110	642 × 394	24 100S
Ø 125	645 × 387	24 125S
Ø 160	656 × 370	24 150S
Ø 200*	720 × 348	24 200S

Pumping capacity



Z-53.2-388

* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

Backwater pumping station *Pumpfix F*

Installation in an exposed wastewater pipe



Z-53.2-388

Made of polymer, with protective cover.

Backwater pumping station according to EN 13564 Type 3 with pump (1kW/230V) and backwater valve, pump activates during backwater, suitable for wastewater with or without sewage.

Plug-and-Play control unit with connection option to building management system and alarm, display for operating status and battery back-up, protection type IP 54, with integrated self diagnosis system SDS, motorized backwater flap, *Pumpfix F* body rated protection type IP 68 (3 m, 24 h).

Power cable length: 5 m (15 m available on request).

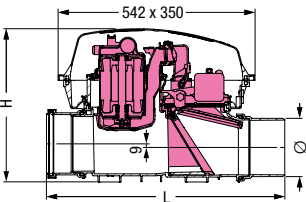
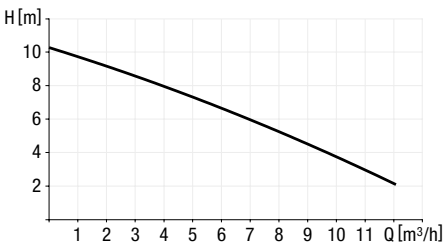
Note:

With S1-pump, without macerator, capable for continuous operation: on request



Outer diameter Ø (mm)	L × H in mm	Art. no.
Ø 110	642 × 422	24 100
Ø 125	645 × 422	24 125
Ø 160	656 × 422	24 150
Ø 200*	720 × 422	24 200

Pumping capacity



Z-53.2-388

* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

Backwater valves

Staufix FKA

The reliable solution for wastewater with sewage.

Particularly reliable motor operation: In contrast to conventional backwater valves, the *Staufix FKA* closes the backwater flap with the help of a motor. This means that it is also suitable for wastewater containing sewage – not only for showers, washbasins and washing machines, but also for toilets.

Staufix FKA is available in two variants – for installation in an exposed drainage pipe and for floor slab installation, where you can choose between a black cover or tileable cover.



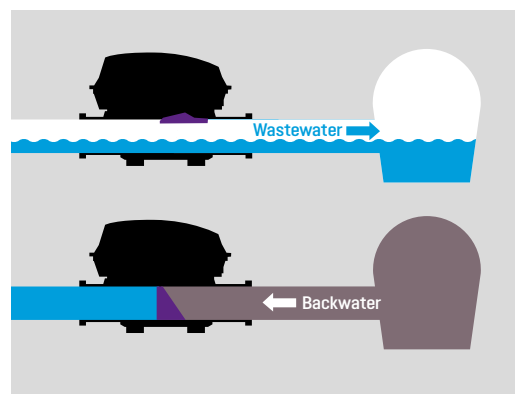
1 Backwater valve 2 Control unit



1 Backwater valve 2 Control unit 3 Sealing gasket set

Installation kit for the floor slab

The backwater valve is available for floor slab installation with a tileable cover and can also be installed in waterproof concrete by using an extension piece with central flange and an elastomer waterproofing membrane.



How it works

During normal operations, both flaps are open so that all the wastewater can drain away fully. In the event of backwater from the sewer, the flap is closed and locked by a motor and then opened again automatically afterwards.

The backwater valve has a plug-in, fully wired, convenient control unit with SDS self-diagnosis system.

Backwater valve *Staufix FKA*

Installation in a concrete slab/floor



EN 13564 Type 3 F

Made of polymer, with telescopic upper section for continuous height- and level adjustment.

For installation depth (D) from 486 – 640 mm,
Installation area 750 × 750 mm

With surface water tight cover plate class A 15 made of polymer.

Installation kit with choice of cover.

Backwater valve according to EN 13564 Type 3 with two open flaps.

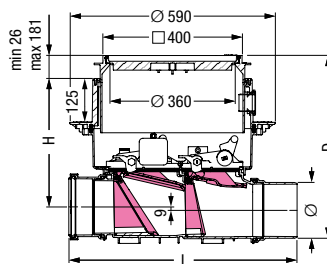
Plug-and-Play control unit with connection option to building management system and alarm, protection type IP 54, with integrated self diagnosis system SDS, display for operating status and battery back-up, motor is rated protection Type IP 68 (3 m, 24 h).

Supply voltage/-frequency: 230 V AC/50 Hz.

Power cable length: 5 m (15 m available on request).

Accessories:

- Extension sections for installation in waterproof concrete see page 16
- Conversion kits see page 17



Outer diameter Ø (mm)	L × H in mm	Art. no.
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With recessed cover for on-site tiling

Ø 110	642 × 394	84 100X
Ø 125	645 × 387	84 125X
Ø 160	656 × 370	84 150X
Ø 200*	720 × 348	84 200X

With black cover

Ø 110	642 × 394	84 100S
Ø 125	645 × 387	84 125S
Ø 160	656 × 370	84 150S
Ø 200*	720 × 348	84 200S



EN 13564 Type 3 F

* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

Backwater valve *Staufix FKA*

Installation in an exposed wastewater pipe



EN 13564 Type 3 F

Made of polymer, with protective cover.

Backwater valve according to EN 13564 Type 3 with two open flaps.

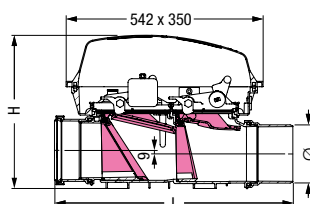
Plug-and-Play control unit with connection option to building management system and alarm, display for operating status and battery back-up, protection type IP 54, with integrated self diagnosis system SDS, display for operating status and battery back-up, motor is rated protection Type IP 68 (3 m, 24 h).

Supply voltage/-frequency: 230 V AC/50 Hz.

Power cable length: 5 m (15 m available on request).

Accessories:

Conversion kits see page 17



Outer diameter Ø (mm)	L × H in mm	Art. no.
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Ø 110	642 × 422	84 100
Ø 125	645 × 422	84 125
Ø 160	656 × 422	84 150
Ø 200*	720 × 422	84 200



EN 13564 Type 3 F

* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

Backwater valves

Staufix SWA

The reliable solution for wastewater

Double security with two pendulum flaps: The *Staufix SWA* backwater valve for wastewater offers absolute security in protection against backwater. In the event of backwater, the outer flap closes securely with the second flap providing additional security. The system can also be locked with a manually actuated emergency closure. *Staufix SWA* is suitable for showers, washbasins and washing machines.

Staufix SWA is available in two versions – for installation in an exposed drainage pipe and for floor slab installation, where you can choose between a black cover or tileable cover.



1 Backwater valve 2 Sealing gasket set



1 Backwater valve

Simple conversion

The *Staufix SWA* backwater valve can be retrofitted with the *Staufix FKA* and *Pumpfix F* conversion kits – even in its installed state.

➤ Backwater valve *Staufix FKA*
Page 11

➤ Backwater pumping station *Pumpfix F*
Page 8

➤ Conversion kits
Page 17

Twin flap backwater valve *Staufix SWA*

Installation in a concrete slab/floor



EN 13564 Type 2

Made of polymer, with telescopic upper section for continuous height- and level adjustment.

For installation depth (D) from 486 – 640 mm,
Installation area 750 × 750 mm

With surface water tight cover plate class A 15 made of polymer.

Installation kit with choice of cover.

Backwater valve according to EN 13564 Type 2 with two self-closing flaps, one of which can be locked by hand as an emergency closure.



Outer diameter Ø (mm)	L × H in mm	Art. no.
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With recessed cover for on-site tiling

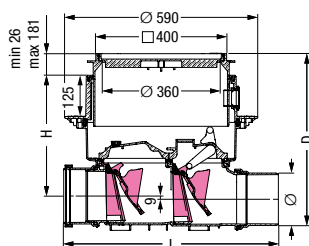
Ø 110	642 × 394	73 100.10X
Ø 125	645 × 387	73 125.10X
Ø 160	656 × 370	73 150.10X
Ø 200*	720 × 348	73 200.10X

With black cover

Ø 110	642 × 394	73 100.10S
Ø 125	645 × 387	73 125.10S
Ø 160	656 × 370	73 150.10S
Ø 200*	720 × 348	73 200.10S

Accessories:

- Extension sections for installation in waterproof concrete see page 16
- Conversion kits see page 17



CE EN 13564 Type 2

* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

Twin flap backwater valve *Staufix SWA*

Installation in an exposed wastewater pipe



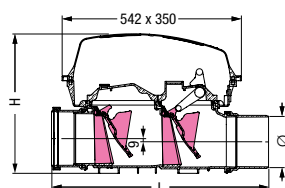
EN 13564 Type 2

Made of polymer, with protective cover.

Backwater valve according to EN 13564 Type 2 with two self-closing flaps, one of which can be locked by hand as an emergency closure.

Accessories:

Conversion kits see page 17



Outer diameter Ø (mm)	L × H in mm	Art. no.
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Ø 110	642 × 422	73 100.10
Ø 125	645 × 422	73 125.10
Ø 160	656 × 422	73 150.10
Ø 200*	720 × 422	73 200.10



CE EN 13564 Type 2

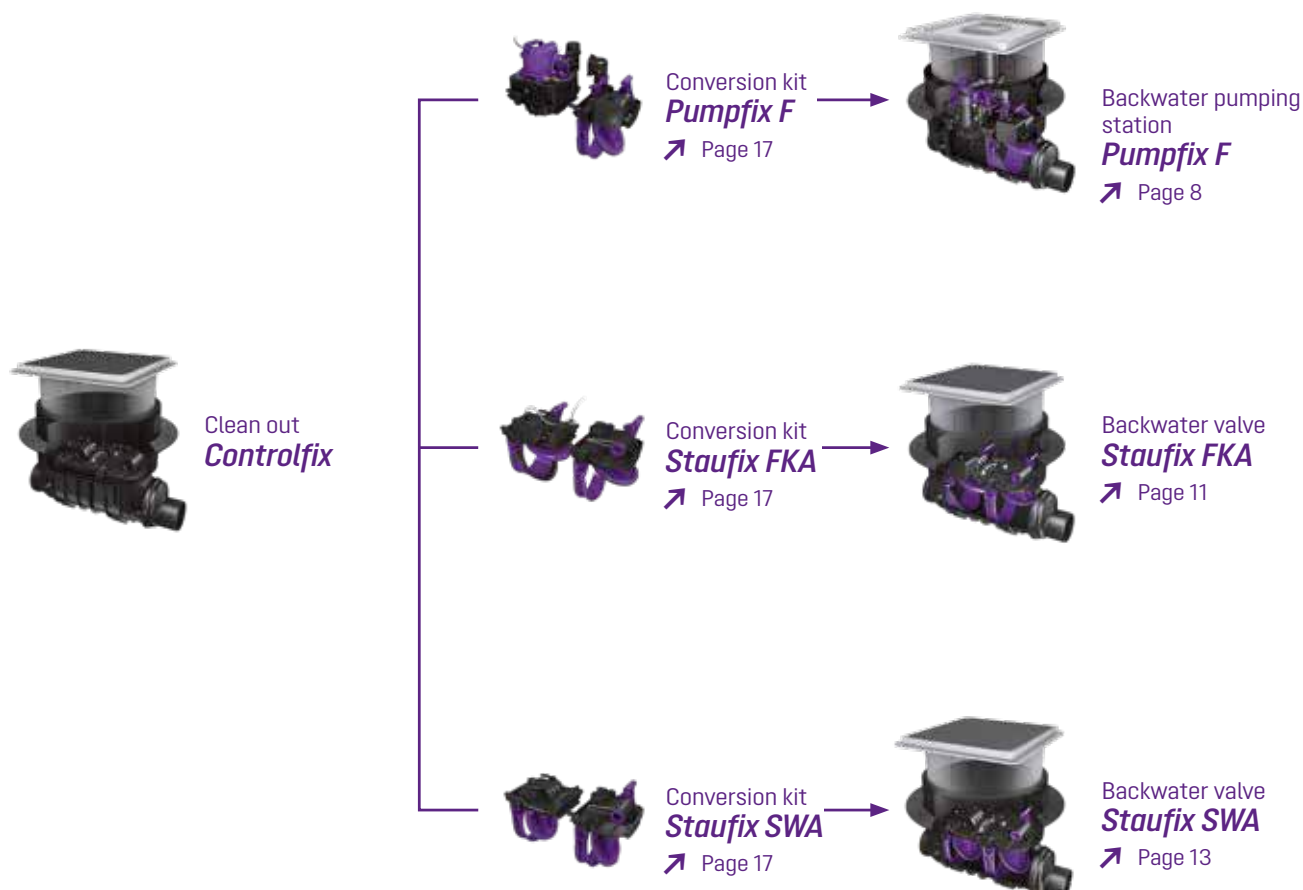
* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

Clean out *Controlfix*

The practical upgrade solution.

The foundation stone for your safety: Clean outs are installed at regular intervals in the drainage pipes in order to be able to clear out any blockages more easily. Our clean out *Controlfix* also facilitates this task further with its practical quick-release closures, enabling you to carry out maintenance quickly and without the need for tools.

Would you like to retain the option to retrospectively equip your drainage pipe with a backwater valve? The *Controlfix* clean out is ideally suited for this too – as it can itself be easily upgraded in situ to a *Staufix* backwater valve or a *Pumpfix F* backwater pumping station!



Clean out *Controlfix*

Installation in a concrete slab/floor

Made of polymer, with telescopic upper section for continuous height- and level adjustment.

For installation depth (D) from 486 – 640 mm,
Installation area 750 × 750 mm

With surface water tight cover plate class A 15 made of polymer.

Installation kit with choice of cover.

➤ Accessories:

- Extension sections for installation in waterproof concrete see page 16
- Conversion kits see page 17



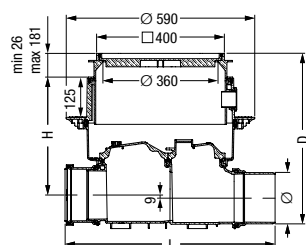
Outer diameter Ø (mm)	L × H in mm	Art. no.
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With recessed cover for on-site tiling

Ø 110	642 × 394	80 100X
Ø 125	645 × 387	80 125X
Ø 160	656 × 370	80 150X
Ø 200*	720 × 348	80 200X

With black cover

Ø 110	642 × 394	80 100S
Ø 125	645 × 387	80 125S
Ø 160	656 × 370	80 150S
Ø 200*	720 × 348	80 200S



* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

Clean out *Controlfix*

Installation in an exposed wastewater pipe

Made of polymer, with protective cover.

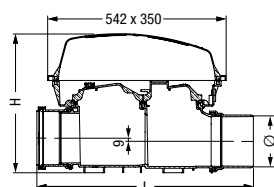
➤ Accessories:

Conversion kits see page 17



Outer diameter Ø (mm)	L × H in mm	Art. no.
--------------------------	-------------	----------

Ø 110	642 × 422	80 100
Ø 125	645 × 422	80 125
Ø 160	656 × 422	80 150
Ø 200*	720 × 422	80 200



* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

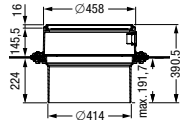
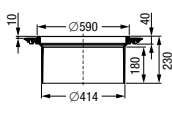
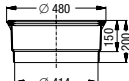
Accessories

Pumpfix F / Staufix FKA / Staufix SWA / Controlfix

Extension sections

for installation in a concrete floor

Art. no.

with centre flange	Additional function: For installation in water-proof concrete Inclusive: Temporary construction debris cover, fully assembled, gasket set (counter flange made of polymer, screwed, elastomer sealing sheet made of NK/SBR Ø 800 mm) Extension: Max. 360 mm	 	83 075
with flange and counter flange	Additional function: For connection to an on-site sealing sheet Inclusive: Screws Extension: Max. 140 mm (In case of deeper installation ensure maintenance capability!)	 	83 073
with gasket	Extension: Max. 180 mm (In case of deeper installation ensure maintenance capability!)	 	83 070
Gasket set	Additional function: For installation in water-proof concrete Inclusive: counter flange made of polymer, screws, elastomer sealing sheet made of NK/SBR Ø 800 mm (Waterproof concrete installation tested by MFPA Leipzig UB 5.1/11-452-1)		83 023

Cable extensions

for extension from 15 m or 25 m (cable length delivered: 5 m)

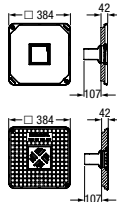
	for backwater pumping station <i>Pumpfix F</i>	for motorized backwater valve <i>Staufix FKA and Staufix FKA Standard</i> (up to 2015)		Art. no.
Cable extension for motor (10 m)	Extension to 15 m: 1×80 890 Extension to 25 m: 2×80 890	Extension to 15 m: 1×80 890 Extension to 25 m: 2×80 890		80 890
Cable extension for probe (10 m)	Extension to 15 m: 2×80 889 Extension to 25 m: 4×80 889	Extension to 15 m: 1×80 889 Extension to 25 m: 2×80 889		80 889
Cable extension for pump (10 m)	Extension to 15 m: 1×80 891 Extension to 25 m: 2×80 891			80 891

Cover plates

for installation in a concrete floor

Cover

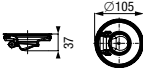
Art. no.

with drain Ø 75	Inclusive: Gasket, <i>Multistop</i> Version recessed for on-site tiling, grey: For tile thicknesses of 18 mm Version black: With integrated grating	  	tileable black	83 045 83 046
surface water tight	Inclusive: Gasket Version recessed for on-site tiling, grey: For tile thicknesses of 18 mm	  	tileable black	83 052 83 050

Hygiene and odour stop

Compatibility see product description

Art. no.

Multistop	Function: Odour, foam, rodent and insect stop Compatibility: Art. no. 83 045 and 83 046	 	43 500
Hair filter	Compatibility: Art. no. 83 045 and 83 046	 	43 700

Accessories

Pumpfix F / Staufix FKA / Staufix SWA / Controlfix

Conversion kits

for models made on or after Jan 2011

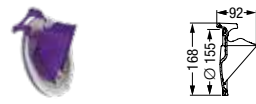
Art. no.

Backwater pumping Pumpfix F for installation in a concrete slab/floor	Compatibility: For Ø 110 – Ø 200* Inclusive: Comfort control unit with recessed cover for on-site tiling and drain, <i>Multistop</i> , gasket Cable length: 5 m  Cable extension: See page 36		80 098
Backwater pumping Pumpfix F for installation in an exposed wastewater pipe	Compatibility: For Ø 110 – Ø 200* Inclusive: Comfort control unit Cable length: 5 m  Cable extension: See page 36		80 097
Motorized backwater valve Staufix FKA	Compatibility: For installation in a concrete slab/floor and in an exposed wastewater pipe, for Ø 110 – Ø 200* Inclusive: Comfort control unit Cable length: 5 m  Cable extension: See page 36		80 093
Backwater valve Staufix SWA	Compatibility: For installation in a concrete slab/floor and in an exposed wastewater pipe, for Ø 110 – Ø 200* * In-/Outlet Ø 200, hydraulics corresponds to Ø 160		80 091

Rodent / Insect protection

Compatibility see product description

Art. no.

Rat protection flap	Inclusive: Stainless steel shield Compatibility: <i>Staufix FKA</i> from 01/2011 to 2015 (with flap in pendulum position)		80 037
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Maintenance

for all Staufix backwater valves (Ø 110, Ø 125, Ø 160)

Art. no.

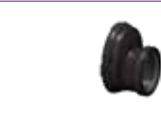
Testing funnel	Inclusive: Gasket		70 214
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Spigot and Socket

for backwater valves

Outer diameter
Ø (mm)

Art. no.

Spigot	Function: Removable inlets / outlets, can be mounted in various dimensions		Ø 110 83 081 Ø 125 83 082 Ø 160 83 083 Ø 200* 83 084
Socket	Function: Removable inlets / outlets, can be mounted in various dimensions		Ø 110 83 085 Ø 125 83 086 Ø 160 83 087 Ø 200* 83 088

* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

Control unit accessories

Compatibility see product description

Art. no.

Audible alarm	Compatibility: For all control units with SDS function Cable length: 20 m		20 162
Access code potential-free contact	Compatibility: For Comfort control units beginning model year 2017		80 077

Backwater valves

Staufix and StaufixControl

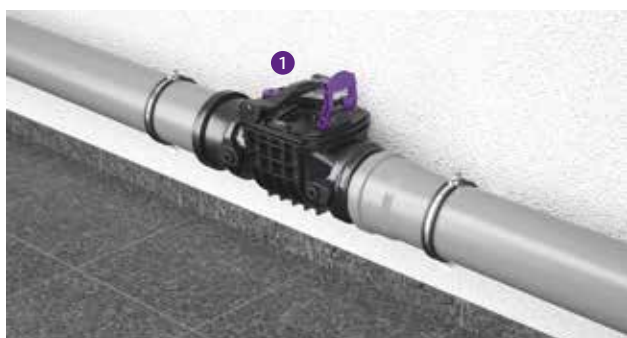
The original solution for wastewater without sewage – also with additional control function.

You can't improve on an original... But we can! The new *Staufix* is the result of decades of product development and optimisation. It is now even more compact, allowing a simpler installation and more flexible mounting.

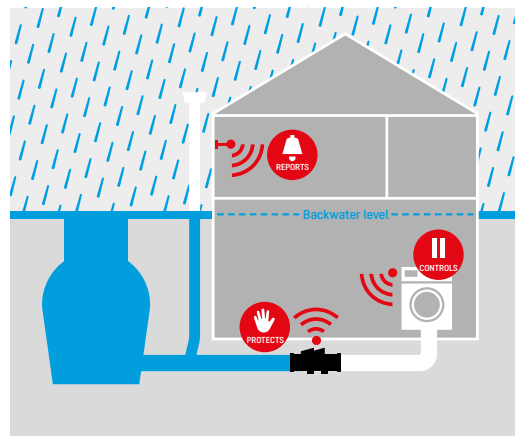
The *StaufixControl* variant offers smart additional functions such as visual and acoustic backwater warnings. *Staufix* and *StaufixControl* are each available in two variants – for installation in an exposed drainage pipe and for floor slab installation, where you can choose between a black cover or tileable cover.



1 Backwater valve 2 Extension section



1 Backwater valve



Version *StaufixControl*

The new backwater valve *StaufixControl* provides the same safe and reliable protection against backwater as the *Staufix*. In addition it is also equipped with a remote signal generator which emits both a visual and acoustic warning signal when backwater occurs. A further advantage: With the optional wireless receiver as a switchable socket, a washing machine, for example, could be automatically turned off to prevent it from pumping water into a blocked sewer pipe.

Installation situation

The backwater valves *Staufix* and *StaufixControl* can be installed either in an exposed drainage pipe or in the floor slab – convenient and tidy thanks to the installation kit with telescopic upper section. Even installation in waterproof concrete is possible by means of an extension piece with flange and an elastomer waterproofing membrane.



Tool-free maintenance

With the quick-fastening, single-hand closure system with lift function, the cover is particularly easy to open and close – for convenient maintenance, with absolutely no tools required.

Twin flap backwater valve *StaufixControl*

Installation in a concrete slab/floor

EN 13564 Type 2

Made of polymer, with telescopic upper section for continuous height- and level adjustment.

For installation depth (D)

Ø 90 – 110, 287 – 410 mm

Ø 125 – 200, 341 – 464 mm,

Installation area 750 × 750 mm



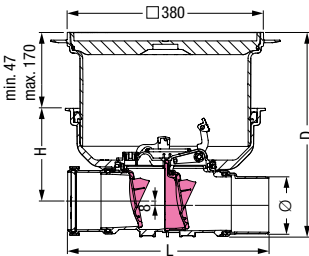
With surface water tight cover plate class A 15 made of polymer.

Installation kit with choice of cover.

Backwater valve according to EN 13564 Type 2 with two self-closing flaps, one of which can be locked by hand as an emergency closure.

Warning: With visual and acoustic warning in the event of backwater.

Accessories: see page 26



Without rodent protection (two polymer flaps)

Outer diameter Ø (mm)	L × H in mm	Art. no.
With recessed cover for on-site tiling		
Ø 90	389 × 179	770 090.10X
Ø 110	389 × 179	770 100.10X
Ø 125	515 × 222	770 125.10X
Ø 160	526 × 205	770 150.10X
Ø 200*	590 × 185	770 200.10X

With black cover

Outer diameter Ø (mm)	L × H in mm	Art. no.
Ø 90	389 × 179	770 090.10S
Ø 110	389 × 179	770 100.10S
Ø 125	515 × 222	770 125.10S
Ø 160	526 × 205	770 150.10S
Ø 200*	590 × 185	770 200.10S

With rodent protection (one polymer and one stainless steel flap)

Outer diameter Ø (mm)	L × H in mm	Art. no.
With recessed cover for on-site tiling		
Ø 90	389 × 179	770 090.10XR
Ø 110	389 × 179	770 100.10XR
Ø 125	515 × 222	770 125.10XR
Ø 160	526 × 205	770 150.10XR
Ø 200*	590 × 185	770 200.10XR

With black cover

Outer diameter Ø (mm)	L × H in mm	Art. no.
Ø 90	389 × 179	770 090.10SR
Ø 110	389 × 179	770 100.10SR
Ø 125	515 × 222	770 125.10SR
Ø 160	526 × 205	770 150.10SR
Ø 200*	590 × 185	770 200.10SR

Twin flap backwater valve *StaufixControl*

Installation in an exposed wastewater pipe

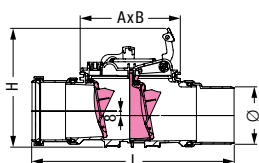
EN 13564 Type 2

Made of polymer

Backwater valve according to EN 13564 Type 2 with two self-closing flaps, one of which can be locked by hand as an emergency closure.

Warning: With visual and acoustic warning in the event of backwater.

➤ **Accessories:** see page 26



Without rodent protection (two polymer flaps)

Outer diameter Ø (mm)	L x H in mm	A x B in mm	Art. no.
Ø 90	386 x 230	193 x 167	770 090
Ø 110	389 x 230	193 x 167	770 100
Ø 125	515 x 306	263 x 214	770 125
Ø 160	526 x 306	263 x 214	770 150
Ø 200*	590 x 306	263 x 214	770 200

With rodent protection (one polymer and one stainless steel flap)

Outer diameter Ø (mm)	L x H in mm	A x B in mm	Art. no.
Ø 90	386 x 230	193 x 167	770 090R
Ø 110	389 x 230	193 x 167	770 100R
Ø 125	515 x 306	263 x 214	770 125R
Ø 160	526 x 306	263 x 214	770 150R
Ø 200*	590 x 306	263 x 214	770 200R

Twin flap backwater valve *Staufix*

Installation in a concrete slab/floor

EN 13564 Type 2

Made of polymer, with telescopic upper section for continuous height- and level adjustment.

For installation depth (D)

Ø 90 – 110, 287 – 410 mm

Ø 125 – 200, 341 – 464 mm,

Installation area 750 × 750 mm

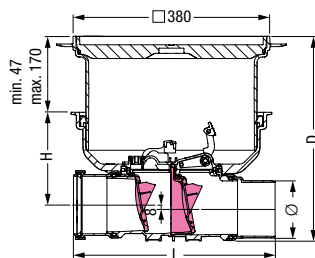
With surface water tight cover plate class A 15 made of polymer.

Installation kit with choice of cover.

Backwater valve according to EN 13564 Type 2 with two self-closing flaps, one of which can be locked by hand as an emergency closure.

Note: Can be retrofitted on the *StaufixControl*.

➤ **Accessories:** see page 26



Without rodent protection (two polymer flaps)

Outer diameter Ø (mm)	L × H in mm	Art. no.
With recessed cover for on-site tiling		
Ø 90	389 × 179	730 090.10X
Ø 110	389 × 179	730 100.10X
Ø 125	515 × 222	730 125.10X
Ø 160	526 × 205	730 150.10X
Ø 200*	590 × 185	730 200.10X

With black cover

Outer diameter Ø (mm)	L × H in mm	Art. no.
Ø 90	389 × 179	730 090.10S
Ø 110	389 × 179	730 100.10S
Ø 125	515 × 222	730 125.10S
Ø 160	526 × 205	730 150.10S
Ø 200*	590 × 185	730 200.10S

With rodent protection (one polymer and one stainless steel flap)

Outer diameter Ø (mm)	L × H in mm	Art. no.
With recessed cover for on-site tiling		
Ø 90	389 × 179	730 090.10XR
Ø 110	389 × 179	730 100.10XR
Ø 125	515 × 222	730 125.10XR
Ø 160	526 × 205	730 150.10XR
Ø 200*	590 × 185	730 200.10XR

With black cover

Outer diameter Ø (mm)	L × H in mm	Art. no.
Ø 90	389 × 179	730 090.10SR
Ø 110	389 × 179	730 100.10SR
Ø 125	515 × 222	730 125.10SR
Ø 160	526 × 205	730 150.10SR
Ø 200*	590 × 185	730 200.10SR

Twin flap backwater valve *Staufix*

Installation in an exposed wastewater pipe

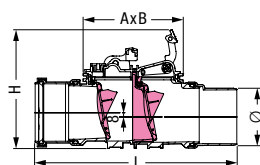
EN 13564 Type 2

Made of polymer

Backwater valve according to EN 13564 Type 2 with two self-closing flaps, one of which can be locked by hand as an emergency closure.

Note: Can be retrofitted on the *StaufixControl*.

➤ **Accessories:** see page 26



Without rodent protection (two polymer flaps)

Outer diameter Ø (mm)	L x H in mm	A x B in mm	Art. no.
Ø 90	386 x 230	193 x 167	730 090
Ø 110	389 x 230	193 x 167	730 100
Ø 125	515 x 306	263 x 214	730 125
Ø 160	526 x 306	263 x 214	730 150
Ø 200*	590 x 306	263 x 214	730 200

With rodent protection (one polymer and one stainless steel flap)

Outer diameter Ø (mm)	L x H in mm	A x B in mm	Art. no.
Ø 90	386 x 230	193 x 167	730 090R
Ø 110	389 x 230	193 x 167	730 100R
Ø 125	515 x 306	263 x 214	730 125R
Ø 160	526 x 306	263 x 214	730 150R
Ø 200*	590 x 306	263 x 214	730 200R

Single flap backwater valve *Staufix*

Installation in a concrete slab/floor



EN 13564 Type 1

Made of polymer, with telescopic upper section for continuous height- and level adjustment.

For installation depth (D)

Ø 90 – 110, 287 – 410 mm

Ø 125 – 200, 341 – 464 mm,

Installation area 750 × 750 mm



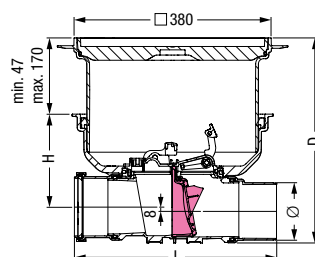
With surface water tight cover plate class A 15 made of polymer.

Installation kit with choice of cover.

Backwater valve according to EN 13564 Type 1 with one self-closing flap, can be locked by hand as an emergency closure.

Note: Can be upgraded to *Staufix* Type 2.

➤ **Accessories:** see page 26



CE EN 13564 Type 1

Outer diameter Ø (mm)	L × H in mm	Art. no.
With recessed cover for on-site tiling		
Ø 90	389 × 179	720 090.10X
Ø 110	389 × 179	720 100.10X
Ø 125	515 × 222	720 125.10X
Ø 160	526 × 205	720 150.10X
Ø 200*	590 × 185	720 200.10X
With black cover		
Ø 90	389 × 179	720 090.10S
Ø 110	389 × 179	720 100.10S
Ø 125	515 × 222	720 125.10S
Ø 160	526 × 205	720 150.10S
Ø 200*	590 × 185	720 200.10S

* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

Single flap backwater valve *Staufix*

Installation in an exposed wastewater pipe



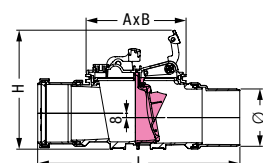
EN 13564 Type 1

Made of polymer

Backwater valve according to EN 13564 Type 1 with one self-closing flap, can be locked by hand as an emergency closure.

Note: Can be upgraded to *Staufix* Type 2.

➤ **Accessories:** see page 26



Outer diameter Ø (mm)	L × H in mm	A × B in mm	Art. no.
Ø 90	386 × 230	193 × 167	720 090
Ø 110	389 × 230	193 × 167	720 100
Ø 125	515 × 306	263 × 214	720 125
Ø 160	526 × 306	263 × 214	720 150
Ø 200*	590 × 306	263 × 214	720 200



CE EN 13564 Type 1

* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

Clean out *Staufix*

Installation in a concrete slab/floor

Made of polymer, with telescopic upper section for continuous height- and level adjustment.

For installation depth (D)

Ø 90 – 110, 287 – 410 mm

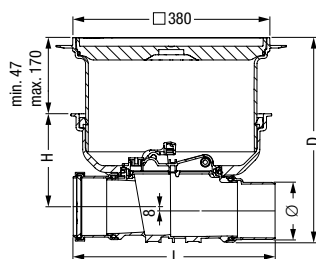
Ø 125 – 200, 341 – 464 mm,

Installation area 750 × 750 mm

With surface water tight cover plate class A 15 made of polymer.

Installation kit with choice of cover.

➤ **Accessories:** see page 26



Outer diameter Ø (mm)	L × H in mm	Art. no.
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With recessed cover for on-site tiling

Ø 90	389 × 179	700 090.10X
Ø 110	389 × 179	700 100.10X
Ø 125	515 × 222	700 125.10X
Ø 160	526 × 205	700 150.10X
Ø 200*	590 × 185	700 200.10X

With black cover

Ø 90	389 × 179	700 090.10S
Ø 110	389 × 179	700 100.10S
Ø 125	515 × 222	700 125.10S
Ø 160	526 × 205	700 150.10S
Ø 200*	590 × 185	700 200.10S

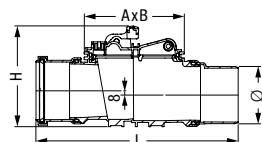
* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

Clean out *Staufix*

Installation in an exposed wastewater pipe

Made of polymer

➤ **Accessories:** see page 26



Outer diameter Ø (mm)	L × H in mm	A × B in mm	Art. no.
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Ø 90	386 × 230	193 × 167	700 090
Ø 110	389 × 230	193 × 167	700 100
Ø 125	515 × 306	263 × 214	700 125
Ø 160	526 × 306	263 × 214	700 150
Ø 200*	590 × 306	263 × 214	700 200

* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

Accessories

Staifix and StaifixControl

Extension sections

made of polymer



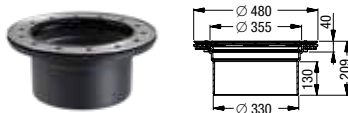
with flange,
for deeper installation

Inclusive: Sealing

Extension: Max. 147 mm

Note: In case of deeper installation ensure maintenance capability!

Art. no. **830 070**



with flange and counter flange,
for deeper installation

Material: Counter flange

made of stainless steel

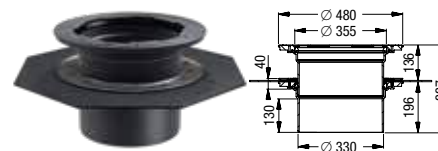
Inclusive: Sealing

Extension: Max. 147 mm

Compatibility: For connection to an on-site membrane

Note: In case of deeper installation ensure maintenance capability!

Art. no. **830 073**



with flange
for installation in waterproof concrete

Inclusive sealing set:

Elastomer waterproofing membrane made of NK/SBR Ø 700 mm

Extension: Max. 294 mm

Delivery: Completely assembled.

Note: Suitable for installation in the concrete slab/floor.

Art. no. **830 075**

Lockable cover



Lockable cover *Control*

Compatibility:

- for Type 1 and Type 2
- Conversion kit as an upgrade to *StaifixControl*

Warning: With visual and acoustic warning in the event of backwater.

Ø 90 – Ø 110 Art. no. **72 224**
Ø 125 – Ø 200 Art. no. **72 225**

Spigot / Socket

made of polymer



Spigot

removable fitting mountable on both sides and in different dimensions

Ø 90 Art. no. **83 090**
Ø 100 Art. no. **830 200**
Ø 110 Art. no. **830 100**
Ø 125 Art. no. **83 082**
Ø 160 Art. no. **83 083**
Ø 200 Art. no. **83 084**



Socket

removable fitting mountable on both sides and in different dimensions

Ø 90 Art. no. **83 091**
Ø 100 Art. no. **830 202**
Ø 110 Art. no. **830 101**
Ø 125 Art. no. **83 086**
Ø 160 Art. no. **83 087**
Ø 200 Art. no. **83 088**

Accessories

Staufix and StaufixControl

Radio receiver

for backwater valve *StaufixControl*

Art. no.

Radio-based audible alarm

Function: For forwarding a visual and acoustic signal in the event of backwater



72 222

Radio receiver as switched socket

Function: For killing power in the event of backwater (e. g. washing machine)



72 223

Conversion kits

Compatibility see product description

Outer diameter
Ø (mm)

Art. no.

Rodent protection flap

Material: Made of stainless steel
Compatibility: Art. no. 720 ..., 730 ... and 770 ...



Ø 90 - Ø 110

70 233

Ø 125 - Ø 200

70 234

Backwater flap

Compatibility: For upgrade from type 1 to type 2



Ø 90 - Ø 110

70 231

Ø 125 - Ø 200

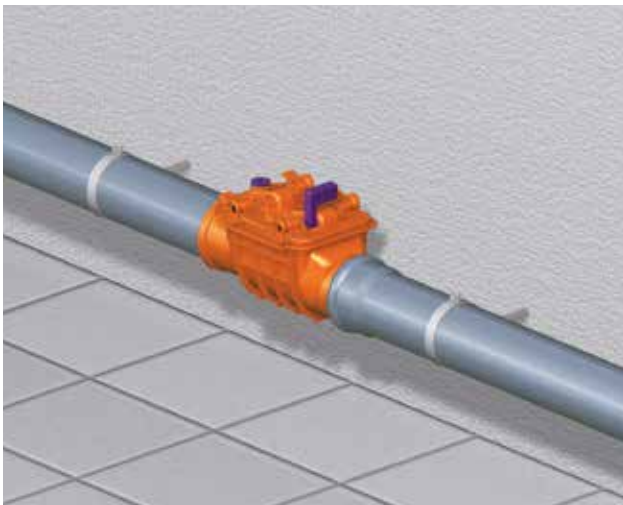
70 232

Backwater valves

Staufix Basic

The original solution for dry basements.

The original backwater valve *Staufix Basic* has been the standard in the water drainage sector for over 40 years. It is made entirely of polymer and so is completely corrosion-free. The *Staufix Basic* is installed in an individual drainage pipe and prevents the penetration of water and rodents by means of mechanical flaps – simple and secure!



Low drop

Thanks to the minimal height difference of just 7 mm between the inlet and outlet, the backwater valve is ideally suited to installation in existing drainage pipes.

Cleaning & maintenance without tools

The cover can be opened or locked by hand thus providing access without the need for tools.

Rat protection

The optional stainless steel rat protection flap prevents rats and other vermin entering the premises.

Twin flap backwater valve *Staifix Basic*

Installation in an exposed wastewater pipe

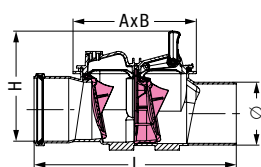
EN 13564 Type 2

Made of polymer

Installation area 650 × 300 mm

Twin flaps, self-closing, one of which can be locked by hand as an emergency closure.

Inlet/outlet for connection to PVC pipe according to EN 1566-1.



Without rodent protection (two polymer flaps)

Outer diameter Ø (mm)	L × H in mm	A × B in mm	Art. no.
Ø 110	355 × 180 + 25	205 × 155	73 100
Ø 125	405 × 240 + 40	270 × 200	73 125
Ø 160	450 × 240 + 40	270 × 200	73 150
Ø 200	530 × 278 + 50	353 × 248	73 200

With rodent protection (one polymer and one stainless steel flap)

Outer diameter Ø (mm)	L × H in mm	A × B in mm	Art. no.
Ø 110	355 × 180 + 25	205 × 155	73 100R
Ø 125	405 × 240 + 40	270 × 200	73 125R
Ø 160	450 × 240 + 40	270 × 200	73 150R

EN 13564 Type 2

Single flap backwater valve *Staifix Basic*

Installation in an exposed wastewater pipe

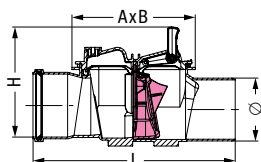
EN 13564 Type 1

Made of polymer

Installation area 650 × 300 mm

Self-closing flap, can be locked by hand as an emergency closure.

Inlet/outlet for connection to PVC pipe according to EN 1566-1.



Without rodent protection (one polymer flap)

Outer diameter Ø (mm)	L × H in mm	A × B in mm	Art. no.
Ø 100	355 × 180 + 25	205 × 155	72 100
Ø 110	355 × 180 + 25	205 × 155	72 100
Ø 125	405 × 240 + 40	270 × 200	72 125
Ø 160	450 × 240 + 40	270 × 200	72 150
Ø 200	530 × 278 + 50	353 × 248	72 200

With rodent protection (one stainless steel flap)

Outer diameter Ø (mm)	L × H in mm	A × B in mm	Art. no.
Ø 110	355 × 180 + 25	205 × 155	72 100R
Ø 125	405 × 240 + 40	270 × 200	72 125R
Ø 160	450 × 240 + 40	270 × 200	72 150R

EN 13564 Type 1

Single flap backwater valve *Staifix Basic*

Installation in an exposed wastewater pipe

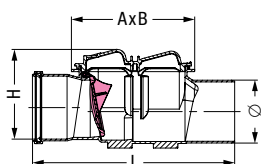
EN 13564 Type 0

Made of polymer

Installation area 650 × 300 mm

Self-closing flap.

Inlet/outlet for connection to PVC pipe according to EN 1566-1.



Outer diameter Ø (mm)	L × H in mm	A × B in mm	Art. no.
Ø 100	355 × 170	205 × 155	76 100
Ø 110	355 × 170	205 × 155	71 100
Ø 125	405 × 230	270 × 200	71 125
Ø 160	450 × 230	270 × 200	71 150
Ø 200	530 × 278	353 × 248	71 200

EN 13564 Type 0

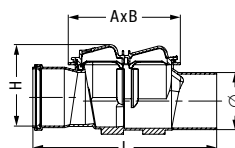
Clean out *Staufix Basic*

Installation in an exposed wastewater pipe

Made of polymer

Installation area 650 × 300 mm

upgradable to all *Staufix* model
backwater valves



Outer diameter Ø (mm)	L × H in mm	A × B in mm	Art. no.
Ø 110	355 × 170	205 × 155	70 100
Ø 125	405 × 230	270 × 200	70 125
Ø 160	450 × 230	270 × 200	70 150
Ø 200	530 × 278	353 × 248	70 200

Accessories

Staufix Basic

Conversion kits

for *Staufix Basic* from 04/2005 to 12/2017

for upgrade to Type 2
(Twin flap backwater valve
Staufix)

Function:

The *Staufix Basic* clean out body can be converted to a ***Staufix Basic* twin flap backwater valve** by means of two backwater flaps, the insert flap housing and the lockable cover.

Please note: 2x backwater flap 70 205 and the lockable cover are required for the Ø 200 version.

Backwater flap



Outer diameter Ø (mm)	Art. no.
Ø 110	70 231
Ø 125	70 232
Ø 160	70 232
Ø 200	70 205

Insert flap housing



Outer diameter Ø (mm)	Art. no.
Ø 110	70 241
Ø 125	70 242
Ø 160	70 242
Ø 200	70 205

for upgrade to Type 1
(Single flap backwater valve
Staufix)

Function:

The *Staufix Basic* clean out body can be converted to a ***Staufix Basic* single flap backwater valve with emergency closure** by means of the backwater flap, insert flap housing and the lockable cover.

Lockable cover incl. emergency closure and sealing gasket



Outer diameter Ø (mm)	Art. no.
Ø 110	70 261
Ø 125	70 262
Ø 160	70 262
Ø 200	70 203

for upgrade to Type 0
(Single flap backwater valve
Staufix)

Function:

The *Staufix Basic* clean out body can be converted to a ***Staufix Basic* single flap backwater valve** by means of a backwater flap (for *Staufix Basic* from 04/2005).

Backwater flap made of stainless steel

Compatibility see product description

as rodent protection

Compatibility: Art. no.

70 100, 70 125, 70 150, 71 100, 71 125, 71 150
72 100, 72 125, 72 150, 73 100, 73 125, 73 150



Outer diameter Ø (mm)	Art. no.
Ø 110	70 233
Ø 125	70 234
Ø 160	70 234

Backwater valve

Staufix Ø 50 or Ø 75

Standard-compliant in nominal widths
Ø 50 or Ø 75.

Individual drainage points such as washbasins, showers or washing machines can be very simply protected against backwater with the *Staufix Ø 50* or *Staufix Ø 75* backwater valves.

The *Staufix Ø 50* or *Ø 75* can be installed in the pipe to protect several drainage points. There are also additional variants of the *Staufix Ø 50* with siphon traps, with washing machine connections or with inlet funnel for the emergency overflow of heating systems. This ensures that individual drainage points are protected.



Ø 50 or Ø 75 exposed drainage pipe



Washbasins with odour traps and washing machine connection



Washbasins with odour traps and washing machine connection

Standard-compliant

The small backwater valves *Staufix Ø 50* and *Staufix Ø 75* are each equipped with two flaps and an emergency closure – and the first standard-compliant backwater double valves for wastewater without sewage per EN 13564 Type 2.

Area of application

The backwater valves are versatile in use: They can be installed as individual safeguards for washbasins, showers or washing machines, as a central backwater protection in horizontal drainage pipes or as an emergency overflow for heating systems.

Tool-free maintenance

The maintenance and cleaning of the backwater valves is particularly convenient and possible without any tools whatsoever thanks to the quick-release closure.

Twin flap backwater valve *Staufix* Ø 50

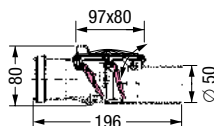
Installation in an exposed wastewater pipe

EN 13564 Type 2

Made of polymer

Twin flaps, self-closing, one of which can be locked by hand as an emergency closure.

Inlet/outlet for connection to HT-pipe according to EN 1451-1.



Outer diameter
Ø (mm)

Art. no.

Ø 50

73 050



EN 13564 Type 2

Twin flap backwater valve *Staufix* Ø 75

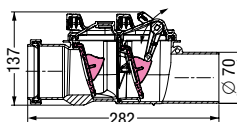
Installation in an exposed wastewater pipe

EN 13564 Type 2

Made of polymer

Twin flaps, self-closing, one of which can be locked by hand as an emergency closure.

Inlet/outlet for connection to HT-pipe according to EN 1451-1.



Outer diameter
Ø (mm)

Art. no.

Ø 75

73 070

EN 13564 Type 2

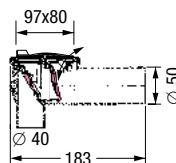
Twin flap backwater valve *Staufix Siphon* Ø 50

Installation in an exposed wastewater pipe

EN 13564 Type 5

Made of polymer, for washing stand siphons

Twin flaps, self-closing, one of which can be locked by hand as an emergency closure, incl. wall attachment, inlet connection Ø 40 (1 1/2 inch) at pipe odour trap. Outlet Ø 50 for connection to HT-pipe according to EN 1451-1.



Outer diameter Ø (mm)	Art. no.
Ø 50	73 051



CE EN 13564 Type 5

Twin flap backwater valve *Staufix Siphon* Ø 50

Installation in an exposed wastewater pipe

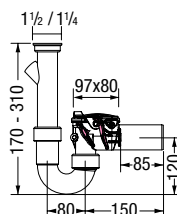
EN 13564 Type 5

Made of polymer

Twin flaps, self-closing, one of which can be locked by hand as an emergency closure, incl. wall attachment, outlet Ø 50 for connection to HT-pipe according to EN 1451-1.

Model contains:

- pipe odour trap
- washing machine connection



Outer diameter Ø (mm)	Art. no.
Ø 50	73 052



CE EN 13564 Type 5

Twin flap backwater valve *Staufix Siphon* Ø 50

Installation in an exposed wastewater pipe

EN 13564 Type 5

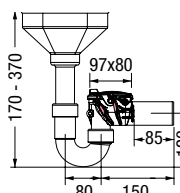
Made of polymer

Two flaps, self-closing, one of which can be locked by hand as an emergency closure, incl. wall attachment. Outlet Ø 50 for connection to an HT-pipe according to EN 1451-1.

Model contains:

- pipe odour trap
- inlet funnel

Installation: Ideal for the emergency overflow of heating systems



Outer diameter Ø (mm)	Art. no.
Ø 50	73 053



CE EN 13564 Type 5

Backwater valve

Multitube

The high-performance solution for larger pipes.

The *Multitube* is a powerful backwater valve for large-diameter pipes in public, municipal and industrial areas. It can be installed in an exposed drainage pipe. The *Multitube* is also completely corrosion free as it is made entirely from polymer. Available in diameters of Ø 260 mm to Ø 515 mm.

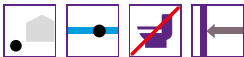
Area of application

The *Multitube* backwater valve is suitable for use in leaching and pond systems and behind cisterns that are separately connected to a rainwater channel or that lead to a drainage ditch. It provides not only reliable protection against backwater, but also provides additional protection against rats, mice, frogs and vermin.



Single flap backwater valve *Multitube*

Installation in an exposed wastewater pipe

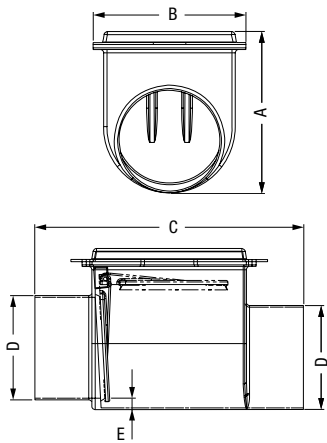


Made of polymer

One self-closing flap



Illustration shows Art. no. 71 400



Outer diameter Ø (mm)	A in mm	B in mm	C in mm	D in mm	E in mm	Connection for pipe size Ø mm	Art. no.
With connection couplings*, for connection to all pipe materials							
Ø 260	485	455	730	260	60	250 - 275	71 250
Ø 320	490	470	825	320	35	310 - 335	71 300
Ø 410	600	610	900	410	30	385 - 410	71 400
Ø 515	730	700	1230	515	40	495 - 525	71 500

*With connection couplings it is possible to connect pipes of different diameters. Connection couplings are necessary where the difference in outer diameter is > 12 mm. Rights reserved for technical changes

Backwater valve

Pipe flap valve

The dependable solution at the end of the pipe.

The self-actuating pipe flap valves prevent undesirable backwash into wastewater pipes in the event of backwater or high water levels. They are made entirely of polymer and so are 100% corrosion-free. The pipe flap valves are available in various sizes from Ø 110 mm to Ø 1.000 mm.

Area of application

Pipe flap valves are used in wastewater without sewage, for example in seawater and freshwater environments. Here they serve as a backwater valve in horizontal pipes leading into chambers or outdoors.



Pipe flap valve

For use as an end piece



Made of polymer

Flap self-closing.

Inlet/outlet for connection to PVC pipe according to EN 1451-1.

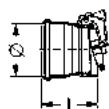


Illustration shows Ø 110 - Ø 200

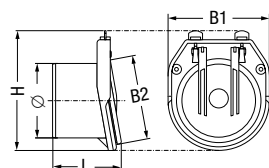


Illustration shows Ø 250 - Ø 638

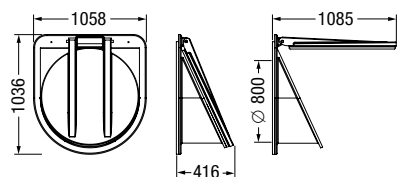


Illustration shows Ø 800

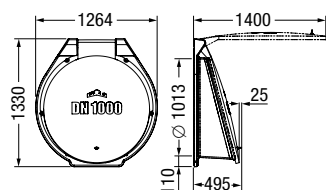


Illustration shows Ø 1000



Illustration shows Ø 160



Illustration shows Ø 250



Illustration shows Ø 800

Outer diameter Ø (mm)	DN	H in mm	L in mm	B1 in mm	B2 in mm	Connection for pipe size Ø mm	Art. no.
-	100	-	120	-	-	Ø 110	79 100
-	125	-	136	-	-	Ø 125	79 125
-	150	-	142	-	-	Ø 160	79 150
-	200	-	170	-	-	Ø 200	79 200

Without connection coupling, connection according to EN 1451-1

Outer diameter Ø (mm)	DN	H in mm	L in mm	B1 in mm	B2 in mm	Connection for pipe size Ø mm	Art. no.
Ø 250	250	400	220	345	280	-	79 250
Ø 315	300	450	225	400	410	-	79 300

With connection coupling*, for connection to all pipe materials

Outer diameter Ø (mm)	DN	H in mm	L in mm	B1 in mm	B2 in mm	Connection for pipe size Ø mm	Art. no.
Ø 405	400	420	295	417	-	Ø 385 - 410	79 400
Ø 506	500	500	320	522	-	Ø 495 - 525	79 500
Ø 638	600	659	345	655	-	Ø 605 - 638	79 600
Ø 800**	-	-	-	-	-	-	79 800
Ø 1000**	-	-	-	-	-	-	79 1000

* With connection couplings it is possible to connect pipes of different diameters. Connection couplings are necessary where the difference in outer diameter is > 12 mm. Rights reserved for technical changes

**For wall installation

Basement drain

The Universal

The versatile drain with backwater valve.

It couldn't be more flexible. *The Universal* is a versatile basement drain for sewage free wastewater. It is equipped with a backwater valve and a manually lockable emergency closure. *The Universal* has three inlets as a standard feature (two in Ø 50 and one in Ø 75 mm), the telescopic upper section is also rotatable, tiltable and height-adjustable. This ensures it provides maximum flexibility for the design and installation. *The Universal* is optionally available with a slotted grating made of polymer or stainless steel.



1 Drain 2 Inlet 3 Steel cover

Basement drain *The Universal*

For installation in a concrete floor/slab



Made in PP

With lateral outlet 2.5°, 2 inlets Ø 50, 1 inlet Ø 75 mm with blind plug, odour trap and sludge trap.

With/without twin flap backwater valve.

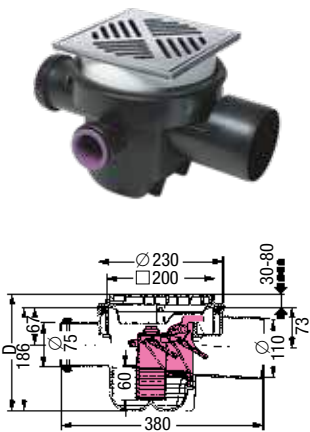
Drainage capacity 1.8 l/sec flow rate.

Installation area 400 × 320 mm

Cover:

Slotted cover 188 × 188 mm made of polymer, black, class K 3;

slotted cover 187 × 187 mm and rim made of stainless steel AISI 304, screwed, class L 15



➤ **Accessories:** see pages 38 – 39

With twin flap backwater valve

Outer diameter Ø (mm)	Installation depth D in mm	Art. no.
With black cover		
Ø 110	216 - 276	27 611
With stainless steel cover		
Ø 110	216 - 266	27 621

Without twin flap backwater valve

Outer diameter Ø (mm)	Installation depth D in mm	Art. no.
With black cover		
Ø 110	216 - 276	29 111
With stainless steel cover		
Ø 110	216 - 266	29 121

Basement drain *Drehfix*

The compact drain for renovation.

The *Drehfix* is a basement drain with integrated, removable backwater valve (Type 5). In addition, it protects connected discharge points such as washbasins, showers or washing machines against wastewater from the sewer. With odour trap, sludge bucket, manually locked emergency closure and a discharge rate of 1.8 l/s, it can be used flexibly and is so compact that it fits in the recesses of old cast iron drains. It is therefore ideally suitable for renovation projects.



1 Drain 2 Inlet

Basement drain *Drehfix*

For installation in a concrete floor/slab



Made in ABS

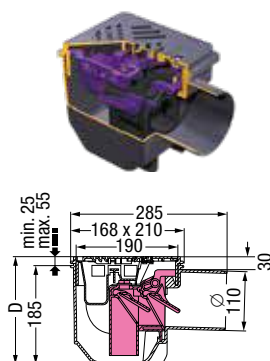
With lateral outlet 2.5°,
with/without removeable twin flap
backwater valve and emergency closure
which can be locked by hand, odour trap
and sludge trap and integrated, height
adjustable upper section.

Drainage capacity 1.8 l/sec flow rate.

Installation area 320 × 190 mm

Cover:

Slotted cover 150 × 190 mm made of
polymer, black, with Easy Entry Function,
class K 3



Outer diameter Ø (mm)	Installation depth D in mm	Art. no.
With twin flap backwater valve		
Ø 110	210 – 240	27 301
Without twin flap backwater valve		
Ø 110	210 – 240	33 101

➤ **Accessories:** see pages 38 – 39

Accessories

The Universal / Drehfix

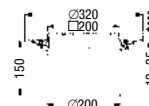
Variofix shallow bed upper section

for basement drain *The Universal*

Art. no.

Variofix shallow bed upper section

Inclusive: Waterproofing membrane
Cover: Slotted cover and rim in stainless steel AISI 304, screwed, class K 3



48 968

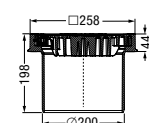
Extension section in *Ecoguss*

for basement drain *The Universal*

Art. no.

with support rim and slotted cover

Version: With support rim 250 × 250 mm
Cover: Round slotted cover in *Ecoguss*, Ø 235 mm, class B 125, *Lock & Lift* System



67 985

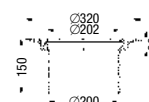
Extension section

for basement drain *The Universal*

Art. no.

with pressure sealing flange and counter flange

Inclusive: Waterproofing layer against ground moisture
Height: 150 mm



27 298

Waterproofing membrane



48 651

2 component adhesive

Compatibility: For gluing of KESSEL waterproofing membranes

48 650

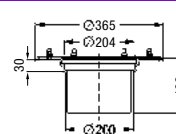
Extension section in *Ecoguss*

for basement drain *The Universal*

Art. no.

with pressure sealing flange and counter flange

Additional function: For installation in waterproof concrete
Height: 166 mm



48 958

Elastomer waterproof membrane

Material: NBR



48 982

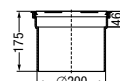
Extension section

for basement drain *The Universal*

Art. no.

Extension section

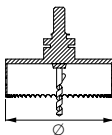
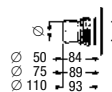
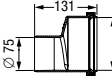
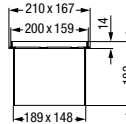
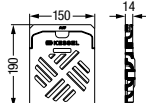
Inclusive: Lip seal
Height: 175 mm



48 988

Accessories

The Universal / Drehfix

Hole saw				Outer pipe diameter in mm	Drill size in mm	Art. no.
Hole saw set	Inclusive: Saw blade holder			Ø 50	60	500 101
				Ø 75	92	
				Ø 110	121	
Inlet adaptor				Outer diameter Ø (mm)	Drill size in mm	Art. no.
for basement drain <i>Drehfix</i>						
Inlet adaptor	Inclusive: Flat seal			Ø 50	60	39 005
				Ø 75	92	39 007
				Ø 110	121	39 100
Transition section				Outer diameter Ø (mm)		Art. no.
for basement drain <i>The Universal</i> and <i>Drehfix</i>						
Transition section	Inklusive: Ø 110 socket / Ø 75 spigot for use as connection piece, gasket			Ø 75/110		27 602
Rodent protection						Art. no.
for basement drain <i>The Universal</i> and <i>Drehfix</i>						
Rodent protection	Material: Stainless steel					27 609
Twin-flap backwater protection insert						Art. no.
for basement drain <i>The Universal</i> with twin flap backwater valve						
with integrated odour trap	Inclusive: Odour trap (62 mm)					27 603
Extension section / slotted cover / sludge trap						Art. no.
for basement drain <i>Drehfix</i>						
Extension section	Compatibility: For recessed installation Height: 183 mm					38 670
Slotted cover	Version: Class K 3, with recessed handle for cover removal					27 205
Sludge trap	Version: With integrated handle for removal					27 308

Standard backwater chamber or modular backwater chamber Ø 1000 with *Controlfix* clean out

The robust solution in front of the building

A backwater chamber in front of the building offers significant advantages. It enables all drainage points that are at risk of backwater to be safeguarded outside the building at a single central and maintenance-friendly point. Noise nuisance, for example due to pumps or similar, can be ruled out and there is no loss of living space in the building.

Double use

The backwater chamber can simultaneously be used as a transition chamber – with two side inlets for the drainage of the building, roof and yard.

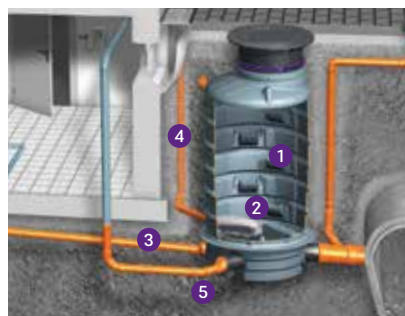


Thanks to the clean out *Controlfix*, the backwater chambers can be equipped with various conversion kits:

- Conversion kit *Staufix SWA*: Page 59
- Conversion kit *Staufix FKA*: Page 59
- Conversion kit *Pumpfix F*: Page 59

Standard backwater chamber Ø 1000 with *Controlfix*

Thanks to its monolithic construction using unbreakable, impact-resistant material, the standard backwater chamber Ø 1000 is permanently leak-proof and secure against the ingress of roots. In addition, it can also be ideally adapted to the ground level thanks to its vertically, adjustable upper section.



- 1 Backwater chamber
- 2 Clean out
- 3 Basement drains
- 4 Roof drains
- 5 Basement drainage

Modular backwater chamber Ø 1000 with *Controlfix*

Thanks to its modular construction with a technical module as well as a large selection of chamber modules and upper sections, the modular backwater chamber can be adapted to suit any individual installation situation. Frost-free installation up to a depth of 3.000 mm



- 1 System base
- 2 Clean out
- 3 System chamber
- 4 Height adjustable upper section

Backwater inspection chamber Ø 1000 with *Controlfix*

For underground installation



Z-42.1-333

Polyethylene PE-HD

Monolithic design, with open continuous channel and clean out *Controlfix*, with integrated access steps, watertight, resistant to aggressive wastewater, with telescopic height-adjustable protective cover made of polymer for use during the construction period (can be used as a cover in green areas).

Triple 160 mm hub type gasketed inlets (left and right inlets with open channel passage through chamber, center hub inlet connected to housing for insertion of KESSEL backwater valve). Available backwater valve options - KESSEL *Staufix SWA*, KESSEL *Staufix FKA* or KESSEL *Pumpfix F*.

For connection to PVC pipe according to EN 1401-1 and PE-HD connections according to EN 12666-1.

Installation:

Handles groundwater depths up to 2000 mm

Distance from base of chamber to:

Base of inlet approx. 136 mm

Base of outlet approx. 108 mm

Note: Further chamber heights (on request)

➤ **Accessories:** pages 45 – 47



Installation depth in mm

Art. no.

3 inlets Ø 160 / 1 outlet Ø 200

H1: 1180	88 10 05
H2: 1680	88 15 05
H3: 2180	88 20 05
H4: 2680	88 25 05
H5: 3180	88 30 05

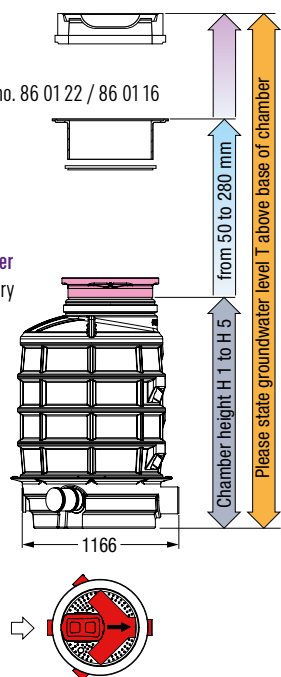
3 inlets Ø 160 / 1 outlet Ø 160

H1: 1180	88 10 05-DN 150
H2: 1680	88 15 05-DN 150
H3: 2180	88 20 05-DN 150
H4: 2680	88 25 05-DN 150
H5: 3180	88 30 05-DN 150

Standard cover on-site

Accessories Art. no. 86 01 22 / 86 01 16

Inspection chamber
including temporary
construction
debris cover



Engineering systems base backwater chamber with *Controlfix*

For installation in a concrete slab or outdoor underground installation



Polyethylene PE-HD

Version:

- integrated clean out *Controlfix*
- closed channel passage or two inlets in direction of flow

Installation:

Handles groundwater depths up to 3000 mm

➤ **Accessories:** pages 45 – 47

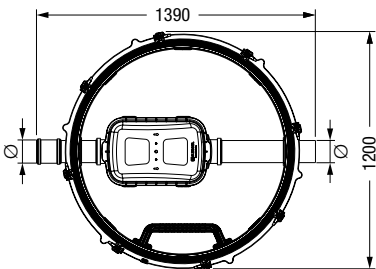
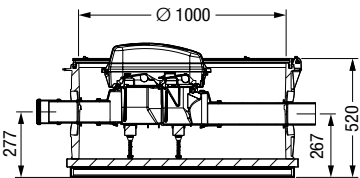


With closed channel passage

Outer diameter Ø (mm)	Art. no.
Ø 110	85 10 01
Ø 125	85 12 51
Ø 160	85 15 01

With two inlets 90° in flow direction

Outer diameter Ø (mm)	Art. no.
Ø 110	85 10 03
Ø 125	85 12 53
Ø 160	85 15 02



Engineering systems base backwater chamber in combination with system chamber Ø 1000

Conversion options

Conversion kit *Staufix SWA*

Conversion kit *Staufix FKA*

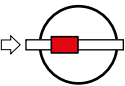
Conversion kit *Pumpfix F*



Channel passage:

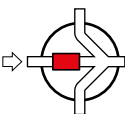
with closed channel passage Ø...

Version Ø 200: (on request)



with two inlets in direction of flow Ø...

left + right 90°



Engineering system chamber Ø 1000 with access opening Ø 600

for combination with engineering system base

EN 13598 Part 2 Z-42.1-527

Made of polyethylene PE-HD

Installation: For underground installation; handles groundwater depths up to 3000 mm

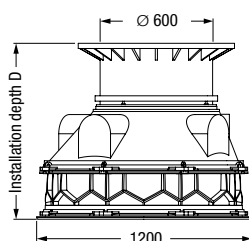
Modular design comprising:

- chamber rings with access steps fitted
- with telescopic height adjustable upper section
- round cover made of cast iron
- includes all sealing gaskets and wedge connectors required for installation

Delivery: As individual elements

Remark: Covers surface water tight

Note: Additional installation depths (on request)



Installation depth D in mm	Class A/B	Class D
	Art. no.	Art. no.
1130 - 1379	874 00 18	874 00 19
1380 - 1629	874 00 24	874 00 25
1630 - 1879	874 00 30	874 00 31
1880 - 2129	874 00 36	874 00 37
2130 - 2379	874 00 42	874 00 43
2380 - 2629	874 00 48	874 00 49
2630 - 2879	874 00 54	874 00 55
2880 - 3129	874 00 60	874 00 61

EN 13598 Part 2 Z-42.1-527

Engineering system chamber Ø 1000 with access opening Ø 800

for combination with engineering system base

EN 13598 Part 2 Z-42.1-527

Made of polyethylene PE-HD

Installation: For installation in the concrete slab; handles groundwater depths up to 3000 mm

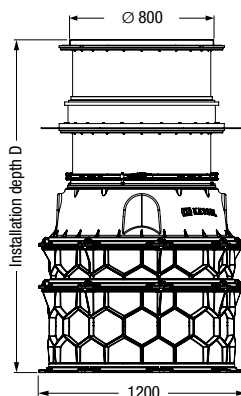
Modular design comprising:

- for waterproof concrete with flange and counter flange
- chamber rings with access steps fitted
- with telescopic height adjustable upper section
- square cover made of stainless steel, class A/L 15
- includes all sealing gaskets and wedge connectors required for installation

Delivery: As individual elements

Remark: Covers surface water tight

Note: Additional installation depths, upper sections and covers class B/D (on request)



Cover tileable

Installation depth D in mm	Art. no.
628 - 877	874 00 03
878 - 1127	874 00 09
1128 - 1377	874 00 15
1378 - 1627	874 00 21
1628 - 1877	874 00 27

Cover not tileable, anti-slip

Installation depth D in mm	Art. no.
613 - 862	874 00 05
863 - 1112	874 00 11
1113 - 1362	874 00 17
1363 - 1612	874 00 23
1613 - 1862	874 00 29

EN 13598 Part 2 Z-42.1-527

Engineering system chamber Ø 1000 with access opening Ø 800

for combination with engineering system base

EN 13598 Part 2 Z-42.1-527

Made of polyethylene PE-HD

Installation: For underground installation; handles groundwater depths up to 3000 mm

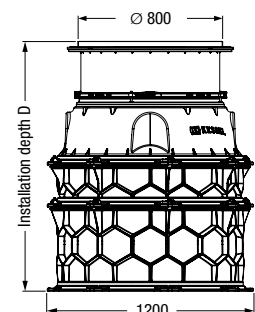
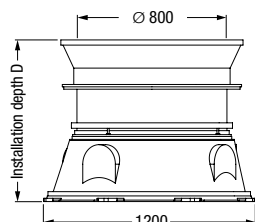
Modular design comprising:

- chamber rings with access steps fitted
- with telescopic height adjustable upper section
- covers made of stainless steel
- includes all sealing gaskets and wedge connectors required for installation

Delivery: As individual elements

Remark: Covers surface water tight

Note: Additional installation depths, upper sections and covers class B/D (on request)



Round cover

Installation depth D in mm	Art. no.
Class K 3	
375 - 624	874 01 22
625 - 874	874 01 23
875 - 1124	874 01 24
1125 - 1374	874 01 25
1375 - 1624	874 01 26
1625 - 1874	874 01 27
1875 - 2124	874 01 28
2125 - 2374	874 01 29
2375 - 2624	874 01 30
2625 - 2874	874 01 31
2875 - 3124	874 01 32

Square cover

Installation depth D in mm	Art. no.
Class B	
620 - 869	874 01 41
870 - 1119	874 01 42
1120 - 1369	874 01 43
Class D	
620 - 869	874 01 58
870 - 1119	874 01 59
1120 - 1369	874 01 60

Square cover

Installation depth D in mm	Art. no.
Class A/L 15, not tileable, anti-slip	
396 - 645	874 00 04
646 - 895	874 00 10
896 - 1145	874 00 16
1146 - 1395	874 00 22
1396 - 1645	874 00 28
1646 - 1895	874 00 34
1896 - 2145	874 00 40
2146 - 2395	874 00 46
2396 - 2645	874 00 52
2646 - 2895	874 00 58
2896 - 3145	874 00 64
Class A/L 15, tileable	
411 - 660	874 00 02
661 - 910	874 00 08
911 - 1160	874 00 14
1161 - 1410	874 00 20
1411 - 1660	874 00 26
1661 - 1910	874 00 32
1911 - 2160	874 00 38
2161 - 2410	874 00 44
2411 - 2660	874 00 50
2661 - 2910	874 00 56
2911 - 3160	874 00 62

Accessories

Backwater chambers

Conversion kits

for models made on or after 01/2011

Art. no.

Backwater pumping Pumpfix F

Compatibility: Backwater inspection chamber Ø 1000, for Ø 110 – Ø 200*
Inclusive: Komfort control unit
Cable length: 15 m
➤ **Cable extension:** page 36



80 102



Motorized backwater valve Staufix FKA

Compatibility: Backwater inspection chamber Ø 1000, for Ø 110 – Ø 200*
Inclusive: Komfort control unit
Cable length: 15 m
➤ **Cable extension:** page 36



80 104



Backwater valve Staufix SWA

Compatibility: Backwater inspection chamber Ø 1000, for Ø 110 – Ø 200*



80 091



* In-/Outlet Ø 200, hydraulics corresponds to Ø 160

Cover plates

for backwater inspection chamber Ø 1000

Cover

Art. no.

with ventilation

Material:
Class A, B in cast iron and concrete
Class D in cast iron



Class A 860 134
Class B 860 135
Class D, locked 860 137

surface water tight

Material: In cast iron



Class A, locked 860 132
Class B, locked 860 133
Class D, locked 860 136

Material: In cast iron and concrete



Class A 860 130
Class B 860 131

Upper sections

for backwater inspection chambers Ø 1000

Art. no.

with recesses for a sludge bucket

Compatibility: Not for surface water tight cover plates class A/B/D
Inclusive: Fixing ring
Installation: Telescopic height adjustable from 100 to 550 mm



860 120

without holders for sludge buckets

Compatibility: Cover plates class A/B/D
Inclusive: Fixing ring
Installation: Telescopic height adjustable from 100 to 550 mm

860 121

can be assembled with standard concrete rings

Compatibility: For standard bearing ring / concrete/cast covers, class A/B/D
Installation: Telescopic height adjustable from 50 to 280 mm

860 122



Compatibility: For standard bearing ring / concrete/cast covers, class A/B/D
Installation: Telescopic height adjustable from 50 to 550 mm

860 125

Accessories

Backwater chambers

Gasket / Embedded step / Locking and removal key

Compatibility see product description

Outer diameter
Ø (mm)

Art. no.

Lip gasket

Compatibility: Art. no. 860 122, 860 125, 860 120, 860 121



Ø 600

860 116

Embedded step

Compatibility: Art. no. 860 122, 860 125, 860 120, 860 121

Inclusive: Drilling template, step, hand rail, screws

Note: The embedded step can be fitted to the upper section (Art. no. **860 120, 860 121, 860 122**) in the factory at an additional charge



860 109

Cable piping gasket set

Compatibility: Control unit 230 V

Inclusive:

- ① Pipe sealing gasket
- ② PVC-collar plug
- ③ Twin flange Ø 110
- ④ HT-collar plug
- ⑤ Cable connections
- ⑥ Retaining clip with screws



Ø 110

85 410

Locking and removal key

Compatibility: Chamber cover



915 595

Set of connecting wedges

Compatibility: Art. no. 680 371 and 680 370
Set-content: 10 pieces



680 373

Profiled gasket

Compatibility: Art. no. 680 371 and 680 370



680 125

Cable attachment set

Compatibility: Engineering systems base backwater chamber Ø 1000



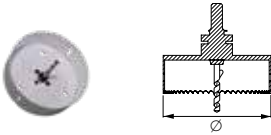
28 076

Accessories

Backwater chambers

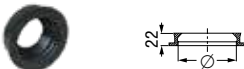
Hole saw

Compatibility see product description

Hole saw set	Inclusive: Saw blade holder		Outer pipe diameter in mm	Drill size in mm	Art. no.
			Ø 50	60	500 101
			Ø 75	92	
			Ø 110	121	
			Ø 110	121	500 100
			Ø 125	133	
			Ø 160	168	

Sealing

Compatibility see product description

Pipe sealing gasket	Drill size:		Nominal pipe diameter in mm	Outer pipe diameter in mm	Art. no.
	Ø 50: 60 mm		DN 50	Ø 50	850 114
	Ø 75: 92 mm		DN 70	Ø 75	850 116
	Ø 110: 121 mm		DN 100	Ø 110	850 117
	Ø 125: 133 mm		DN 125	Ø 125	850 118
	Ø 160: 168 mm		DN 150	Ø 160	850 119

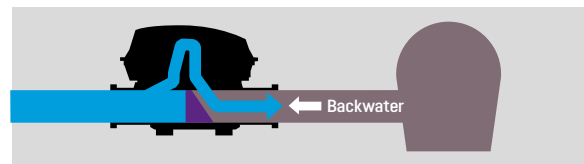
Extension section

for engineering systems base backwater chamber

			Art. no.
500 mm	Inclusive: 2 access steps, installed Note: Without gasket and connecting wedges		680 371
250 mm	Inclusive: 1 access step, installed Note: Without gasket and connecting wedges		680 370

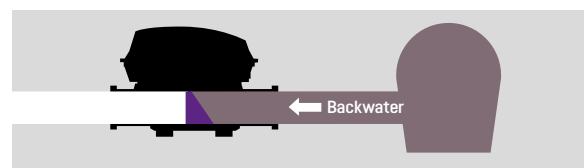
Pumpfix F, Staufix FKA, Staufix SWA**Do you have a toilet in the basement?**

Pumpfix F uses the natural gradient to the sewer!

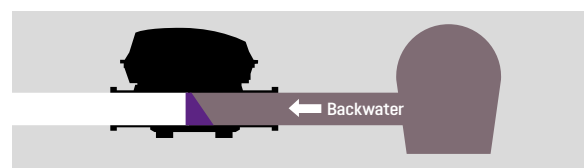


- Minimum energy consumption
- No pumping noises – increased living comfort
- No interruption in operation in the event of a power failure
- Integrated drain function

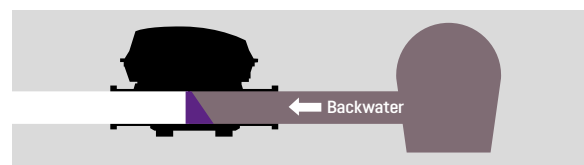
... or protect your basement using the motorised backwater valve *Staufix FKA* or mechanical backwater valve *Staufix SWA*.

*Staufix Basic, Staufix***Multiple basement drainage pipes connected to a single main wastewater pipe ...**

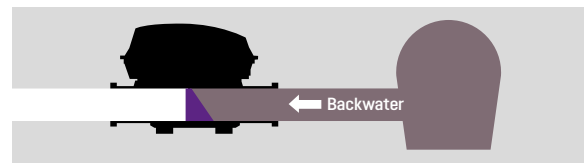
... centrally protect multiple drainage fixtures against backwater using the Staufix backwater valve.

*Staufix, Staufix Siphon***Sink, shower, washing machine, heating overflow**

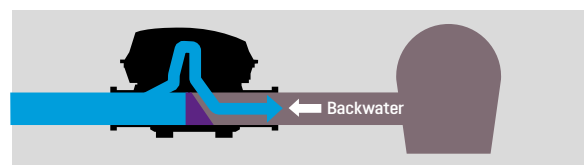
Protect the drainage fixtures elements with *Staufix* backwater valve Ø 50, Ø 75 or *Staufix Siphon* Ø 50.

*Drehfix, „The Universal“***Floor drain**

Use *Drehfix* or „The Universal“.

*Pumpfix S***Flooding through basement steps or windows**

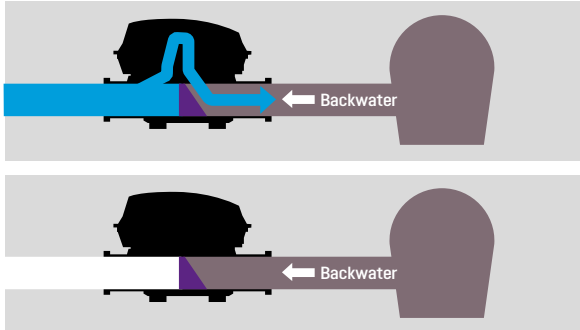
Pumpfix S pumps the basement dry!



Underground backwater protection

Triple inlet underground chamber for rainwater, above ground sewer and underground sewer pipe connections. For use with KESSEL *Staufix SWA*, *Staufix FKA* and *Pumpfix F* backwater valves.

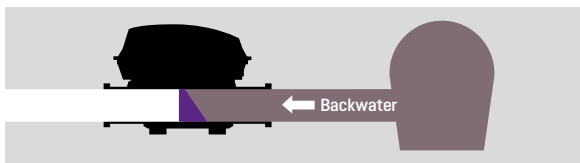
Backwater inspection chamber



In-line single flap backwater protection

For indoor or outdoor underground backwater protection in industrial sized gravity wastewater pipes.

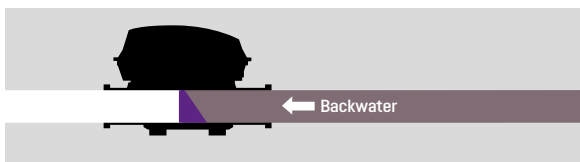
Multitube



End of pipe backwater protection

Protection of water discharge from large public, municipal and industrial sector drainage pipes into flood prone areas (rivers, oceans and large public sewers).

Pipe flaps



This is KESSEL.

Since 1963, KESSEL has stood like no other company for innovative and safe draining technology. We have established ourselves as the impulse generator of the branch for decades and are now a premium international supplier.



500+
employees



**103 million
euros**
annual turnover (2018)



92,920 m²
factory space



54
export markets

Alongside continuous quality assurance, environmental protection, energy efficiency as well as health and safety at work are especially important to us – both in production and during the operation of our product solutions at the customer's.

We also set great store by sustainability in our customer relations. For this reason, we offer a unique range of services from consultation and planning through installation and commissioning to regular maintenance.

One thing is certain: we remain with quality, innovation, safety and service at the top among the leaders in technology development to live up to our vision again and again:

KESSEL – Leading in drainage



Made in Germany



The KESSEL plant Lenting (Germany)

Leading in drainage.

No matter whether the task involves discharging water, wastewater treatment or backwater protection: if the best solution is required, there is no option but KESSEL.

Backwater protection

Pump technology

Separator technology



For further information
visit

www.kessel.com



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BIM

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Subject to technical modifications.

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