

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.

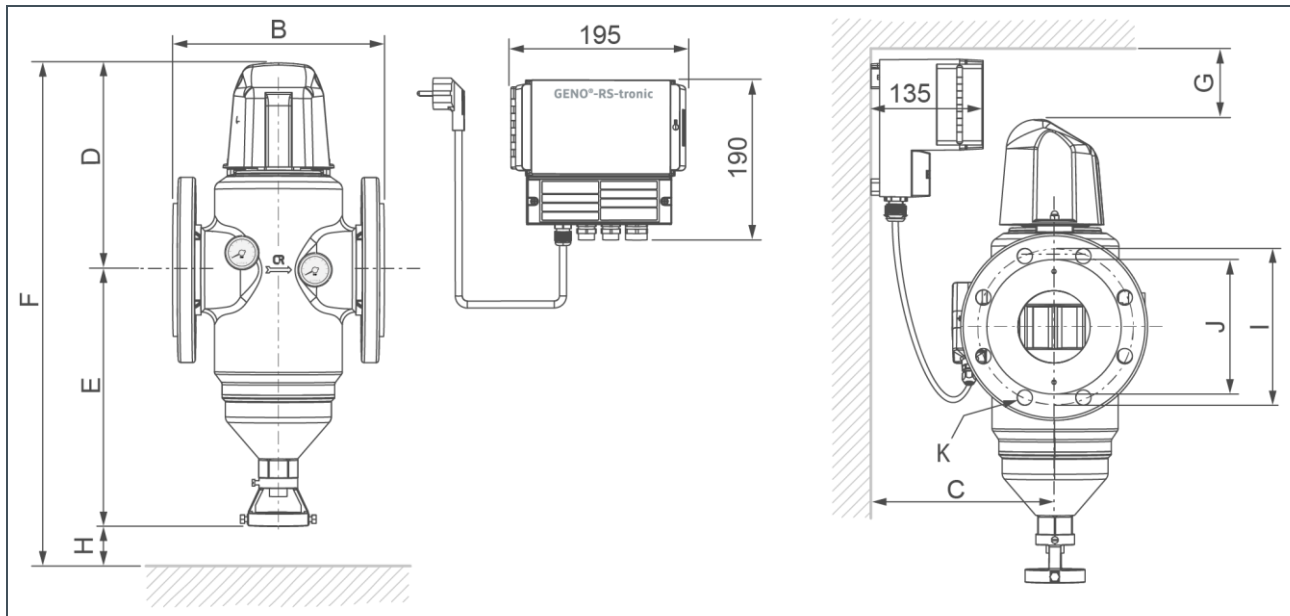
Structure

- Filter container made of brass with a low level of dezincification
- Modular filter elements 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)
- 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
- Separate control unit GENO-RS-tronic
- Flange connection
- Flushing water connection
- Operation manual

Technical specifications I



Dimensions and weights		GENO backwash filter MXA			
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	250
C	Min. distance to wall	[mm]	115	125	125
D	Overall height above centre of connection	[mm]	233	243	243
E	Installation height up to centre of connection	[mm]	212	302	302
F	Total height	[mm]	445	545	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	180
Y	Max. sealing surface	[mm]	122	140	158
K	Number of M 16 screws	[pcs]	4	8	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	20

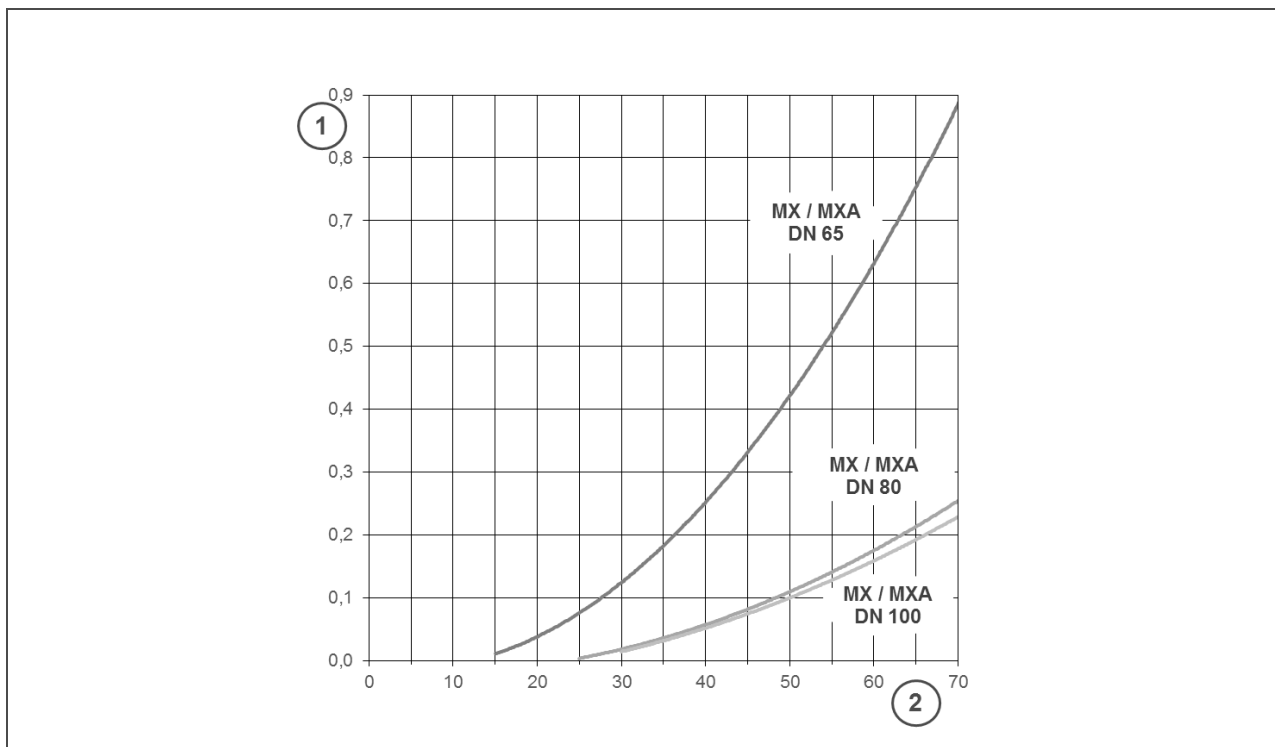
Connection data		
Rated voltage range	[V]	230
Rated frequency	[Hz]	50 – 60
Electrical power input (standby)	[W]	19
Electrical power input (operation = max.)	[W]	26
Protection / protection class		IP 54/⊕

Technical specifications II

Performance data			
Flow rate at Δp 0.2 (0.5) bar	[m ³ /h]	30 (47)	60 (96.5) 60 (98)
K _V value	[m ³ /h]	69	124 138
Filter fineness	[μ m]		100
Upper/lower filter fineness	[μ m]		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
Max. water temperature	[°C]		90
Max. ambient temperature	[°C]		5 – 40
Order no.		107 470	107 475 107 480

Technical specifications III

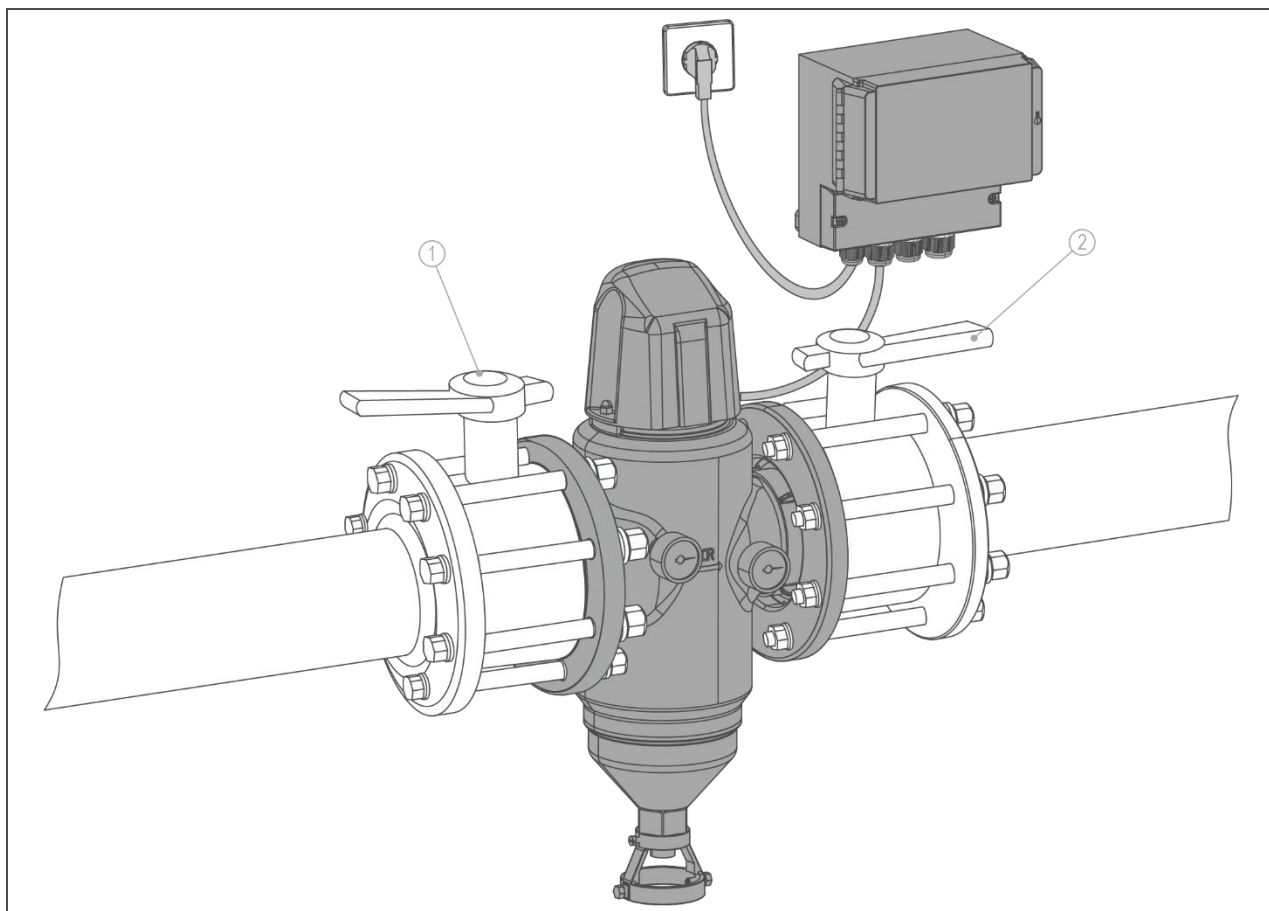
Pressure loss curves of GENO backwash filter MXA DN 65, DN 80, DN 100



Item	Designation	Item	Designation
1	Pressure differential [bar]	2	Flow rate [m ³ /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 ³ /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

Accessories

DN 65

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

DN 80, DN 100

107 054 Filter element	50 µm
107 063 Filter element	100 µm
107 074 Filter element	200 µm
107 084 Filter element	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

