



M&S Armaturen GmbH

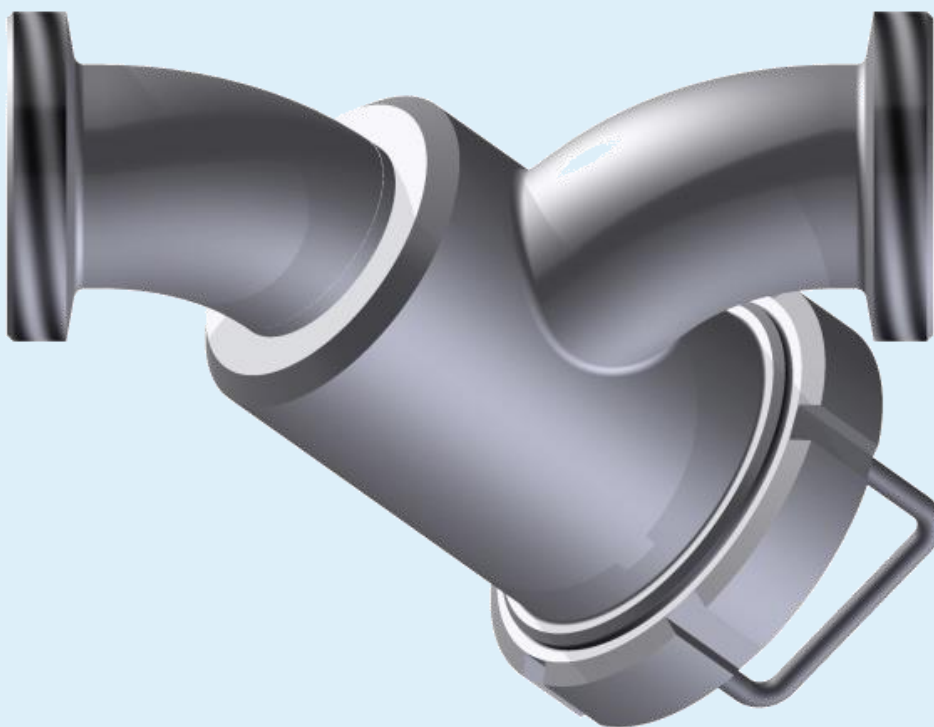
PARTNER INSTEAD OF SUPPLIER.

Operating instructions

-Translation of the original-

Dirt Collecting Filter DIN m/m

M&S Article No. 60500



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Rev.0 / 2015-03-01
BA60500GB.docx



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Dirt collecting filter DIN m/m

2 Safety instructions

2.1 Marking of safety instructions in operating instructions



Danger warnings

Danger warnings are denoted by the danger symbol which appears on the left and are framed.



Information

Descriptions to which particular attention must be paid are denoted by this symbol which appears on the left and are also framed.

2.2 Intended use

The dirt collecting filter is only intended for the described purpose. Any use beyond that is considered to be improper use. M&S is not liable for any resulting damage, the risk is solely with the operator. Requirement for perfect safe operation of the dirt collecting filter are proper transport and storage as well as professional set-up and assembly. Proper use also includes adherence to the requirements for operation, maintenance and repair. Unauthorised changes and modifications that impair the safety of the control unit are not permitted. Only use original spare parts and accessories approved by the manufacturer.

2.3 Personnel

Operating and maintenance personnel must be qualified for the respective tasks. They must have had special instructions about any occurring hazards and must know and observe the safety advices mentioned in the operating instructions.

2.4 General instructions

The user is obliged to operate the dirt collecting filter in perfect condition only. Apart from the operating instructions, the following apply

- pertinent regulations on the prevention of accidents
- generally accepted safety-related rules
- internal work and safety regulations



3 Use and operating principle

The dirt collecting filter serves as filter in process plants. By default, a perforated plate with round holes (hole width $W = \text{Ø}1.5\text{mm}$, pitch $T = 2.5\text{ mm}$) is used. The grade of filtration can be increased by placing another layer of wire mesh onto the screen area. In principle, the dirt collecting filters can be equipped with different perforated plates or wire meshes. In the variant with wire mesh, four different dimensions are standard (mesh width w [mm] x wire diameter d [mm]):

- 0.1 x 0.063
- 0.25 x 0.16
- 0.4 x 0.22
- 0.5 x 0.25

The medium to be filtered flows axially through the inlet liner into the interior of the strainer, flows through the filter and leaves the strainer through the outlet liner. Opposite flow direction or backflush are available upon request.

4 Transport and storage



When you receive the dirt collecting filter, check the information on order and delivery papers to make sure they correspond.

Check that the delivery is complete, and check its condition.

If there are visible signs of transit damage and/or packing units are missing, notify the forwarding agent immediately in the consignment note. You (the recipient) should take recourse against the forwarding agent immediately in writing, and M&S Armaturen GmbH must be informed of this action.

Complaints regarding transit damage that is not immediately evident must be made to the forwarding agent within 6 days.

The recipient must bear the costs for claims made after this period.

4.1 Transport



The packing units must only be transported using suitable lifting equipment and slinging gear.

Pay attention to the graphic symbols on the packaging.

Transport the dirt collecting filter carefully to prevent damage from sudden impacts; exercise due care when loading/unloading.



Dirt collecting filter DIN m/m

5 Sectional drawings

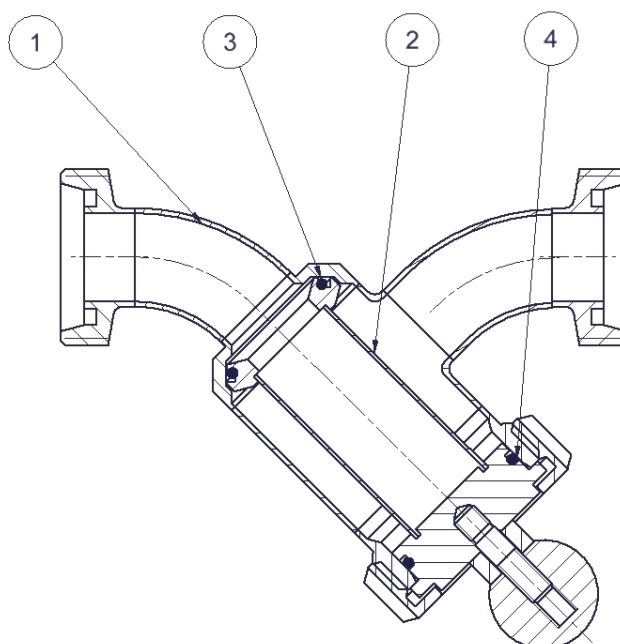


Figure 1 Sectional view dirt collecting filter DIN m/m DN25-DN32

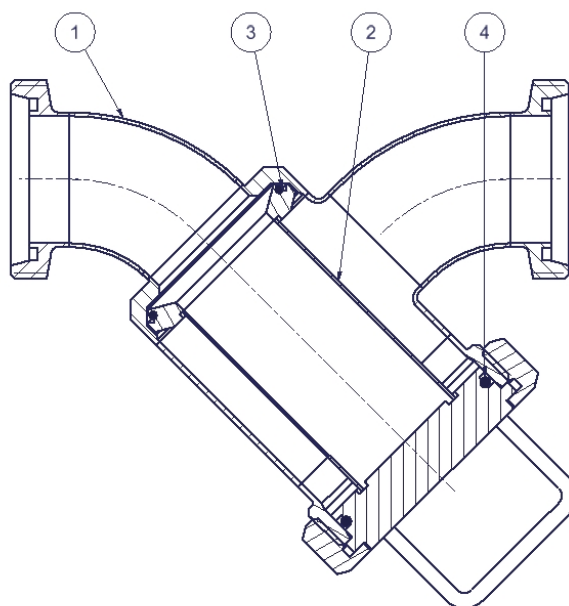


Figure 2 Sectional view dirt collecting filter DIN m/m DN40-DN100

Table 1: Bill of material dirt collecting filter DIN m/m

Pos.	Designation	Pos.	Designation
1	Dirt collecting filter housing	3	O-ring
2	Strainer for dirt collecting filter	4	O-ring



Dirt collecting filter DIN m/m

6 Assembly / disassembly

6.1 Assembly



- Observe the relevant national guidelines and regulations.

Connect the dirt collecting filter via the inlet and outlet liners to the inflow or outflow pipelines. To do so, use suitable gaskets DIN 11851-G (M&S Art.-No. 111) and screw the pipe ends with a cone liner DIN 11851 using a matching grooved nut DIN 11851-F (M&S Art.-No. 110) to the threaded liners. Upon request, other connection options (e.g. weld-in connections) are available.

7 Repairs / maintenance



- The maintenance intervals differ from case to case, the operator should define them by himself basing on sporadic checks.
- To replace the gaskets follow the installation instructions (chap. 6) or the cleaning instructions (chap. 8).



- M&S Armaturen GmbH cannot accept liability for claims made as a result of nonobservance of these Operating Instructions or constructional changes to the dirt collecting filter.
- Any other use or use outside the defined scope is considered to be improper use. M&S Armaturen GmbH will not accept liability for losses incurred as a result of improper use.



Dirt collecting filter DIN m/m

8 Cleaning



- Before cleaning, the pipeline containing the dirt collecting filter must be free from pressure and fluids!
- For safe maintenance of the dirt collecting filter, also refer to the installation instructions (chap. 6).

- Loosen the grooved nut DIN 11851-F using a hook spanner.
- Pull the strainer (2) out of the housing (1) by holding the ball handle or bow handle.
- Clean strainer (2) and interior of the housing completely.
- If necessary, replace the O-rings (3).
- If necessary, replace the O-rings (4).
- Insert the strainer (2) centred into the housing (1).
- Push the strainer (2) firmly into place.
- Tighten the grooved nut using a hook spanner.
- Apply pressure to the system and check the screw connection for tightness.



Dirt collecting filter DIN m/m

9 Technical specifications

9.1 Dimensions

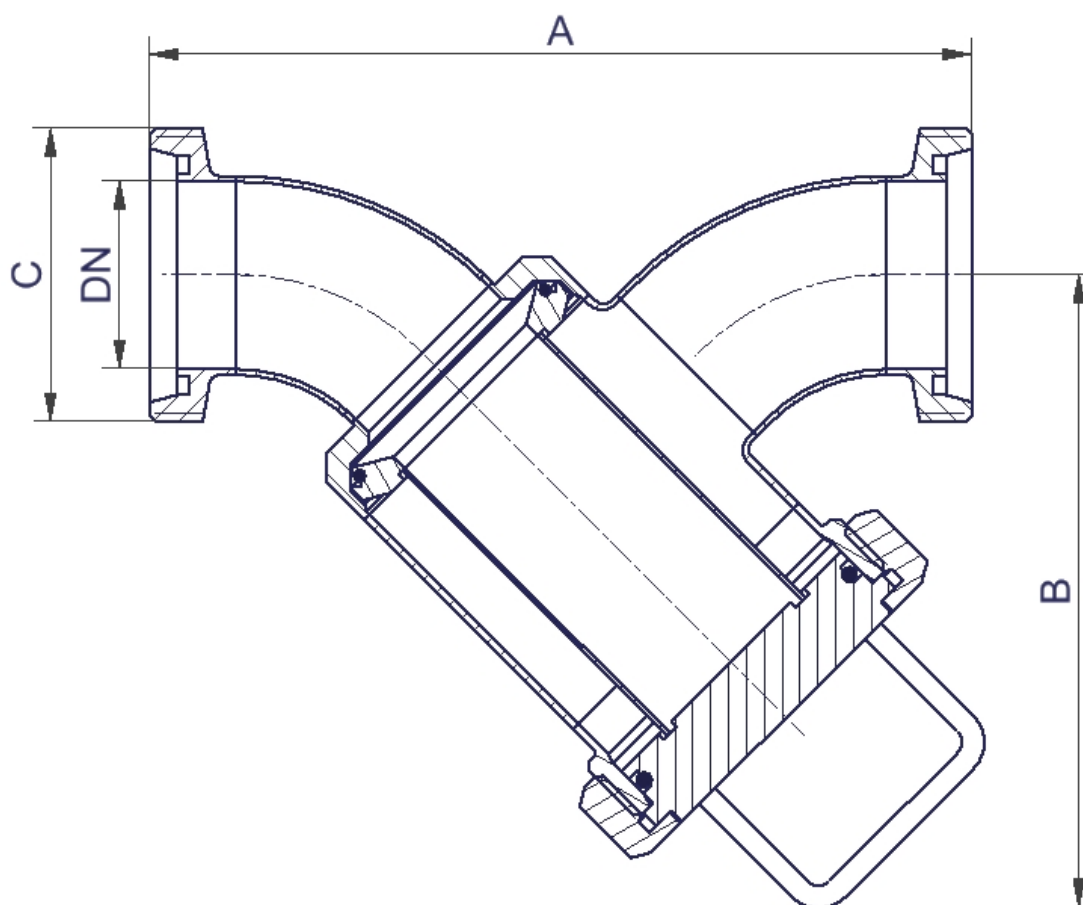


Figure 4 Dimensions dirt collecting filter DIN m/m

Table 2 Dimensions dirt collecting filter DIN m/m

DN	A [mm]	B [mm]	C [DIN 405-1]
25	163	90	Rd52x1/6
32	180	102	Rd58x1/6
40	210	111	Rd65x1/6
50	220	138	Rd78x1/6
65	280	165	Rd95x1/6
80	320	200	Rd110x1/4
100	370	225	Rd130x1/4



Dirt collecting filter DIN m/m

9.2 Information on the free screen area of the strainer in [%]

Table 1 Free screen area of the strainer in [%], variant without wire mesh

DN	Screen area [m ²]	Hole width W [mm] / pitch T [mm]					
		1.0 / 2.0	1.5 / 2.5*	2.0 / 3.5	3.0 / 5.0	4.0 / 6.0	5.0 / 8.0
25	0.0057	23	32	30	33	40	35
32	0.0083						
40	0.0106						
50	0.0165						
65	0.0283						
80	0.0434						
100	0.0618						

Table 2 Free screen area of the strainer in [%], variant with wire mesh

DN	Screen area [m ²]	Mesh width w [mm] x wire diameter d [mm]			
		0.1x0.063*	0.25x0.16*	0.4x0.22*	0.5x0.25*
25	0.0057	12	12	13	14
32	0.0083				
40	0.0106				
50	0.0165				
65	0.0283				
80	0.0434				
100	0.0618				

(*) M&S standard

10 Materials and surfaces

in contact with product:	1.4301/1.4307	AISI 304/304L
	1.4404	AISI 316L (optional)
not in contact with product:	1.4301/1.4307	AISI 304/304L

Gaskets: NBR, EPDM or FKM (depending on specification and/or design)

Interior surface: depending on specification

Exterior surface: depending on specification



Dirt collecting filter DIN m/m



Armaturen GmbH

Armaturen, Rohre, Sonderteile aus Edelstahl

fittings, pipes, special parts made of stainless steel

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