

## GENO backwash filter MXA 1" – MXA 2"

### 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 stick to the filter element or they fall straight down into the filter funnel.

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 container made of brass with a low level of dezincification

- Modular filter element made of high-grade, industrial plastic with filter mesh 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)
- Water meter screw connection
- All water contacting parts comply with the German Drinking Water Ordinance

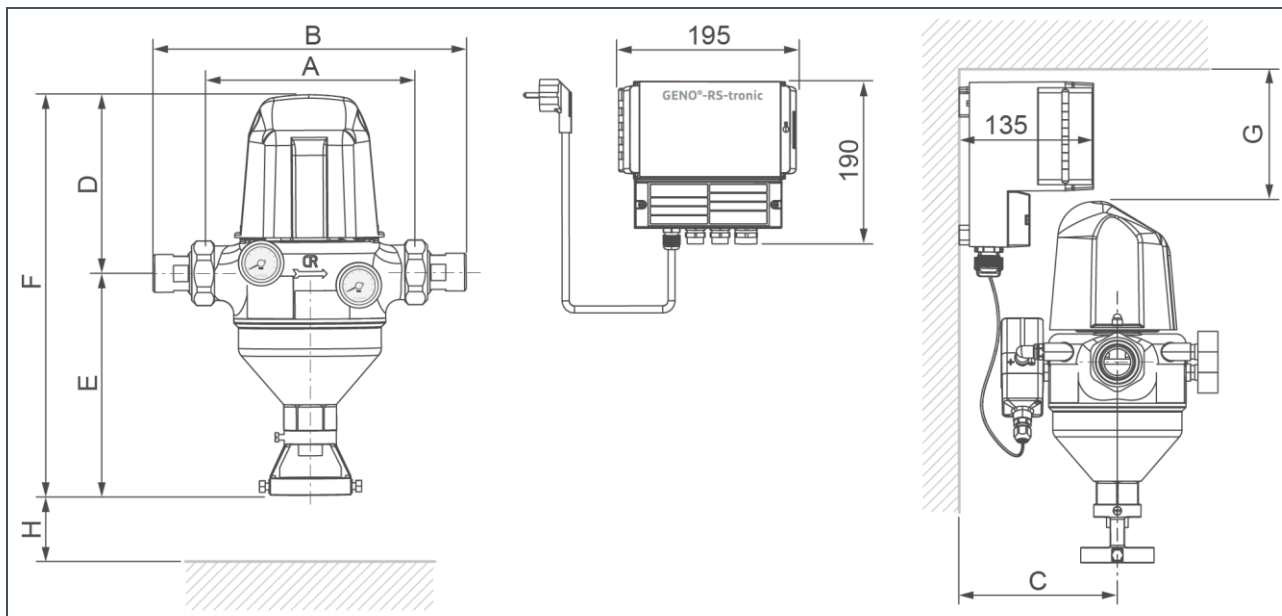
### Scope of supply

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

Swiss and Danish version:

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

## Technical specifications I



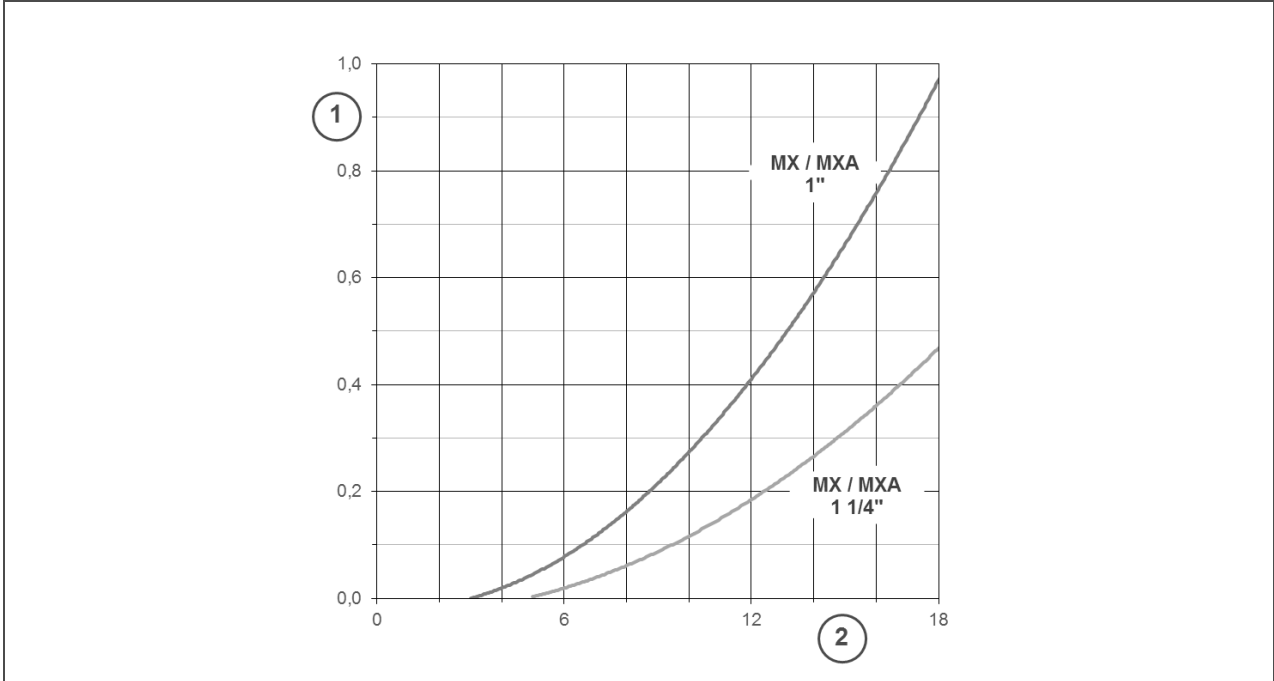
Dimensions and weights		GENO backwash filter MXA				
		DN 25	DN 32	DN 40	DN 50	
Nominal connection diameter		DN 25	DN 32	DN 40	DN 50	
Connection diameter		1"	1¼"	1½"	2"	
A	Installation length without screw connection	mm	190	190	206	206
B	Installation length with screw connection	mm	276	281	342	323
C	Min. distance to wall	mm	115	115	115	115
D	Overall height above centre of connection	mm	153	153	233	233
E	Installation height up to centre of connection	mm	194	194	212	212
F	Total height	mm	347	347	445	445
G	Space above upper edge of filter	mm			130	
H	Space required for replacing filter element	mm	100	100	min. 100 / optimum from 215	
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	8.6	8.7	12.7	12.7
Connection data						
Rated voltage range		V	230			
Rated frequency		H	50 – 60			
Electrical power input (standby)		W	19			
Electrical power input (operation = max.)		W	26			
Protection / protection class		IP 54/⊕				

## Technical specifications II

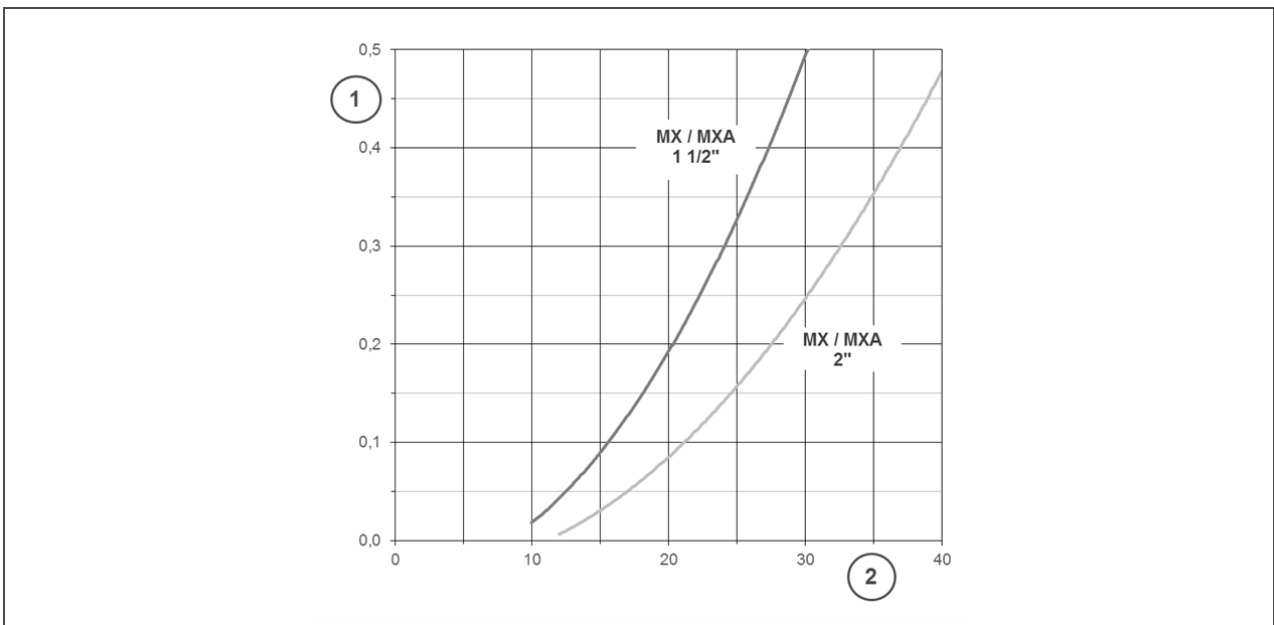
Performance data					
Flow rate at $\Delta p$ 0.2 (0.5) bar	m <sup>3</sup> /h	8.5 (13)	12 (18.5)	22 (30)	27 (38.5)
K <sub>v</sub> value	m <sup>3</sup> /h	18	25	46	56
Filter fineness	µm	100			
Largest/smallest pore size	µm	110/90			
Nominal pressure		PN 16			
Minimum flow pressure	bar	2			
Operating pressure at max. water temperature	bar/°C	10/90			
Differential pressure release	bar	0.4 – 0.5			
General					
DVGW registration number		NW-9301BO0194			
UA 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			
Ambient temperature	°C	5 – 40			
<b>Order no.</b>		<b>107 450</b>	<b>107 455</b>	<b>107 460</b>	<b>107 465</b>

### Technical specifications III

#### Pressure loss curves of GENO backwash filter MXA 1" and 1¼"



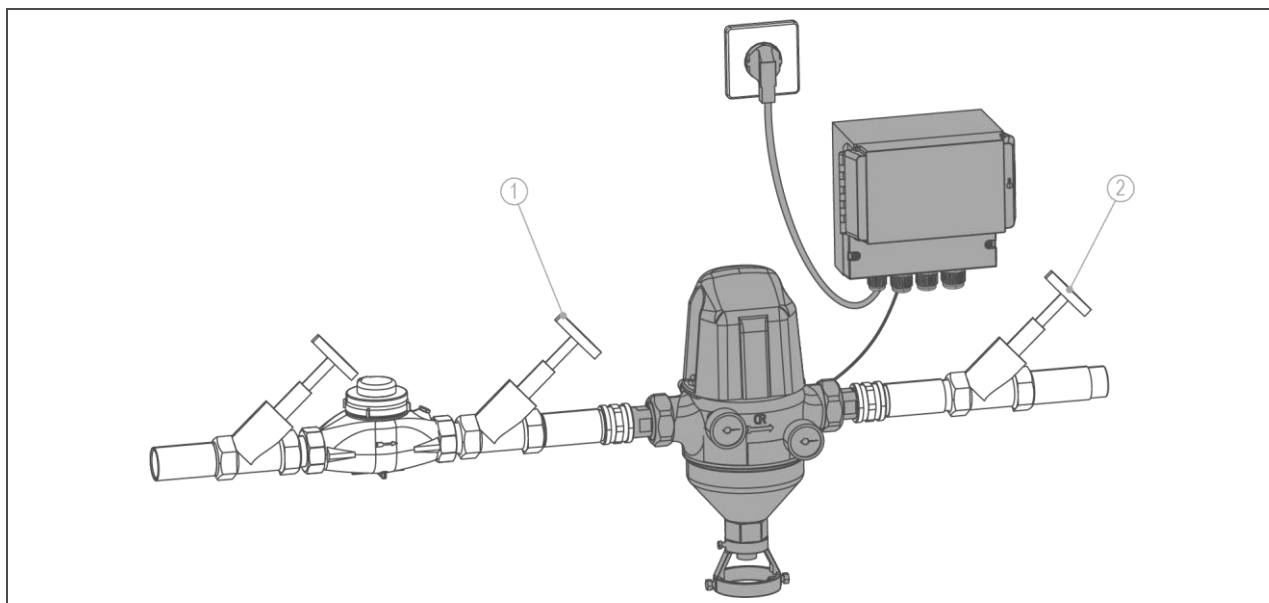
#### Pressure loss curves of GENO backwash filter MXA 1½" and 2"



Item	Designation	Item	Designation
1	Pressure differential in bar	2	Flow rate in m³/h

Consumption data		
Backwash water volume at a water pressure of 3 bar and a backwash time of 1.5 min., approx.		40
Max. backwash flow rate at approx. 9 bar	[m³/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

#### DN 25 (1"), DN 32 (1¼")

107 052 Filter element	50 µm
107 061 Filter element	100 µm
107 072 Filter element	200 µm
107 082 Filter element	500 µm

#### DN 40 (1½"), DN 50 (2")

107 053 Filter element	50 µm
107 062 Filter element	100 µm
107 073 Filter element	200 µm
107 083 Filter element	500 µm

### Contact

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