

Fine filter BOXER® K / KD

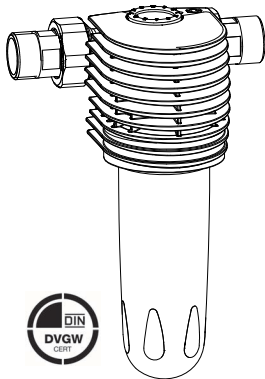


Fig. 1: Fine filter BOXER® K

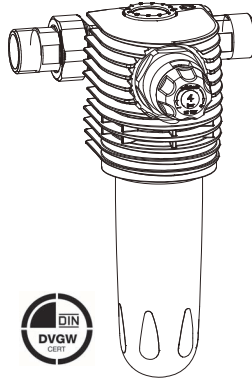


Fig. 2: Fine filter BOXER® KD



Fig. 3: Filter element

Designated application

The fine filters BOXER® K / KD are designed for the filtration of drinking and process water. They protect the water pipes and connected water-carrying system parts from disturbances and corrosion damage due to undissolved impurities (particles), such as rust particles, sand, etc. The filters are neither suitable for oils, greases, solvents, soaps and other lubricating media, nor for the separation of water-soluble substances. According to DIN EN 806-2, a filter as per DIN EN 13443-1 needs to be installed in drinking water pipes and must be installed directly downstream of the water meter system. The BOXER® K filter can be used for pressure and negative pressure applications.

Function

The filtration process

The unfiltered raw water flows into the filter via the inlet of the connection block and then from the outside in through the filter element and to the pure water outlet. Depending on the filter insert, foreign particles the size of > 5 µm, 20 µm, 50 µm, 80 µm (DVGW version) are thus retained. Depending on their size and weight, the foreign particles either stick to the filter element or they fall straight down into the filter cylinder. The cleaned water flows through the inside of the filter to the pressure reducer (only in case of BOXER® KD) and then to the pure water outlet.

Replacement of the filter element

If the water pressure in the pipe system drops noticeably due to the increasing pollution of the filter element, the filter element must be replaced.

However, according to DIN EN 806-5, the filter element must be replaced every 6 months at the latest for hygienic reasons, irrespective of the degree of impurities.

On the upper side of the fine filter's housing, a rotatable maintenance ring is located. During start-up and later on after each maintenance, the maintenance ring must be set to the next maintenance date.

BOXER® K

Fine filter with pivotable connection flange. The connection flange is included in the packing by itself and therefore can be installed either in horizontal or vertical pipes.

BOXER® KD

Design as for BOXER® K, however, with pressure reducer and integrated pressure gauge.

Design

Connection block incl. water meter screw connections (made of dezincification-resistant brass) with seals and stainless steel screws. Filter made of pressure-resistant plastic and maintenance ring.

Due to a special lining in the filter head, the filter element can be replaced manually, no tools required. Support fabric made of high-quality plastic for continuous use and overlying, replaceable filter element made of polyester fabric (the pore size of the standard version is 80 µm; a pore size of 20 µm, 50 µm and 5 µm is available on request).

All water-contacting parts meet the requirements of the German Drinking Water Ordinance. Test regulations: KTW, DVGW W 270, DIN 50930-6.

All materials are recyclable.

Scope of supply

BOXER® K / KD complete with filter element, connection flange, water meter screw connection and connection material.

Accessories

Differential pressure monitoring of the filter

For order number, please inquire



Insert with non-return valve 1"

Order no. 101 648e

Conversion kit for conversion to a different model of the BOXER®-series

For order number, please inquire

Inserts required for the replacement of an older Grünbeck filter by a BOXER®.

Insert for		Order no.
FS 1"/Ultra 99 R	1"	101 647e
FS 1 ¼"	1 ¼"	101 852
Connection flange	¾"	101 862
A + D (V.2, V.3)	1"	101 646e
 1 ¼"	1 ¼"	101 864
Connection flange D (V1) supplied	1"	101 865
until year of construction 06/99	 1 ¼"	101 866

Installation requirements

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/Dimensions

	BOXER® K			BOXER® KD			
	¾"	1"	1 ¼"	¾"	1"	1 ¼"	
Connection data							
Nominal connection diameter [DN]	20	25	32	20	25	32	
Performance data							
Nominal flow at Δp 0.2 (0.5) bar [m³/h]	2.8 (4.5)	3.7 (6.0)	4.0 (6.3)	-	-	-	
Flow rate as per DIN EN 1567 [m³/h]	-	-	-	2.3	3.6	5.8	
Kv-value [m³/h]	6.5	8.5	9.1	-	-	-	
Pore size [µm]	80						
Largest/smallest pore size [µm]	140/80						
Nominal pressure [bar]	PN 16						
Dimensions and weights							
A Total height [mm]	260			277			
B Installation length with/without screw connection [mm]	185/100	182/100	191/100	185/100	182/100	191/100	
C Min. distance to wall [mm]	60						
D Height up to centre of connection [mm]	223			240			
E Depth to centre of connection [mm]	121	125	128	163	167	170	
F Clearance required for replacement of filter element [mm]	150						
Empty weight, approx. [kg]	1.7	1.9	2.2	2.0	2.1	2.4	
Test certificate/Certification mark							
DVGW registration number	NW-9301BR0532			NW-9301BR0533			
Ambient data							
Max. water temperature [°C]	30						
Max. ambient temperature [°C]	40						
Order no.	101 205	101 210	101 215	101 255	101 260	101 265	

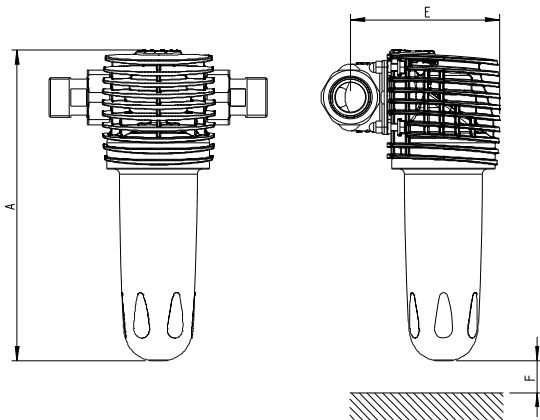


Fig. 4 : Installation example fine filter BOXER® K

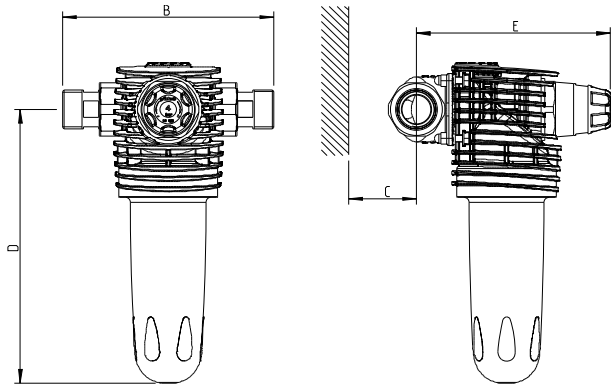


Fig. 5 : Installation example fine filter BOXER® KD

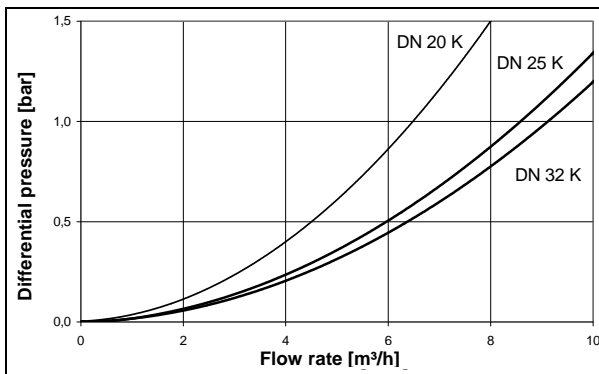


Fig. 6 : Pressure loss curve fine filter BOXER® K