### 7 | Inspection / Service

According to DIN EN 806-5, backwash filters must be inspected / serviced every six months and at the same time the user has to perform a backwash as well. Furthermore, the filter must be checked for tightness. Defective components must be replaced by trained specialists.

### Backwash



Fig. 4: Backwash unit

## 8 | Spare parts

If the water pressure in the pipe system drops due to an increasing pollution of the filter element, a backwash must be performed; a backwash definitely must be performed every six months at the latest. In order to do so, the backwash handle (refer to fig. 4) must be turned in the direction of the arrow until the stop position is reached. Keep the backwash handle in this position for approx. 5 - 10 sec. Afterwards, turn the handle back. In

case of persistent impurities, perform

several backwash processes.

Designation	Order no.
Set of seals for KICKER®	101 610e
Spare filter element 100 µm	101 603e
Backwash unit	101 309e
Spare filter cylinder	101 081e

Consumables and spare parts may be ordered from an authorised sanitary and heating company or from Grünbeck's local customer service.

When inquiring, please indicate the filter type, filter size and serial number of the filter (located on the type designation plate or on the original packing).



**Note:** The filter element and the seals are wearing parts.

Although these parts are wearing parts we grant a limited warranty of 6 months.

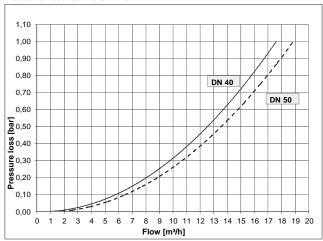
### 9 | Accessories

Designation	Order no.
Differential pressure	please
monitoring of the filter	inquire

Inserts for the conversion of older Grünbeck filters to a **KICKER®**.

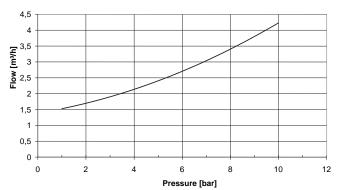
Insert for	Order no.
Adapter kit for conversion of FS 11/2" to FS-B / KICKER® 11/2".	101 651e
Adapter kit for conversion of FS 2" to FS-B / KICKER® 2".	101 652e

### Pressure loss curve of KICKER®



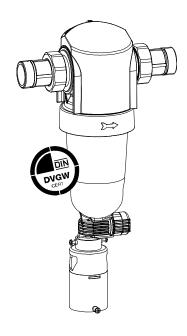
### Backwash water volume

Backwash	water	volume



# grünbeck

# Operation Manual Backwash Filter KICKER®



Edition January 2014 Order no. 036 101 099-inter

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A company certified by TÜV SÜD in accordance with DIN EN ISO 9001, DIN EN ISO 14001 and SCC

### General information

Our systems must be installed by an approved sanitary and heating com-

Check the components for transport damage.

Protect the systems from frost and do not install them near heat sources with high radiation temperatures.



**Attention:** Do not clean the filter with cleaning agents that contain alcohol or solvents!

In case of drinking water that contains coarse dirt, a coarse filter has to be installed upstream of the system.

## 1 | Application

The KICKER® filters are designed for the filtration of drinking water. The filters are not suitable for circulation water that has been treated with chemicals. Furthermore, they are neither suited for oils, greases, solvents, soaps and other lubricating media, nor for the separation of water-soluble substances. The filters are suitable for the pressure range and negative pressure range. A backwash process is only possible when used in the pressure range.

# 2 | Technical specifications

Backwash filter		KICKER®		
Connection diameter		1 ½" 2"		
Nominal connection diameter	[DN]	DN 40	DN 50	
Flow rate Δp 0.2 (0.5)	[m³/h]	8,0(12,5)	8,9(13,5)	
Filter fineness (upper/lower pore size)	[µm]	100 (120/80)		
Operating pressure	[bar]	2-16		
Nominal pressure		PN 16		
Total height	[mm]	520		
Installation length with/without screw connections	[mm]	283/160	277/160	
Empty weight	[kg]	3.6	4.3	
DVGW registration number		NW-9301CM0034		
Water / ambient temperature	[°C]	30/40		
Order no.		101 080	101 085	

### 3 | Installation preconditions

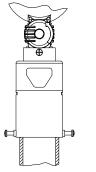


Fig. 1: Drain connection

# 4 | Scope of delivery

KICKER®, complete with filter element (filter fabric made of stainless steel), drain connection (DN 50), water meter screw connections and connection material

### 5 | Installation

According to DIN EN 806-2 and DIN 1988-200, the KICKER® filter must be installed in the cold water pipe downstream of the water meter and upstream of the distribution pipes resp. the devices to be protected. Shut-off valves need to be installed upstream and downstream of the filter (refer to fig. 2). The filter is only suited for horizontal installation.

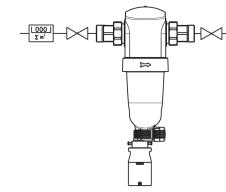


Fig. 2: Installation drawing, front view of KICKER®

Please observe local installation directives and general regulations

The installation site must ensure the protection of the filter against chemicals, dyes, solvents, vapours and direct sunlight. Observe the flow direction (→ indicated on the housing), install stress-free. The installation site must be frost-proof.

The filter should be installed in pipes of equal dimensions as the connection diameter of the filter.

We recommend a direct drain connection. The backwash water must be discharged without backflow (refer to fig. 1).

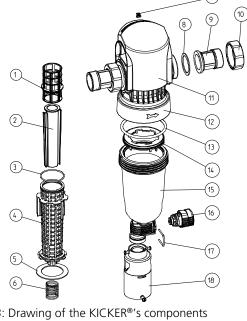


Fig. 3: Drawing of the KICKER®'s components

1 Jet holder

2 Jet

3 O-ring of filter element

(4) Filter element

(5) Flat seal for filter element

(6) Return spring

6 | Start-up

(7) Service flag

(8) Flat seal

9 Insert

(10) Union nut (11) Cover

(12) Housing

(13) O-ring of cylinder

> (14) Adapter ring (15) Filter cylinder

(16) Backwash unit

(17) Clip

(18) Outlet funnel

Upon installation, start up the filter by opening the shut-off valves. Afterwards, the pipe must be ventilated via the nearest connection. Perform a backwash process (refer to item 7 inspection / service).

### Check for tightness

After installation as well as after each service, the filter must be checked for tightness. To do so, the highest possibly occurring operating pressure must be applied and the filter must visually be checked for leakages.