Basement drain \_\_\_\_\_\_



# Simply simpler!

Simply installed, simply safe, simply affordable:

The new *Universale Plus* basement drain with backwater valve according EN 13564 – in the base plate rather than underneath, for the first time.

www.kessel.com

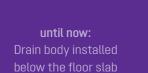
#### **Overview**

### Simply versatile simply advantageous

#### The vertical drain with backwater valve according EN 13564

More advantages, less hassle with an extra measure of innovation: this plan works out! On the following pages you will find out how the Universale Plus basement drain with integrated backwater valve and odour trap makes it even easier for you to drain basement rooms in future.

But that's not all. Also discover why you not only save time but also save money with the Universale Plus - from the design to the installation through to maintenance.







**now new:** Drain body installation in the floor slab

# Simply and systematically safe

You can select your *Universale Plus* basement drain as a complete item or assemble it individually using the modular system – from the waterproof sealing flange through to the variable upper section.



## Simply thought out

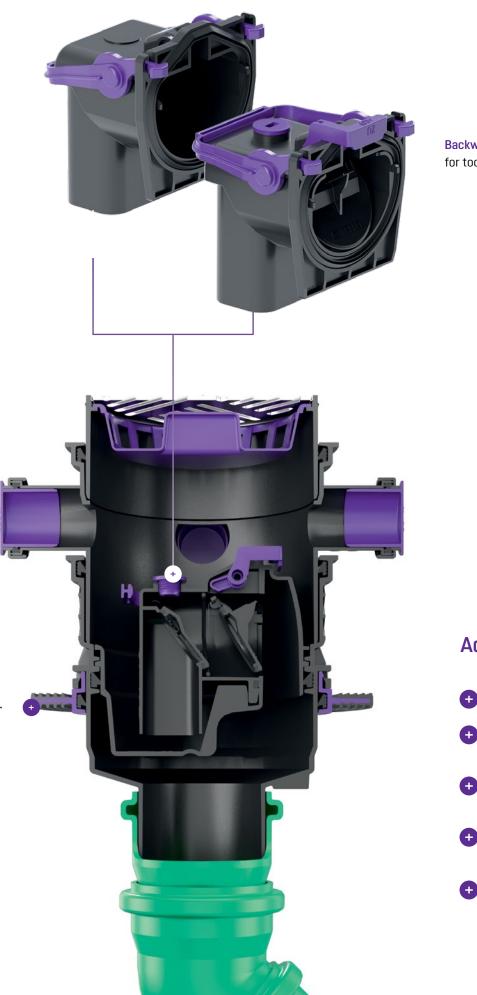
The drain body of the *Universale Plus* basement drain has a vertical outlet and an integrated backwater valve. The advantage of this new design: Both the backwater unit and the inlet to the main drainage pipe are no longer installed deep under the floor slab and so remain easily and completely accessible. In combination with a clear pipe cross-section, maintenance and cleaning work on the main drainage pipe are made considerably easier.

The Universale Plus is to be installed in waterproof concrete? No problem. A waterproof sealing flange is installed in the factory or is available as an optional accessory in the modular system. Particularly practical: It can be clicked in without tools and is therefore always positioned correctly.



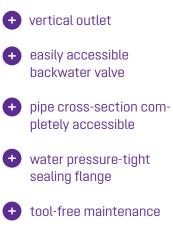
Universale Plus drain body Versions with backwater valve including odour trap or only odour trap

Waterproof sealing flange (MFPA Leipzig tested) factory-mounted or available as optional accessory



Backwater unit or odour trap for tool-free installation

#### **Advantages**



#### **Advantages**



+ extension section with three inlets Ø 50

+ installation above the floor slab

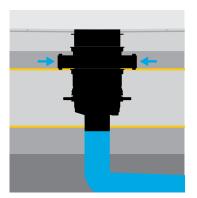
+ separation of building shell/sanitary trades

+ rotatable



# Extension section Simply practical

interior finishes trades is possible.



inlets above the floor slab

Another new feature of the *Universale Plus* is its innovative extension section, in which three inlets are integrated. Using this method, for the first time, the inlets are above the floor slab. Thus two advantages go hand-in-hand: On the one hand, the floor slab now only has to be penetrated once – on the other hand, clear separation of the building shell and

# Upper section Simply flexible

Attractive stainless steel look, tried and tested polymer or durable *Ecoguss*: The variety of the upper sections is as different as the possible uses of the *Universale Plus*. Regardless of the material, all versions have one thing in common: All are rotatable, tiltable and can be adjusted vertically – always suitable for the individual installation situation.

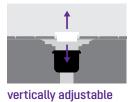




#### **KESSEL AG**

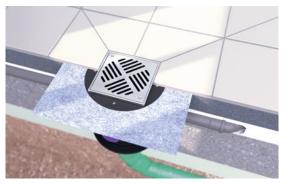




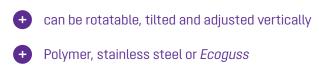




Variofix upper section for combined waterproofing



#### **Advantages**

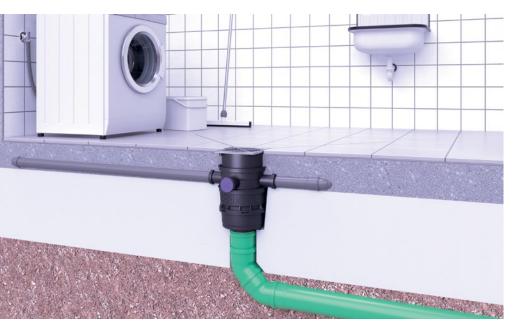


Class K 3 to B 125 Đ

Attractive appearance

# Simply dry in housing

Basement rooms in the house must be drained reliably and protected against backwater – in private households this applies to laundry rooms particularly frequently. The three inlets of the *Universale Plus* are eminently suitable to discharge the wastewater produced by the washing machine, washbasin, etc. As the inlets are above the floor slab, only a single penetration of the floor slab is necessary: That reduces the risk of moisture penetrating from below, which can cause serious structural damage in the long term. The *Universale Plus* therefore protects private households even more reliably.



The installation is also possible without waterproofing where high groundwater is not an issue





With Ecoguss upper section for up to 12.5 tonne loads

# Simply stable in non-housing areas

Whether underground car park, storage room or workshop: Safe drainage of basement rooms is also necessary in nonhousing applications. Here the *Universale Plus* can be relied upon – with the *Ecoguss* upper section even up to load class B 125. This means that it can also be driven on by pallet trucks or forklift trucks. Thanks to its corrosion resistance, stability and maintenance friendliness, the *Universale Plus* will be your reliable partner for many years to come.

#### **KESSEL AG**

### Simply affordable

Cost efficient, from the planning through to the maintenance: The Universale Plus is the drainage solution for basements with which you can save time and money during its entire product life cycle. Where precisely are the potential savings? We show this using a specific example.



The situation: Installation of a basement drain in housing in conjunction with a floor slab made of waterproof concrete and three inlets for connecting a shower, washbasin and washing machine. From the main drainage pipe to the combined waterproofing. Thickness of the floor slab including perimeter insulation 500 mm.

#### Work it out for yourself!

Classic installation below the floor slab	Installation with Universale Plus	
Drain bodies	<i>Universale Plus</i> with <i>Variofix</i> upper section (Art. no. 27 651)	
+ 3x inlet sockets Ø 50	-	
+ 3x 0.5m pipe Ø 50 to EN 1610	-	
+ 3x puddle flanges Ø 50	-	
+ 1x extension for drain body 0.5m Ø 200	-	
+ 1x puddle flange Ø 200	-	
_	+ Extension with 3 inlets Ø 50 (Art. no. 48 966)	
+ Horizontal pipes to discharge points	+ Horizontal pipes to discharge points	
+ upper section for combined waterproofing with stainless steel cover	-	
+ Time needed to attach the inlet sockets, lay the inlet pipes below the floor slab to EN 1610, waterproofing and fixing work for inlet pipes	-	

### **Universale Plus** Article overview

 $\rightarrow$ 

Find the suitable product for your individual installation situation in the article overview on the following pages.

#### Universale Plus basement drain

with backwater valve

#### **( €** EN 13564 Type 5

The polymer *Universale Plus* basement drain is equipped with a removable backwater valve with two backwater flaps, one hand-lockable emergency closure and a sludge bucket.

#### Material: PP

Version includes:

- vertical outlet, Ø 110
- with backwater valve
- odour trap
- sludge bucket

Cover:

• Slotted cover 187×187 mm and frame made of 304 stainless steel, screwed, class K 3

Sealing water height: 60 mm

Drainage capacity with backwater valve: 1.7 L/s Cut-out dimensions: 310 × 310 mm

Accessories: see pages 22 − 23



Fig.: Article 27 671

#### With twin flap backwater valve

Outer diameter Installation depth Ø (mm) D in mm		Art. no.
With stainless ste	eel cover	
<u>я</u> 110	293 - 350	27 671

#### Universale Plus basement drain

with water pressure-tight sealing flange, with / without backwater valve

#### **C E** EN 13564 Type 5

The polymer Universale Plus is equipped with/ without a removable backwater valve with two backwater flaps, one hand-lockable emergency closure and a sludge bucket.

#### Material: PP

Version includes:

- vertical outlet, Ø 110
- factory-mounted flange for installation in waterproof concrete
- with/without backwater valve
- odour trap
- sludge bucket

#### Cover:

- Slotted cover 188×188 mm made of polymer, black, Class K 3
- Slotted cover 187×187 mm and frame made of 304 stainless steel, screwed, class K 3

#### Sealing water height: 60 mm

Drainage capacity with backwater valve: 1.9 L/s Drainage capacity without backwater valve: 2.5 L/s Cut-out dimensions: 310 × 310 mm

Accessories: see pages 22 − 23



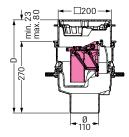
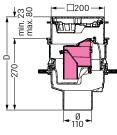


Fig.: Article 27 631



With twin flap backwater valve

Outer diameter Ø (mm)	Installation depth D in mm	Art. no.
With black cover		
Ø 110	293 - 350	27 631
With stainless ste	eel cover	
Ø 110	293 - 340	27 641

#### Without twin flap backwater valve

Outer diameter Ø (mm)	Installation depth D in mm	Art. no.
With black cover	· · ·	
Ø 110	293 - 350	29 131
With stainless st	eel cover	
Ø 110	293 - 340	29 141

Fig.: Article 29 131

#### Universale Plus basement drain

with water pressure-tight sealing flange, with / without backwater valve

#### **( €** EN 13564 Type 5

The polymer Universale Plus basement drain is used for drainage of non-faecal wastewater and is equipped with/without a removable backwater valve with two backwater flaps and a hand-lockable emergency closure. Including temporary protective cover.

#### Material: PP

#### Version includes:

- vertical outlet, Ø 110
- with Variofix upper section for combined waterproofing and enclosed waterproofing membrane to DIN 18534-1-W3-I
- factory-mounted flange for installation in waterproof concrete
- with/without backwater valve
- odour trap

#### Cover:

• Slotted cover 187×187 mm and frame made of 304 stainless steel, screwed, class K 3

Sealing water height: 60 mm

Drainage capacity with backwater valve: 1.7 L/s Drainage capacity without backwater valve: 2.3 L/s Cut-out dimensions: 310 × 310 mm

Accessories: see pages 22 − 23



#### With twin flap backwater valve

Outer diameter Ø (mm)	Installation depth D in mm	Art. no.
Ø 110	309 - 408	27 651

#### With twin flap backwater valve

Outer diameter Ø (mm)		
Ø 110	309 - 408	29 151

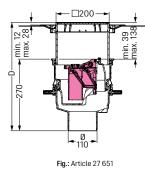


Fig.: Article 27 151

### Backwater valve The Universal

#### The basement drain with horizontal outlet

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 flexibilty for the design and installation. *The Universal* is optionally available with a slotted cover made of polymer or stainless steel.



1 Drain 2 Inlet 3 Steel cover

...

#### Backwater valve The Universal

For installation in a concrete floor/slab

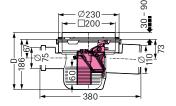
#### **( €** EN 13564 Type 5

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. Sealing water height 60 mm. 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

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

Accessories: see pages 22 − 23





#### 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 stee	el cover	
Ø 110	216 - 266	27 621

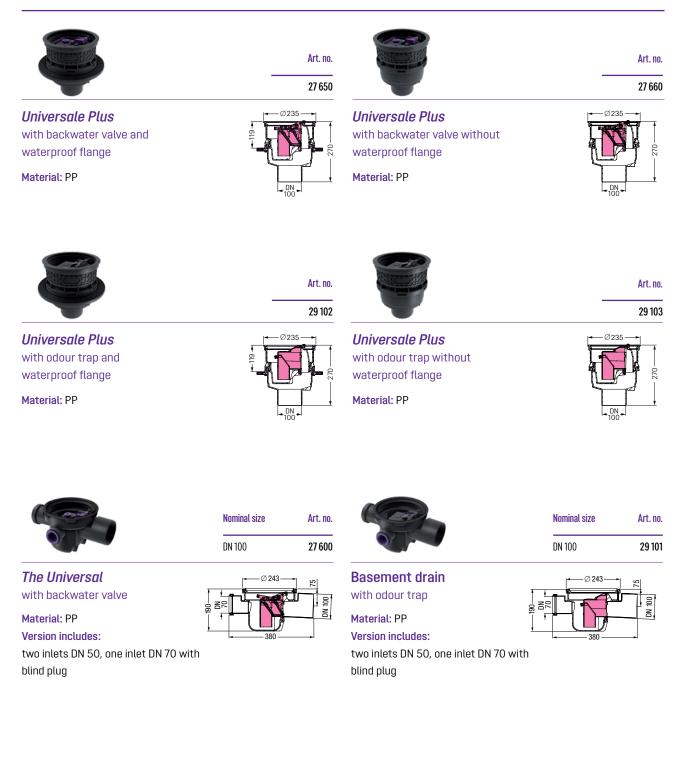
#### Without twin flap backwater valve

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

#### Modular system

Universale Plus / The Universal / Basement drains without backwater valve

#### **Drain body**



#### Modular system

Universale Plus / The Universal / Basement drains without backwater valve

#### Upper sections with slotted cover







#### made of polymer

**Cover:** slotted cover and frame made of 304 stainless steel, screwed, class K 3 **Compatibility:** System 200

←□200→	ŧ
	82-1
<u>-</u> Ø200	+

#### made of polymer

Cover: Slotted cover made of polymer, black, class K 3 Compatibility: System 200



Art. no.

48 964

#### Accessories

Universale Plus / The Universal / Basement drains without backwater valve

Universule Plus / The Universul / Bas		
Waterproof flange		Art. no.
Material: PP Compatibility: Article <b>27 660, 29 103</b>		48 967
Extension section		Art. no.
Material: PP Compatibility: System 200	with 3 inlets	48 966
<ul> <li>Material: Polymer</li> <li>Version: <ul> <li>H = 150 mm</li> </ul> </li> <li>Waterproofing layer against ground moisture</li> </ul> <li>Compatibility: System 200</li>	with pressure sealing flange and mating flange	27 298
Waterproofing membrane		Art. no.
Compatibility: Article 27 298	Waterproofing membrane	48 651
	Installation adhesive for waterproofing membranes 2C installation mortar	48 650
Extension section		Art. no.
Material: <i>Ecoguss</i> Version: • for installation in waterproof concrete • H = 166 mm Compatibility: System 200	with pressure sealing flange and mating flange	48 958

#### **Accessories**

Universale Plus / The Universal / Basement drains without backwater valve



#### Extension section

usable as connector, seal

 Material: Polymer
 48 988

 Version: H = 175 mm
 Image: Compatibility: System 200

 Including: Lip seal
 Image: Comparison of the seal

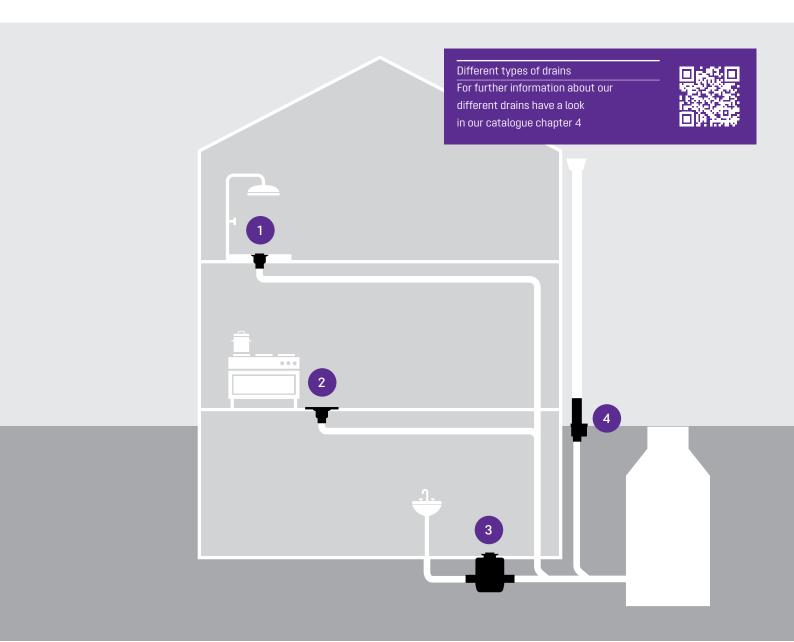
Adaptor		Nominal size Art. r	<b>NO.</b>
Material: Polymer		DN 70/100 27 6	02
Compatibility: Article 27 611, 27 621,	-131		
27 301, 29 111, 29 121, 33 101, 36 101	DN 100		
Including: Ø 110 socket / Ø 70 spigot			

Backwater valve		Art. no.
Material: Polymer Version includes: Module with two flaps, odour trap (62 mm) Compatibility: suitable for The Universal, Universale Plus	with integrated odour trap	27 603

Rat protection		Art. no.
Material: Stainless steel		27 609
Compatibility: Article 27 611,	())III	
27 621, 27 301, 29 111, 29 121,	4*	
33 101, 51 101, 52 101		

Art. no.

### KESSEL offers a big range of **different types of drains**





2

#### **Bathroom drains**

**Floor drains** 

Bathroom drainage tailored to requirements

Floor drains with versatile properties



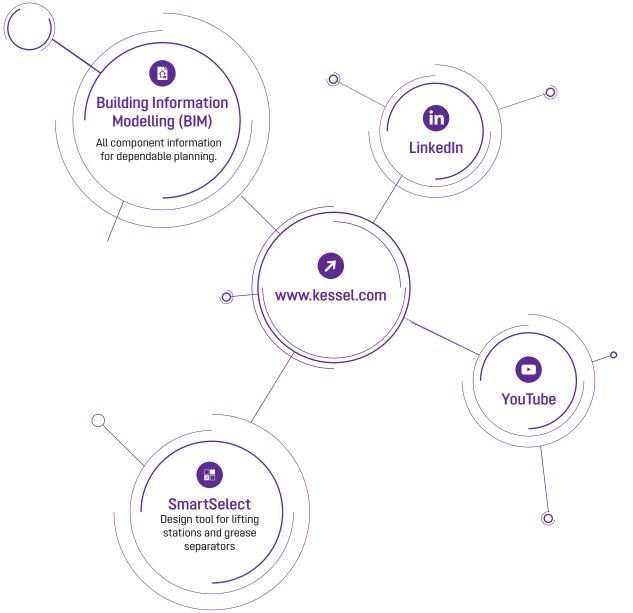
**Basement drains** For dry floors in basement rooms



**Outdoor drains** Robust solutions for particular loads

### Our digital services offer

With KESSEL SmartServices the future has already arrived for each of our drainage products. For you as a customer, this not only means extensive digital support for design, installation and operation – but also the certainty that we continue to develop our services for your benefit.



**KESSEL AG** 



BIM





SmartSelect



LinkedIn

YouTube

### This is **KESSEL**.

Since 1963, KESSEL has stood like no other company for innovative and reliable drainage technology. We have established ourselves as the impulse generator in the industry and are now a worldwide premium supplier.



During the production of our products as well as their operation on-site, we keep quality assurance, environmental protection and worker's safety at the top of our list.

We also place great value in the relationship with our customer, providing consultation, installation support, commissioning and after-sales service.

One thing is certain, our innovation, quality, reliability and service is number one in the industry.

KESSEL - Leading in drainage







KESSEL Headquarters 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 Backwater valves Backwater chambers



#### Pump technology Backwater pumping station Hybrid lifting stations Lifting stations Pumping stations Submersible pumps, conversions and control units





#### Separators Grease separators Coalescence / Oil / Fuel separators Sediment separators

Starch separators



Subject to technical modification

**KESSEL AG** Bahnhofstraße 31 • 85101 Lenting • Germany www.kessel.com