

## Euro system separator GENO-DK 2

### Intended use

The Euro system separator GENO-DK 2 is a safety device to be installed in water pipes if special withdrawal points or appliances are connected to the drinking water supply.

The Euro system separator GENO-DK 2 prevents the back-flow, back-pressure and back-suction of modified drinking water into the drinking water network.

The BA design is for protection up to and including liquid category 4 as per DIN EN 1717.

In order to be able to correctly select and use the proper safety measures which differ with regard to their function and effectiveness, it is necessary to classify substances or micro-organisms that could get into the drinking water and might cause adverse effects or risks due to the modified drinking water into 5 liquid categories – irrespective of the concentration of such substances or micro-organisms.

If several substances or micro-organisms might get into the drinking water at the same time, the most hazardous substance or micro-organism shall determine the liquid category.

### Liquid category 1

Drinking water that does not endanger health but can lead to complaints from owners/operating companies, e.g. due to temporary turbidity caused by air bubbles.

Example:

- Water which is under high pressure, e.g. pressure booster system

Protection by a non-return valve.

### Liquid category 2

Liquid that does not represent a risk to human health.

Liquids that are suitable for human consumption – including water originating from a drinking water installation – that may exhibit modifications with regard to taste, smell, colour or temperature (heating up or cooling down).

Example:

- Heated drinking water

### Liquid category 3

Liquid that represents a health risk due to the presence of one or several poisonous or highly poisonous substances.

Example:

- Ethylene glycol, copper sulphate solution, heating water without additives

### Liquid category 4

Liquid that represents a health risk to human beings due to the presence of one or several poisonous or highly poisonous substances or one or several radioactive, mutagenic or carcinogenic substances.

Examples:

- Lindane, phosalone, parathion (insecticides), hydrazine

### Liquid category 5

Liquid that represents a health risk to human beings due to the presence of microbial or viral pathogens of communicable diseases.

Examples:

- Hepatitis viruses, salmonellae

### Function

The Euro system separator is divided into three pressure zones.

- Upstream pressure zone:  
Area upstream of the non-return valve on the inlet side
- Intermediate pressure zone:  
Area between the non-return valves
- Downstream pressure zone:  
Area downstream of the non-return valve on the outlet side

The control unit closes (flow-through position) or opens (separation position) the drain valve subject to the pressure conditions in the upstream and intermediate pressure zone, thus preventing back-flow, back-pressure and back-suction. The non-return valve on the outlet side additionally secures this.

The Euro system separator does not require any energy supply such as an electrical or a compressed-air connection in order to function. The response values of the controller are fixed.

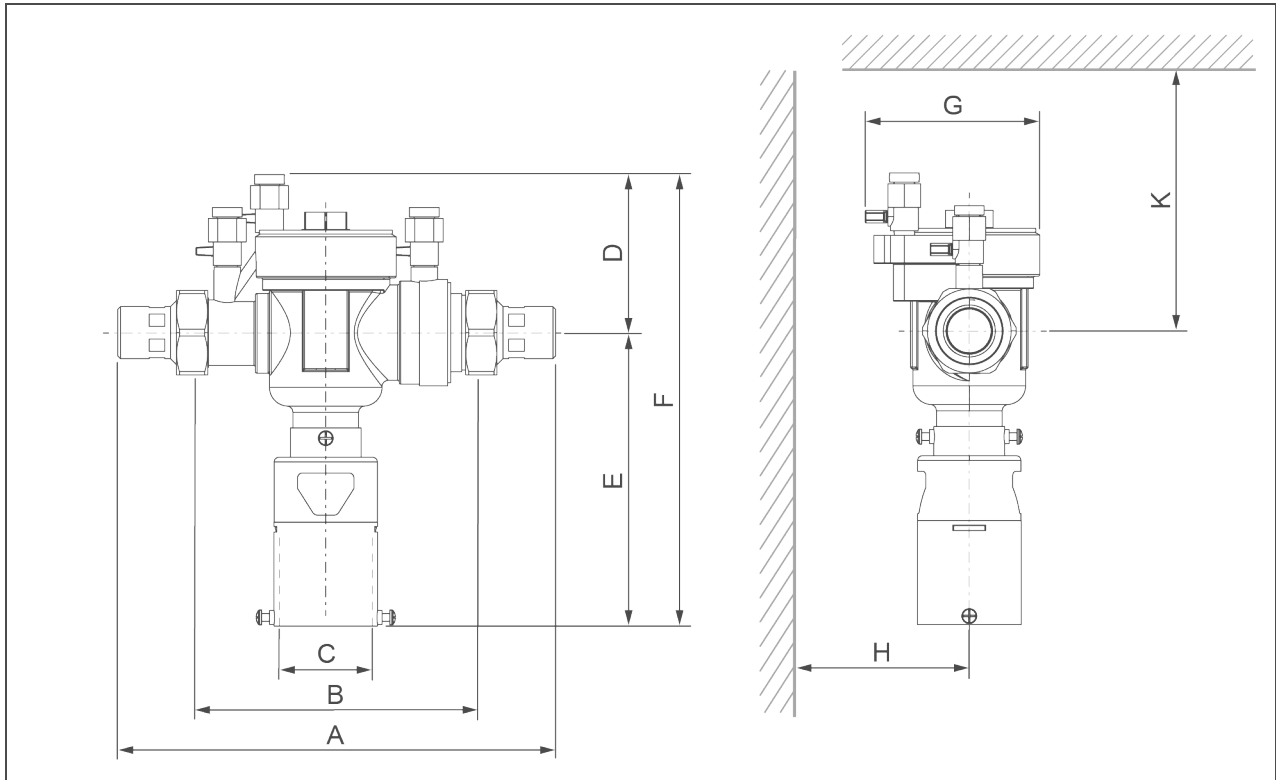
### Design

- Housing with test connection at every pressure zone 1/8"
- Coarse dirt filter 500 µm in upstream pressure zone
- Non-return valve
- Draining valve
- Drain connection acc. to DIN EN 1717
- Screw connections

### Scope of supply

- Euro system separator
- Screw connections
- Flat seals
- Operation manual

## Technical specifications I



Dimensions and weights		GENO-DK 2						
		DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	
A	Installation length with screw connections	mm	227		280		387	395
B	Installation length without screw connections	mm	153		187		274	
C	Ø Drain connection	mm	40/50				50	
D	Height above centre of pipe connection	mm	103		100		130	
E	Height below centre of pipe connection	mm	160		188		130	
F	Total height	mm	263		292		382	
G	Total width	mm	110		114		160	
H	Distance to wall	mm	70		80		90	
H	Space required above centre of pipe connection (e. g. for maintenance)	mm	250		250		280	
	Empty weight	kg	3		4.7		10.7	11.8
	Operating weight, approx.	kg	3.4		5.2		12.5	13.6
<b>Order no.</b>			<b>132 510</b>	<b>132 520</b>	<b>132 530</b>	<b>132 540</b>	<b>132 560</b>	<b>132 570</b>

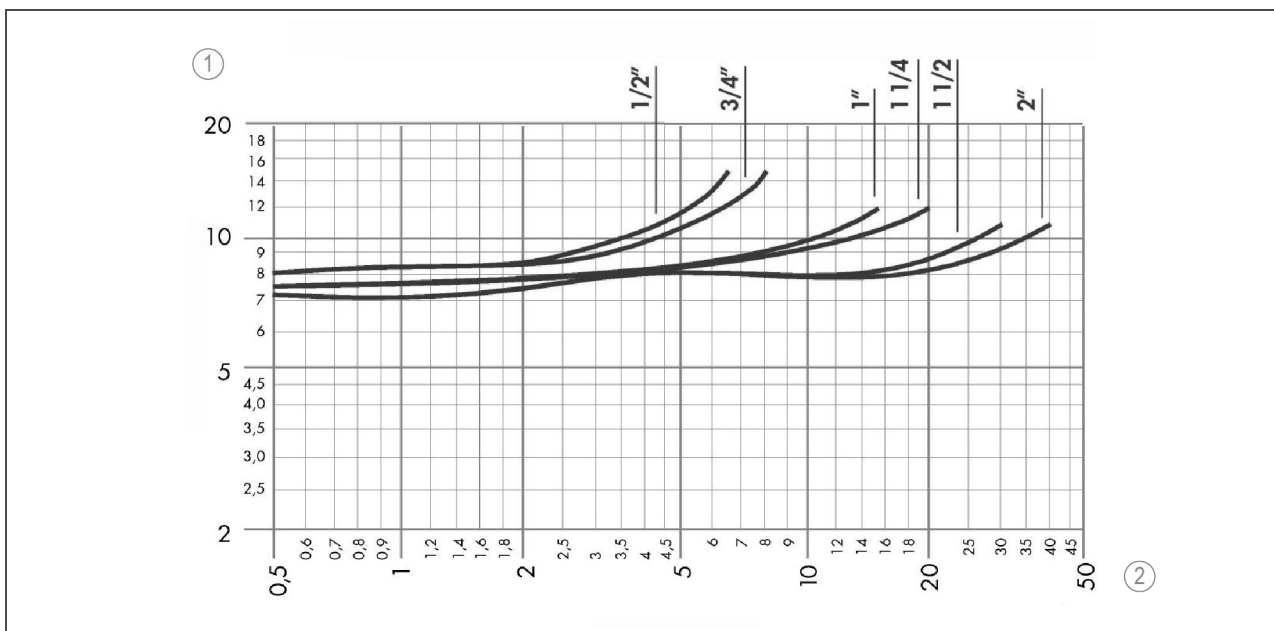
## Technical specifications II

Connection data	GENO-DK 2					
Nominal connection diameter	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
Connection diameter	½"	¾"	1"	1¼"	1½"	2"

Performance data	GENO-DK 2						
Nominal pressure	PN 10						
Min. flow pressure	bar	1					
Max. flow	m³/h	1.9	3.3	5.2	7.2	13.5	21
K <sub>v</sub> value (Δp = 1 bar)	m³/h	3.5	4.5	7.6	9.4	22.2	32.5

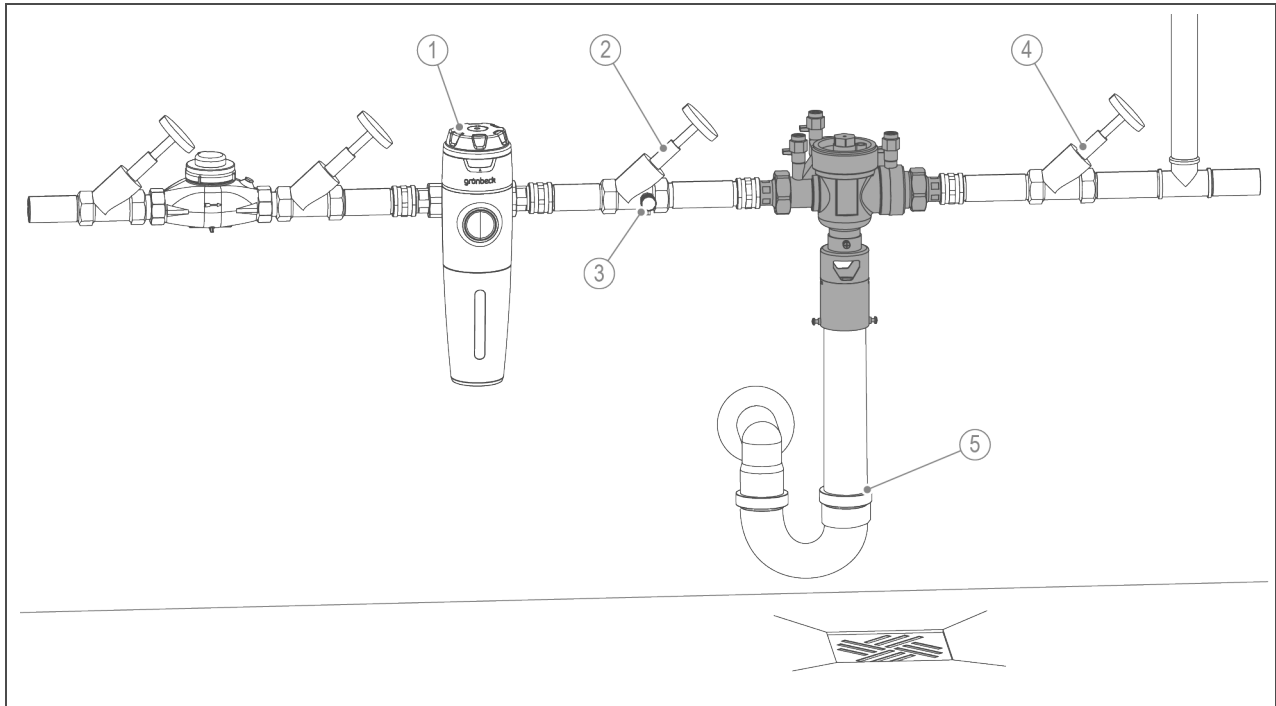
General data	GENO-DK 2					
Water temperature	°C	5 – 65				
Ambient temperature	°C	5 – 60				
DVGW registration number	NW-6305BR0345					
Order no.	132 510	132 520	132 530	132 540	132 560	132 570

## Pressure loss curve of Euro system separator GENO-DK 2



Item	Designation	Item	Designation
1	Differential pressure in bar	2	Flow rate in m³/h

## Installation example



Item	Designation	Item	Designation
1	Drinking water filter pureliQ:KD	2	Shut-off valve (inlet side)
3	Deaeration	4	Shut-off valve (outlet side)
5	Drain connection		

## Installation requirements

Obey the local installation directives, general guidelines and technical specifications.

The installation site must be accessible for maintenance work and be flood and frost-proof and it must ensure the system's protection from chemicals, dyes, solvents and their vapours.

For maintenance and inspection work, shut-off valves must be provided on the inlet and outlet side.

The shut-off valve on the inlet side must be combined with a draining valve.

According to DIN 1988-2, quick-closing shut-off fittings that might cause positive or negative water hammer may only be used for continuous actuation in water installations if the max. admissible water hammer pressure and operating pressure are taken into account. Exceptions apply to fittings that are used for test purposes and are operated by qualified personnel.

A drain connection must be installed to discharge the "dripping water". The waste water pipe must guarantee discharge without back-pressure.

## Accessories

**Service case to check the pressure zone as per W/TPW 135**  
**Service kit**  
**Order no.132 095**

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