grünbeck

Backwash Filter KICKER[®]



Fig. 1: Backwash filter KICKER®

Application

The backwash filters KICKER® are designed for the filtration of drinking and industrial water. They protect the water pipes and the connected water carrying system parts from malfunctions and corrosion damage due to undissolved impurities (particles) such as rust particles, sand, etc. The filters are neither suited for oils, greases, solvents, soaps and other lubricating media, nor for the separation of water-soluble substances. According to DIN 1988, part 200, a filter as per DIN EN 13443-1 has to be installed in the drinking water system directly downstream of the water meter system. The filters are suitable for the pressure and negative pressure range. A backwash process is only possible when used in the pressure range.

Function

The filtration process

The unfiltered raw water flows through the housing into the filter. The dirty water flows from the outside to the inside through the filter element, retaining dirt particles > 100 μ m. The treated water flows through the inside of the filter to the pure water outlet.

The backwash process

If the water pressure in the pipe system drops due to an increasing pollution of the filter element, a backwash must be performed. However, no matter the degree of impurities, a backwash (inspection) must take place every six months at the latest.

By turning the backwash knob to the stop position, the drain is opened. The filter element is pulled into the backwash position.

The treated water flows in the opposite direction through the filter element and rinses the clogged filter element by means of the integrated jet.

The water consumption for the backwash is reduced to a minimum (refer to fig. 4 "backwash water volume"). Depending on the degree of impurities, the backwash process should take about 5 – 10 seconds. If the filter element has not been cleaned completely, the backwash process must be repeated.

Even during the backwash process, the filtration process continues running without interruption in case of water withdrawal.

On the upper side of the backwash filter housing, a service flag is located which on the occasion of the start-up and later on after each inspection is set to the next maintenance date.

Design

Housing incl. water meter screw connections (made of brass resistant to dezincification) with seals.

Filter made of pressure-resistant plastic and service flag. Filter element with stainless steel fabric. Drain connection (DN 50) according to DIN EN 1717.

All materials are recyclable.

Scope of delivery

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

Accessories

Differential pressure monitoring of the filter

For order no. please inquire

Inserts for the conversion of an older Grünbeck filter to a KICKER[®].

Insert for	Order no.
Adapter set for conversion from FS 1½" to FS-B / KICKER [®] 1½".	101 651e
Adapter set for conversion from FS 2" to FS-B / KICKER [®] 2".	101 652e

Installation conditions

Please observe local installation directives, general guidelines and technical specifications.

The installation site must be frost-proof and ensure the filter's protection from chemicals, dyes, solvents, vapours and direct sunlight.



Technical specifications/dimen	sions	Backwash filter KICKER [®]		
Connection data				
Connection diameter		11⁄2"	2"	
Nominal connection diameter		DN 40	DN 50	
Performance data				
Flow rate at ∆p 0.2 (0.5)bar	[m³/h]	8.0 (12.5)	8.9 (13.5)	
Filter fineness	[µm]	1	100	
Upper/lower pore size	[µm]	120	120/80	
Operating pressure	[bar]	2 -	2 - 16	
Nominal pressure		PN 16		
Dimensions and weights				
A Total height	[mm]	520		
B Installation length with/without screw connections	[mm]	283/160	277/160	
C Distance to wall	[mm]	6	65	
Empty weight, approx.	[kg]	3.6	4.3	
Test mark/certification mark				
DVGW resgistration number		NW-9301CM0034		
Ambient data				
Max. water temperature	[°C]	30		
Max. ambient temperature	[°C]	40		
Order no.		101 080	101 085	



Fig. 2: Installation example for backwash filter KICKER®



Fig. 3: Pressure loss curve KICKER®



Fig. 4: Backwash water volume