

Euro system separator GENO-DK 2-Mini

Intended use

The Euro system separator GENO-DK 2-Mini 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-Mini 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.

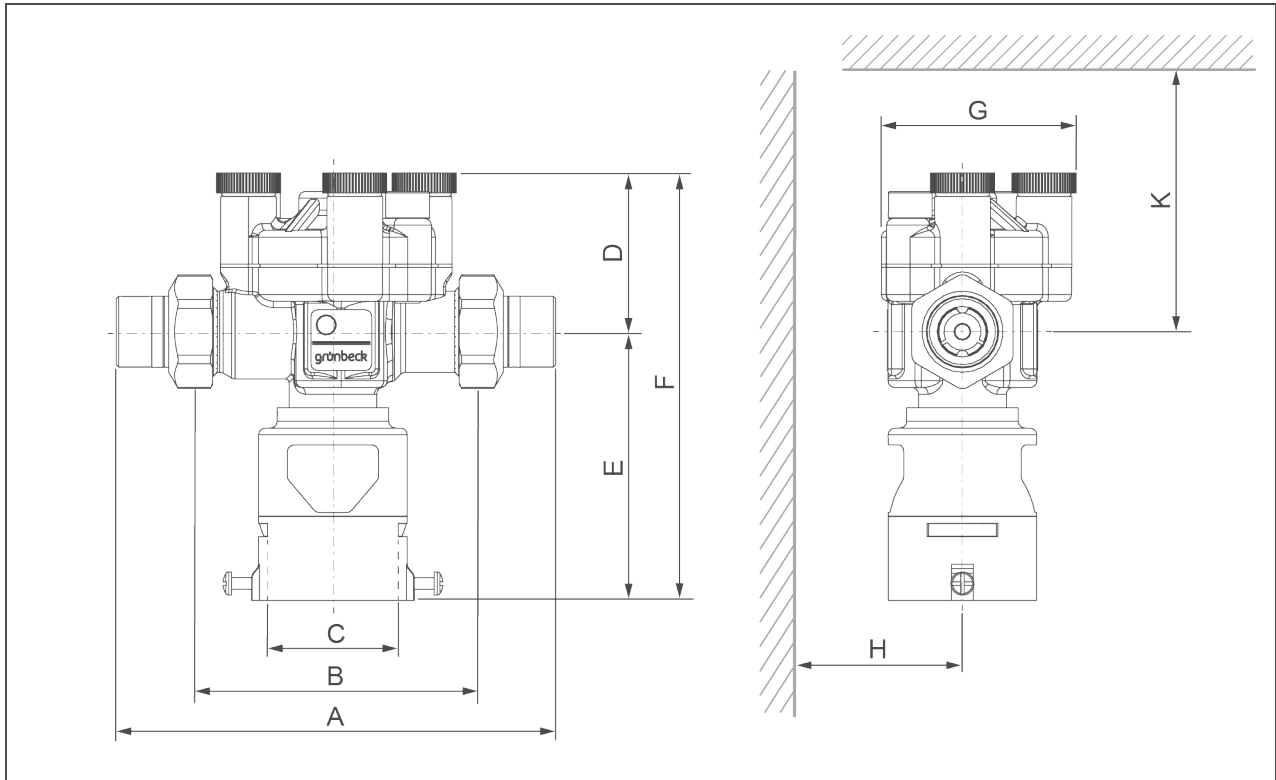
Design

- Housing with test connection at every pressure zone 1/8"
- Coarse dirt filter 500 µm in upstream pressure zone
- Two non-return valves
- Draining valve
- Drain connection acc. to DIN EN 1717
- Screw connections including reduction to R 3/4"

Scope of supply

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

Technical specifications I



Dimensions and weights		GENO-DK 2-Mini
A	Installation length with screw connections	mm 130
B	Installation length without screw connections	mm 83
C	Ø Drain connection	mm 40
D	Height above centre of pipe connection	mm 47
E	Height below centre of pipe connection	mm 80
F	Total height	mm 127
G	Total width	mm 54
H	Distance to wall	mm 35
H	Space required above centre of pipe connection (e. g. for maintenance)	mm 200
	Empty weight	kg 0.9
	Operating weight, approx.	kg 1.2
Order no.		133 100

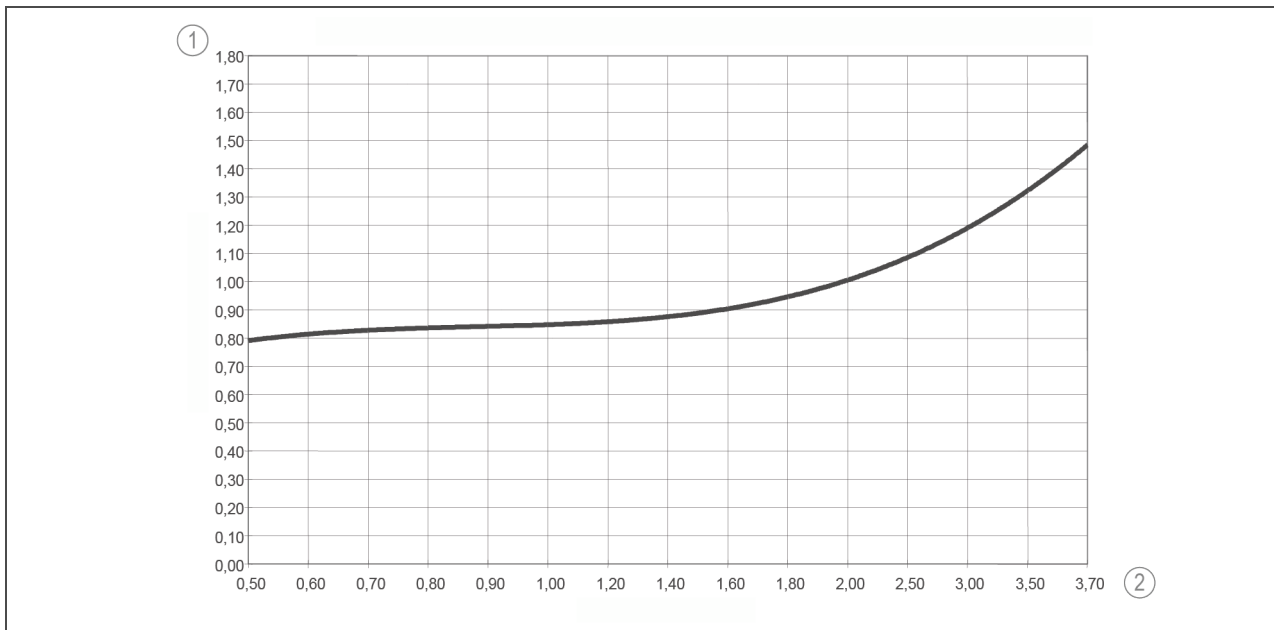
Technical specifications II

Connection data		GENO-DK 2-Mini
Nominal connection diameter	mm	DN 15
Connection diameter		R ½" (reduced to R ¾")

Performance data		GENO-DK 2-Mini
Nominal pressure	bar	PN 10
Flow pressure	bar	≥ 1
Flow rate	m³/h	≤ 3.5
K _v value (Δp = 1 bar)	m³/h	2
Dripping water volume per opening and closing process, approx.	ml	10
Waste water volume at drain connection	m³/h	≤ 1.5

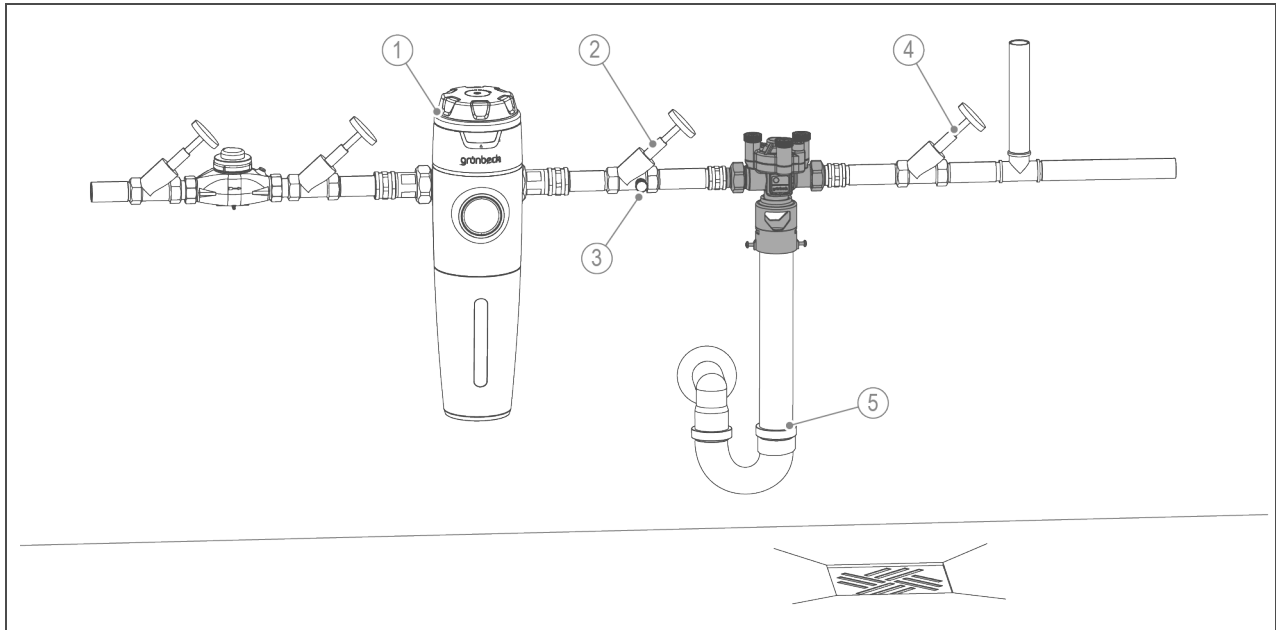
General data		GENO-DK 2-Mini
Water temperature	°C	5 – 60
Ambient temperature	°C	5 – 60
DVGW registration number		NW-6305BR0345
Order no.		133 100

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



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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