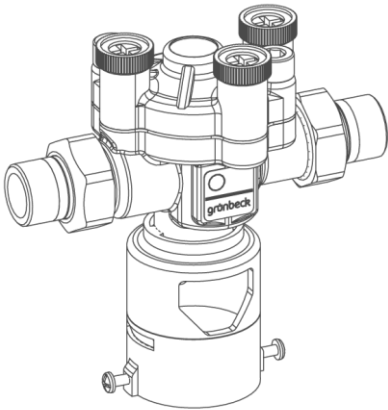




Euro system separator GENO-DK 2-Mini

Intended use

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

The system separator BA design according to DIN EN 12729 protects the drinking water from impurities up to liquid category 4 (as per DIN EN 1717, part 5.2).

The system separator 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.

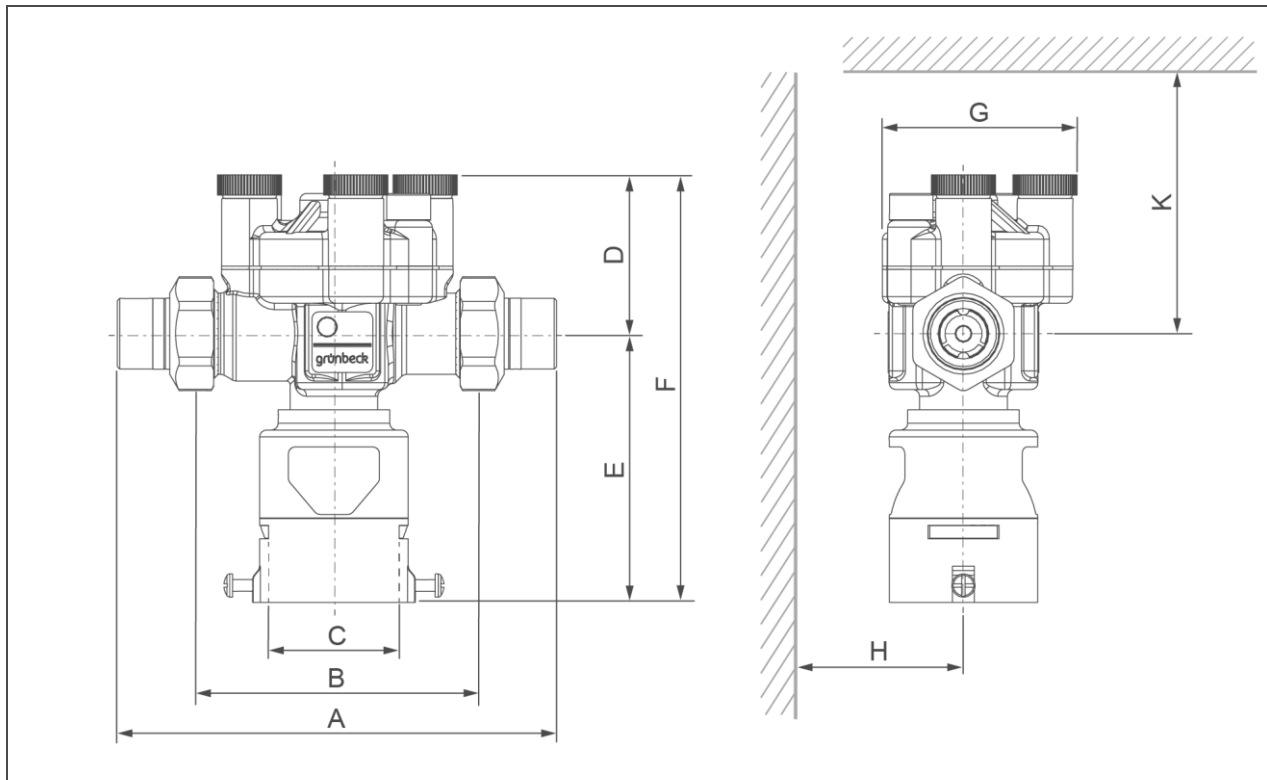
Design

- Housing with test connection at every pressure zone 1/8"
- Conical screen in coarse dirt filter 500 µm in upstream pressure zone
- Two non-return valves
- Relief 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 seal
- Conical screen

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

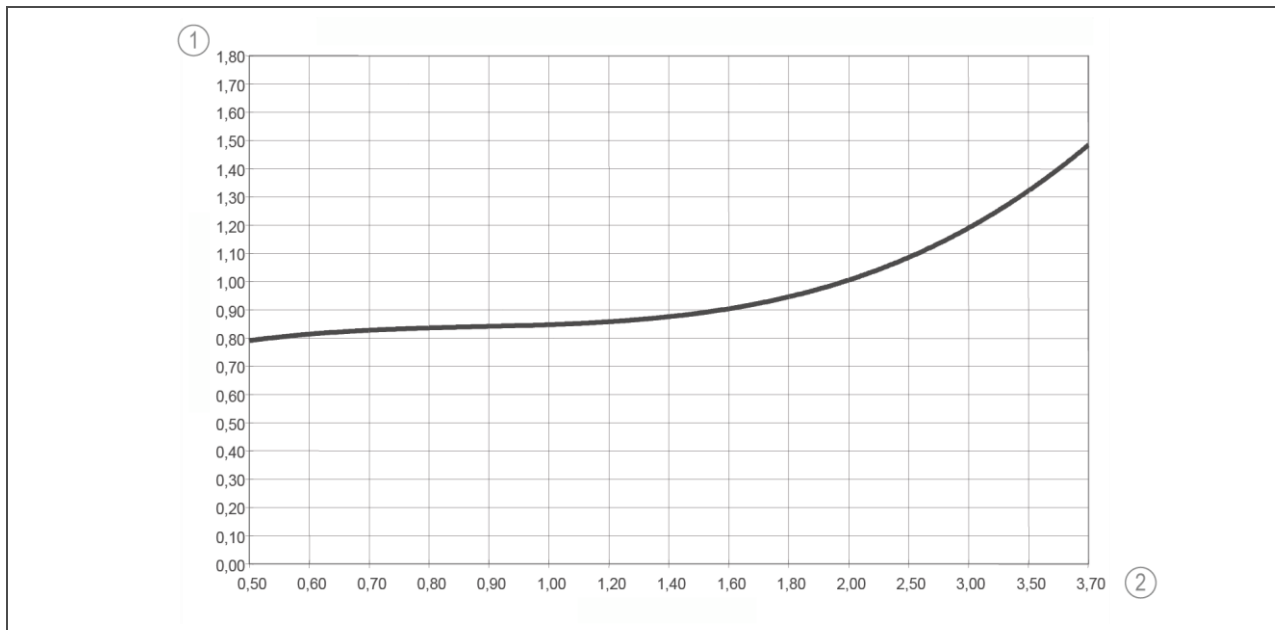
Technical specifications II

Connection data		GENO-DK 2-Mini
Nominal connection diameter	mm	DN 15
Connection diameter		R ½" (or 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

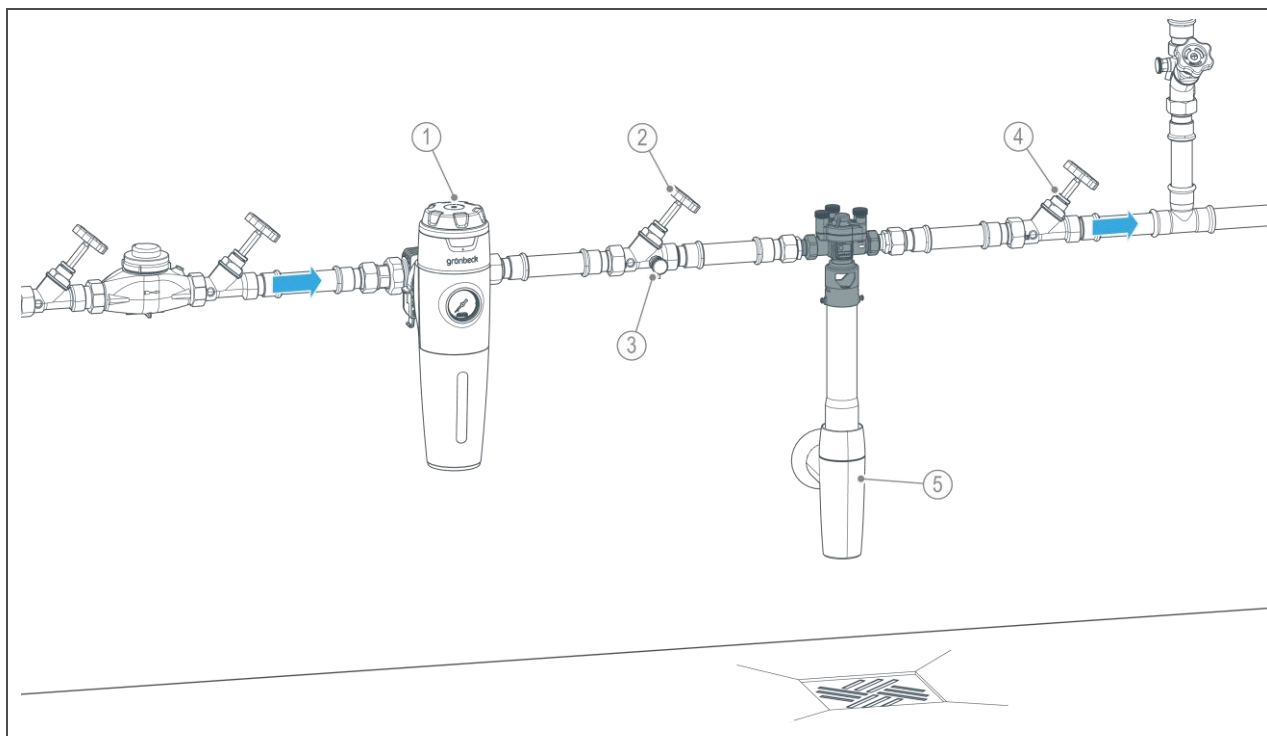
General data		GENO-DK 2-Mini
Medium temperature	°C	5 – 60
Ambient temperature	°C	5 – 60
DVGW registration number		NW-6305BR0345
Order no.		133 100

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 x series	2	Shut-off valve inlet
3	Draining valve	4	Shut-off valve outlet
5	Drain connection DN 50 according to DÄIN EN 1717		

Installation requirements

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

- Protection from frost and severe heat exposure
- Protection from chemicals, dyes, solvents and their vapours
- Ambient temperature and radiation temperature in the immediate vicinity $\leq 60^\circ\text{C}$
- Access for maintenance work (take required space into account)
- Sufficiently illuminated and ventilated
- Pipe with sufficient load-bearing capacity to support the operating weight of the product

Water installation

- Drinking water filter installed upstream (e.g. fine filter pureliQ:KDX)
- Floor drain or a safety device to prevent water damages
- Drain connection $\geq \text{DN } 40$
- Shut-off valves upstream and downstream of the product
- Draining valve upstream of the product

Accessories

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

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