KIESELMANN
FLUID PROCESS GROUP

Translation of the original

Operating Instructions

Dirt trap

Type 7023

DN25 - DN150



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1 General informations

1.1 Informations for your safety

We are pleased that you have decided for a high-class KIESELMANN product. With correct application and adequate maintenance, our products provide long time and reliable operation.

Before installation and initiation, please carefully read this instruction manual and the security advices contained in it. This guarantees reliable and safe operation of this product and your plant respectively. Please note that an incorrect application of the process components may lead to great material damages and personal injury.

In case of damages caused by non observance of this instruction manual, incorrect initiation, handling or external interference, guarantee and warranty will lapse!

Our products are produced, mounted and tested with high diligence. However, if there is still a reason for complaint, we will naturally try to give you entire satisfaction within the scope of our warranty. We will be at your disposal also after expiration of the warranty. In addition, you will also find all necessary instructions and spare part data for maintenance in this instruction manual. If you don't want to carry out the maintenance by yourself, our KIESELMANN - service team will naturally be at your disposal.

1.2 Marking of security instructions

Hints are available in the chapter "safety instructions" or directly before the respective operation instruction. The hints are highlighted with a danger symbol and a signal word. Texts beside these symbols have to be read and adhered to by all means. Please continue with the text and with the handling at the valve only afterwards.

Symbol	Signal word	Meaning
	DANGER	Imminent danger which will result severe personal injury or death.
	WARNING	Imminent danger which may result severe personal injury or death.
	CAUTION	Dangerous situation which may cause slight personal injury or material damages.
	NOTICE	An harmful situation which may result in damages of the product itself or of adjacent vicinity.
	INFORMATION	Marks application hints and other information which is particularly useful.

1.3 General designated use

The fitting is designed exclusively for the purposes described below. Using the fitting for purposes other than those mentioned is considered contrary to its designated use. KIESELMANN cannot be held liable for any damage resulting from such use. The risk of such misuse lies entirely with the user. The prerequisite for the reliable and safe operation of the fitting is proper transportation and storage as well as competent installation and assembly. Operating the fitting within the limits of its designated use also involves observing the operating, inspection and maintenance instructions.

1.4 Personnel

Personnel entrusted with the operation and maintenance of the tank safety system must have the suitable qualification to carry out their tasks. They must be informed about possible dangers and must understand and observe the safety instructions given in the relevant manual. Only allow qualified personnel to make electrical connections.

1.5 Modifications, spare parts, accessories

Unauthorized modifications, additions or conversions which affect the safety of the fitting are not permitted. Safety devices must not be bypassed, removed or made inactive. Only use original spare parts and accessories recommended by the manufacturer.

1.6 General instructions

The user is obliged to operate the fitting only when it is in good working order. In addition to the instructions given in the operating manual, please observe the relevant accident prevention regulations, generally accepted safety regulations, regulations effective in the country of installation, working and safety instructions effective in the user's plant.

2 Safety instructions

2.1 Intended use

Dirt trap is applicated for the separation of solid matters in liquids, in plants of the food and beverage industry.

2.2 General notes



NOTICE - observe the operating instructions

To avoid danger and damage, the fitting must be used in accordance with the safety instructions and technical data contained in the operating instructions.



NOTICE

All data are in line with the current state of development. Subject to change as a result of technical progress.

2.3 General safety instructions



⚠ WARNING

Risk of injury by outflowing medium

Dismantling the valve or valve assemblies from the plant can cause injuries.

- Medias flowing through the leakage drain outlet are to be drained off without splashing into a discharge arrangement.
- Carry the disassembling only if when the plant has been rendered pressure-less and free of liquid and gas.



⚠ CAUTION

Steps should be taken to ensure that no external forces are exerted on the fitting.

3 Function and operation

3.1 Description of function

The dirt trap is used to filter solid matter in liquids. When the liquid flows through the strainer in the direction of the arrow (see figure), the solid matter is retained in the mesh bottom.

3.2 Installation instructions

The installation position must be arranged with the filter element downwards.

3.3 Cleaning

The mesh bottom can be removed from the casing for cleaning.

3.4 General welding guidelines

Sealing elements integrated in weld components must generally be removed prior to welding. To prevent damage, welding should be undertaken by certified personnel (EN ISO 9606-1). Use the TIG (Tungsten Inert Gas) welding process.

⚠ CAUTION

Damage and injuries due to high temperature supply

To avoid a distortion of the components, all welding parts must be welded to stress-relieved.

Allow all components to cool before assembling.

NOTICE

Damage due to impurities

Impurities can cause damage to the seals and seals area.

Clean inside areas prior to assembly.

3.5 Service

RECOMMENDATION

Replacement of seals

To achieve optimal maintenance cycles, the following points must be observed!

- When replacement of seals, all product-contacting seals should be replaced.
- Only original spare parts may be installed.

Maintenance interval

The maintenance intervals depend on the operating conditions "temperature, temperature-intervals, medium, cleaning medium, pressure and opening frequency". We recommend replacing the seals 1-year cycle. The user, however should establish appropriate maintenance intervals according to the condition of the seals.

Lubricant recommendation

	EPDM; HNBR; NBR; PTFE; FKM; k-flex	-	Klüber Paraliq GTE703*
	Silicone	-	Klüber Sintheso pro AA2*
	Thread	-	Interflon Food*

*) It is only permitted to use approved lubricants, if the respective fitting is used for the production of food or drink. Please observe the relevant safety data sheets of the manufacturers of lubricants.

4 Technical data

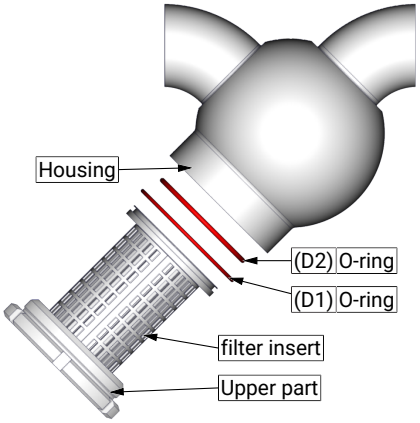
Model	Dirt trap	
Size	DN25 - DN150	
Connection type	• Weld-on end DIN EN 10357 • Male part DIN11851 • Liner / nut DIN 11851	
Strainer insert	• Perforated plate • Perforated plate + Wire cloth	
Temperature	Ambient temperature: (air)	+4° to +45°C
	Operating temperature: (depends on medium)	+0° to +90°C
	Sterilisation temperature: (SIP 30 min)	• EPDM +120 °C • HNBR +100 °C • FKM +100 °C • VMQ (Silicone) +100 °C
Operating pressure	16 bar	
Material (in contact with product)	Stainless steel:	1.4404 / AISI 316L
	Surface:	Ra ≤ 0,8µm
	Sealing material:	EPDM HNBR FKM VMQ

5 Disassembly and assembly

5.1 Disassembly

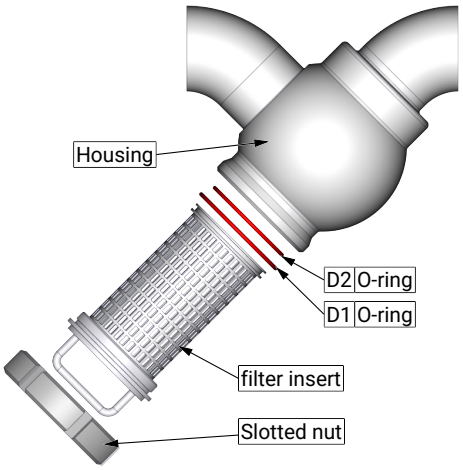
DN 25 – DN 65

- Unscrew the upper part with the filter cartridge and remove from the housing.
- Remove O-ring (D1) and (D2) from the filter cartridge.



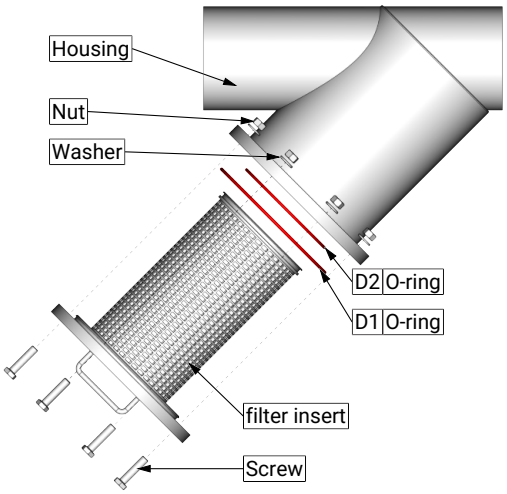
DN 80 – DN 100

- Unscrew the grooved nut and remove the upper part with the filter cartridge from the housing.
- Remove O-ring (D1) and (D2) from the filter cartridge.



DN 125 – DN 150

- Unscrew the screws and remove the filter cartridge from housing.
- Remove O-ring (D1) and (D2) from the filter cartridge.



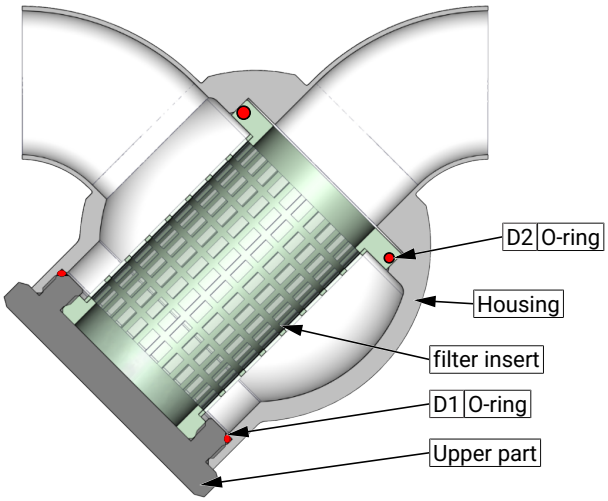
5.2 Assembly

- Before installation, thoroughly clean and slightly lubricate mounting areas and running surfaces.
- Assemble in reverse order.

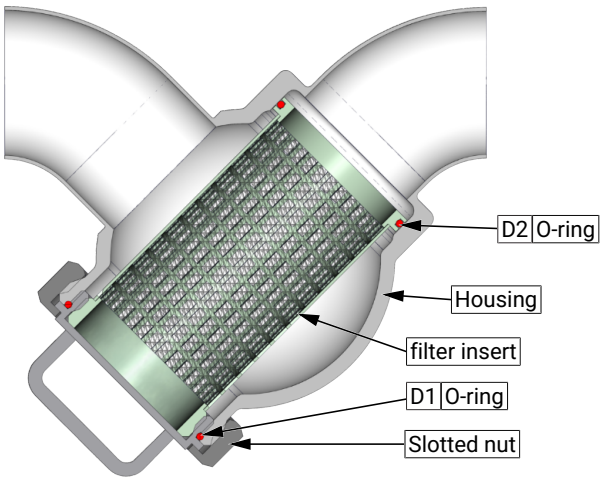
6 Drawings and dimensions

6.1 Drawings

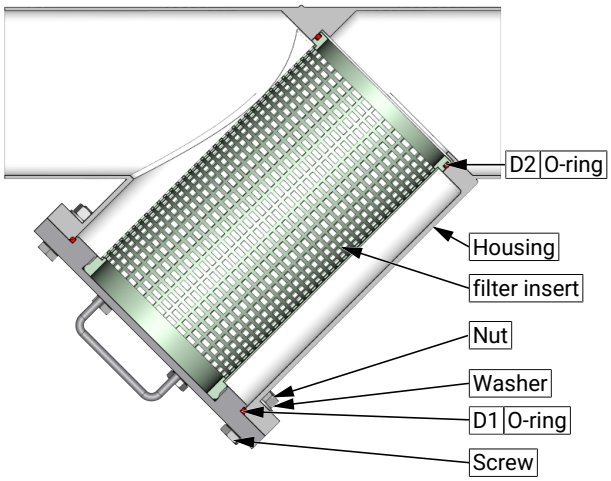
DN 25 - DN 65



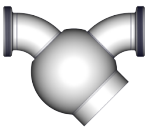
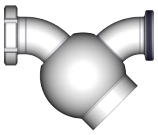
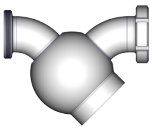
DN 80 - DN 100

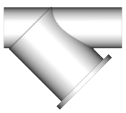
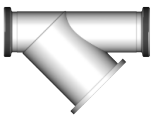
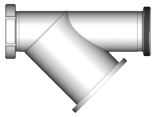
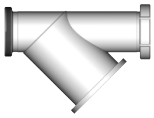


DN 125 - DN 150

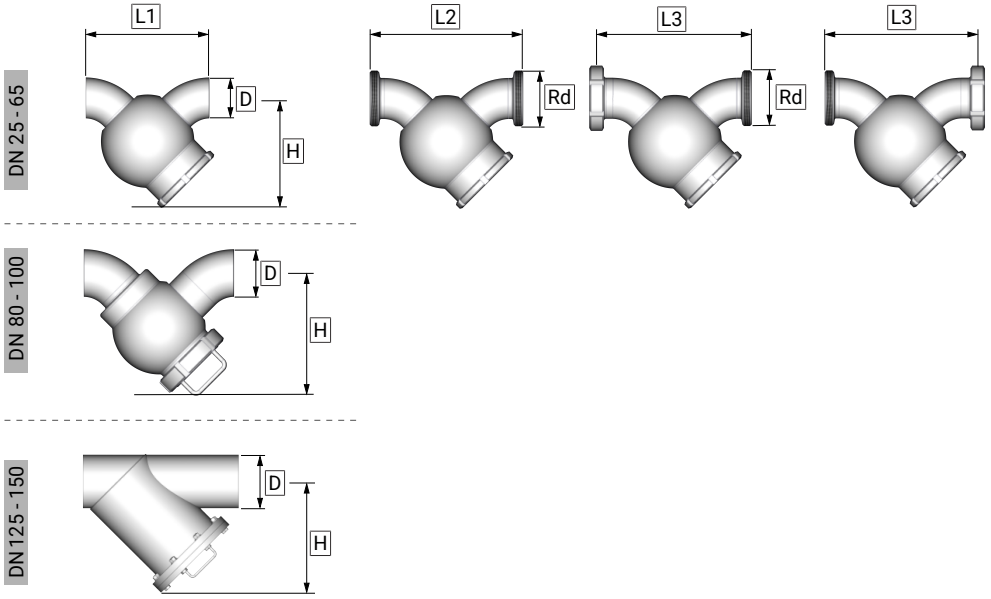


6.2 Connection variants

	S - S	G - G	KM - G	G - KM
DN25 - DN100				

	S - S	G - G	KM - G	G - KM
DN125 - DN150				

6.3 Dimensions



DN	D	Rd	L1	L2	L3	H
25	Ø 29 x 1,5	Rd52x1/6	106	150	150	92
32	Ø 35 x 1,5	Rd58x1/6	116	160	163	104
40	Ø 41 x 1,5	Rd65x1/6	139	183	187	120
50	Ø 53 x 1,5	Rd78x1/6	161	207	212	145
65	Ø 70 x 2,0	Rd95x1/6	210	260	267	186
80	Ø 85 x 2,0	Rd110x1/4	254	304	316	220
100	Ø 104 x 2,0	Rd130x1/4	280	340	354	246
125	Ø 129 x 2,0	Rd160x1/4	390	482	470	281
150	Ø 154 x 2,0	Rd190x1/4	450	524	537	323

7 Wearing parts list

Wear parts set EPDM 7023 DN 990-054

Nominal size	O-ring [D1]	O-ring [D2]
DN 25	2304 046 025-170	2304 035 030-170
DN 32	2304 054 025-170	2304 042 020-170
DN 40	2304 065 026-159	2304 050 035-159
DN 50	2304 080 025-170	2304 062 035-159
DN 65	2304 104 035-159	2304 092 035-159
DN 80	2304 100 040-159	2304 090 040-170
DN 100	2304 123 035-159	2304 111 035-084
DN 125	2304 175 050-170	2304 125 040-170
DN 150	2304 200 050-170	2304 153 045-054

Wear parts set HNBR 7023 DN 990-050

Nominal size	O-ring [D1]	O-ring [D2]
DN 25	2304 046 025-050	2304 035 030-171
DN 32	2304 054 025-050	2304 042 020-050
DN 40	2304 065 026-157	2304 050 035-050
DN 50	2304 080 025-050	2304 062 035-050
DN 65	2304 104 035-050	2304 092 035-050
DN 80	2304 100 040-050	2304 090 040-050
DN 100	2304 123 035-050	2304 111 035-050
DN 125	2304 175 050-050	2304 125 040-050
DN 150	2304 200 050-050	-

Wear parts set FKM 7023 DN 990-051

Nominal size	O-ring [D1]	O-ring [D2]
DN 25	2304 046 025-051	2304 035 030-051
DN 32	2304 054 025-051	2304 042 020-251
DN 40	2304 065 026-051	2304 050 035-051
DN 50	2304 080 025-051	2304 062 035-051
DN 65	2304 104 035-051	2304 092 035-051
DN 80	2304 100 040-051	2304 090 040-051
DN 100	2304 123 035-051	2304 111 035-178
DN 125	2304 175 050-051	2304 125 040-051
DN 150	2304 200 050-051	-

Wear parts set VMQ 7023 DN 990-052

Nominal size	O-ring [D1]	O-ring [D2]
DN 25	2304 046 025-052	2304 035 030-052
DN 32	2304 054 025-052	2304 042 020-052
DN 40	2304 065 026-052	2304 050 035-052
DN 50	2304 080 025-052	2304 062 035-052
DN 65	2304 104 035-052	2304 092 035-052
DN 80	2304 100 040-182	2304 090 040-052
DN 100	2304 123 035-052	2304 111 035-052
DN 125	2304 175 050-052	2304 125 040-052
DN 150	2304 200 050-052	-

Notes

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