

## GENO-backwash filter MXA DN 65 - MXA DN 100

### Intended use

GENO-backwash filters MXA are designed for the filtration of drinking and process water.

The filters are suitable for filtration of process, boiler feed, cooling and air conditioning water – only in partial flow.

The filters are suitable for water temperatures up to 90 °C.

The filters can be used in the positive pressure range and cannot be used in the negative pressure range.

The filters are not suitable for circulation water that is treated with chemicals.

The filters are neither suitable for oils, greases, solvents, soaps and other lubricating media, nor for the separation of water-soluble substances.

The filters are designed according to the stipulations of DIN EN 13443-1 and are intended for installation into drinking water pipes according to DIN EN 806-2 (installation immediately downstream of the water meter).

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.

### Function

The unfiltered raw water flows into the filter from the inlet side and then from the inside out through the filter element and to the pure water outlet. Thus, foreign particles of > 100 µm in size are retained.

Depending on their size and weight, the foreign particles either stick to the filter element or they fall straight down into the filter funnel.

Increasing loading of the filter element increases the differential pressure between the raw water inlet and the pure water outlet.

If the permissible differential pressure of 0.4 bar (factory setting) is exceeded, automatic backwashing is performed. This can also be started manually. The differential pressure can be read off the pressure gauges.

The drain is opened by a manual and time-controlled backwash, and backwashing is carried out. The brush rotates with the filter and wipes over the filter surface. This cleans the filter element.

The impurities are removed by the brush and the suction nozzle sucks them into the drain outlet.

### Structure

- Filter housing made of brass with a low level of dezincification
- Modular filter element made of high-grade, industrial plastic with filter mesh (100 µm made of stainless steel)
- Integrated flushing water connection for clamping HT pipe DN 50 according to DIN EN 1717
- Pressure gauge on raw and pure water side to determine the degree of impurities (differential pressure)
- Flange connection according to DIN EN 1092-1, without counter flanges and seals
- All water contacting parts comply with the German Drinking Water Ordinance

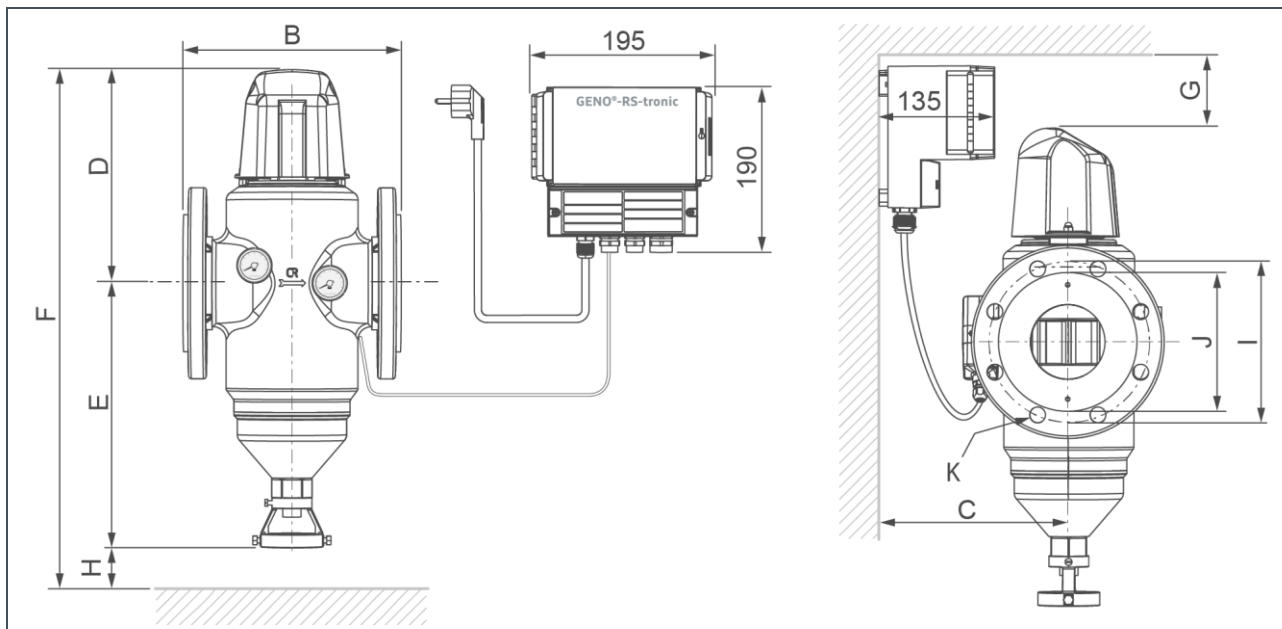
### Scope of supply

- Backwash filter complete, including 2 pressure gauges 0-16 bar, differential pressure transmitter
- Separate control unit GENO-RS-tronic
- Flange connection
- Flushing water connection
- Operation manual

Danish and Swiss Version:

- Control unit GENO-RS-tronic with country-specific power plug

## Technical specifications I



Dimensions and weights		MXA DN 80	MXA DN 65	MXA DN 100
Nominal connection diameter		DN 65	DN 80	DN 100
B	Installation length without counter flanges, flanges PN 16 acc. to DIN EN 1092-1	mm	220	250
C	Min. distance to wall	mm	115	125
D	Overall height above centre of connection	mm	233	243
E	Installation height up to centre of connection	mm	212	302
F	Total height	mm	445	545
G	Space above upper edge of filter	mm	130	
H	Space required for replacing filter element	mm	min. 100 optimum from 215	min. 100 optimum from 315
I	Bolt circle diameter of flange	mm	145	160
Y	Max. sealing surface	mm	122	140
K	Number of M 16 screws	pcs	4	8
Length of cable for differential pressure transducer		mm	1500	
Length of cable for drive unit		mm	1500	
Length of mains cable		mm	1500	
Empty weight with control unit GENO-RS-tronic approx.		kg	14,8	19

Connection data		MXA DN 80	MXA DN 65	MXA DN 100
Rated voltage range		V	230	
Rated frequency		Hz	50 – 60	
Electrical power input (standby)		W	19	
Electrical power input (operation = max.)		W	26	
Protection / protection class			IP 54/⊕	

## Technical specifications II

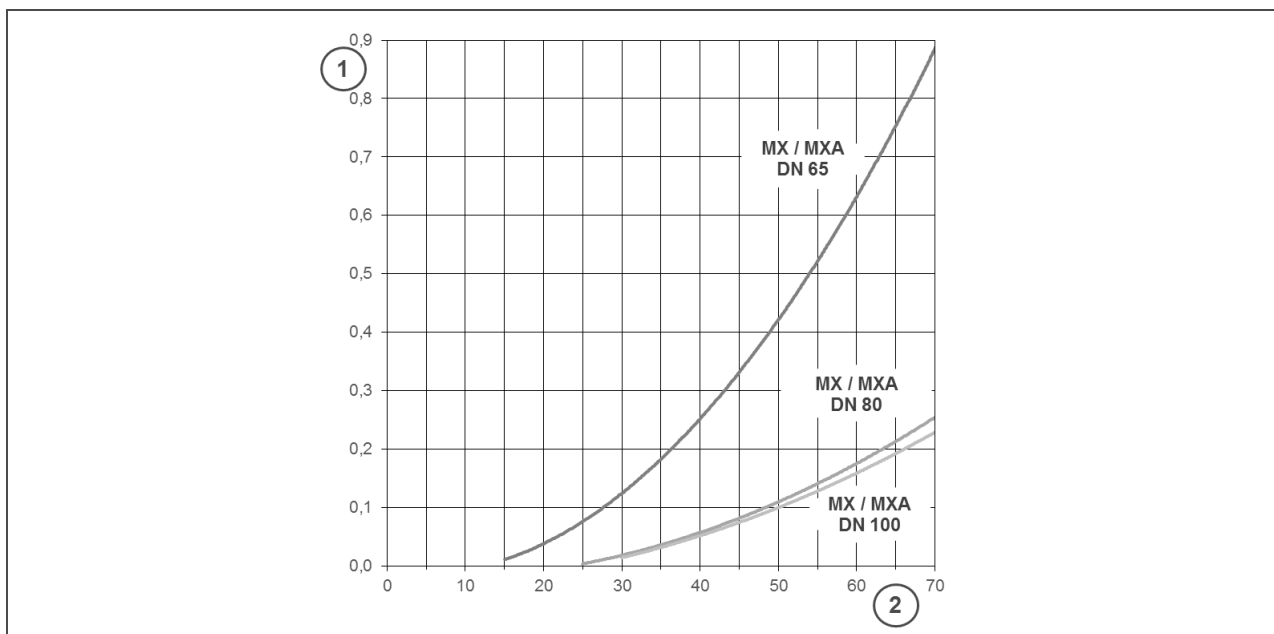
Performance data		MXA DN 80	MXA DN 65	MXA DN 100
Flow rate at $\Delta p$ 0.2 (0.5) bar	m <sup>3</sup> /h	30 (47)	60 (96.5)	60 (98)
K <sub>v</sub> value	m <sup>3</sup> /h	69	124	138
Filter fineness		100		
Upper/lower filter fineness	μm]	110/90		
Nominal pressure		PN 16		
Minimum flow pressure	bar]	2		
Operating pressure at max. water temperature	bar/°C	10/90		
Differential pressure release	bar	0.4 – 0.5		

General data		MXA DN 80	MXA DN 65	MXA DN 100
DVGW registration number		NW-9301BO0194		
ÜA registration number <i>The Office of the Vienna Provincial Government – City of Vienna</i>		R-15.2.3-21-17496		
Max. water temperature	°C	90		
Max. ambient temperature	°C	5 – 40		
<b>Order no.</b>		<b>107 470</b>	<b>107 475</b>	<b>107 480</b>

## Technical specifications III

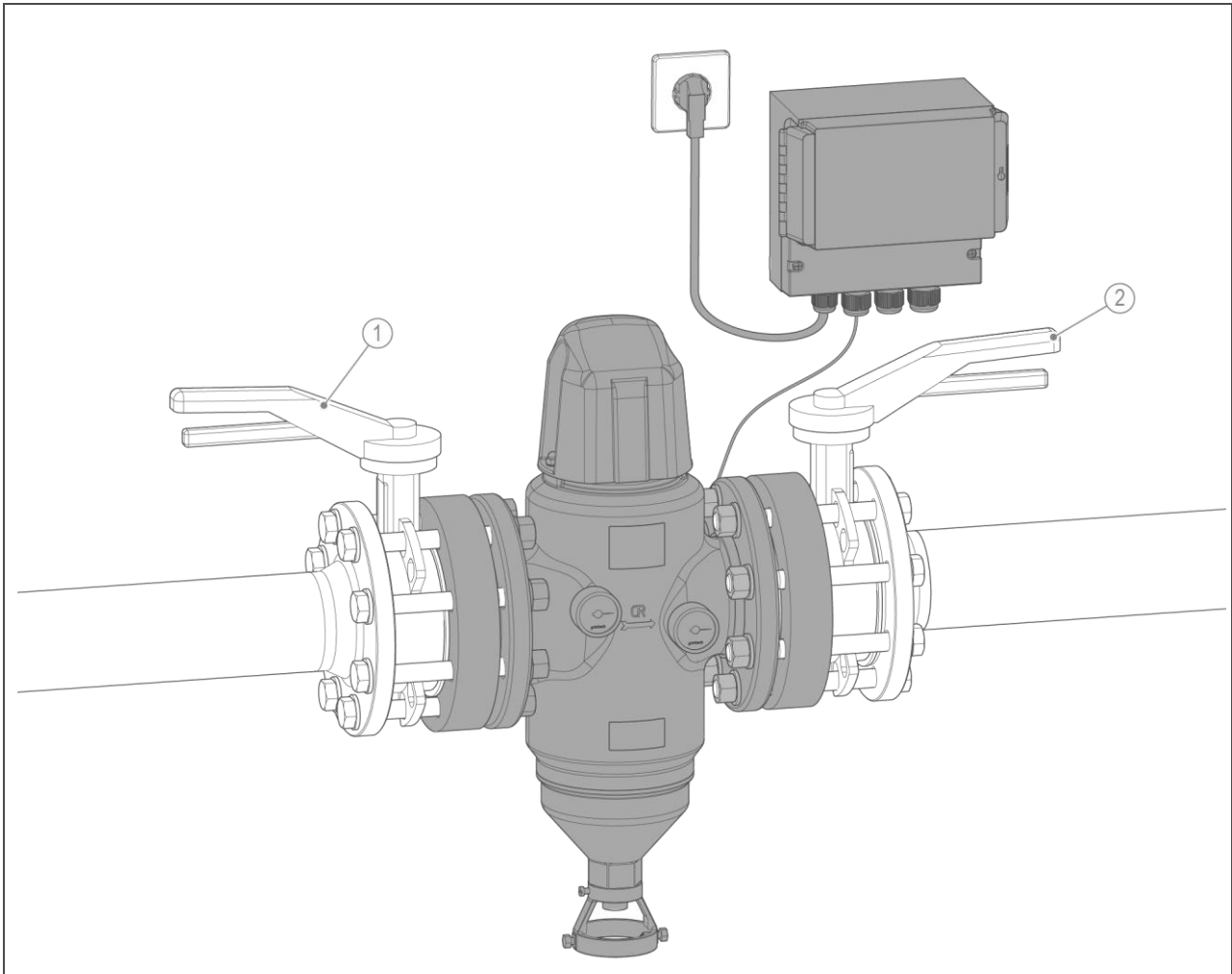
### Pressure loss curves of GENO backwash filter MXA DN 65, DN 80, DN 100



Item	Designation	Item	Designation
1	Pressure differential in bar	2	Flow rate in m <sup>3</sup> /h

Consumption data			
Backwash water volume at a water pressure of 3 bar and a backwash time of 1.5 min., approx.	l	40	
Max. backwash volume flow at 9 bar, approx.	m <sup>3</sup> /h	4	

## Installation example



Item	Designation	Item	Designation
1	Shut-off valve (inlet)	2	Shut-off valve (outlet)

### 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.

The installation site must be well accessible for maintenance purposes.

A shock-proof socket is required within a distance of approx. 1.2 m for the electrical connection of the control unit GENO-RS-tronic.

For the Swiss and Danish version a country-specific power socket is required.

### Accessories

#### Adapter kit

**Order no. 106 804e** DN 80  
**Order no. 106 805e** DN 100

As distance flange to ensure functioning of shut-off flaps mounted directly on the filter

#### Filter elements

According to DIN EN 13443 1, filter elements with 50 µm, 200 µm and 500 µm are not admissible for drinking water installations.

#### DN 65

**Order no. 107 053** 50 µm  
**Order no. 107 062** 100 µm  
**Order no. 107 073** 200 µm  
**Order no. 107 083** 500 µm

#### DN 80, DN 100

**Order no. 107 054** 50 µm  
**Order no. 107 063** 100 µm  
**Order no. 107 074** 200 µm  
**Order no. 107 084** 500 µm

### Contact

Grünbeck Wasseraufbereitung GmbH  
Josef-Grünbeck-Str. 1  
89420 Hoehstaedt  
Germany

☎ +49 9074 41-0

☎ +49 9074 41-100

info@gruenbeck.com  
www.gruenbeck.com

