



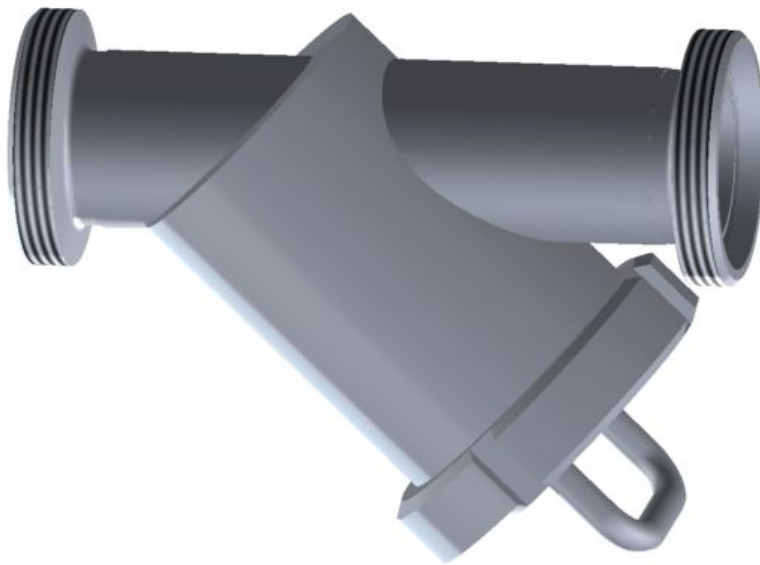
Armaturen GmbH

Armaturen, Rohre, Sonderteile aus Edelstahl
fittings, pipes, special parts of stainless steel

Operating Instructions

Dirt Collecting Filter DIN male/male

M&S Article No. 60300



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2 Symbols used



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.

3 Sectional drawings

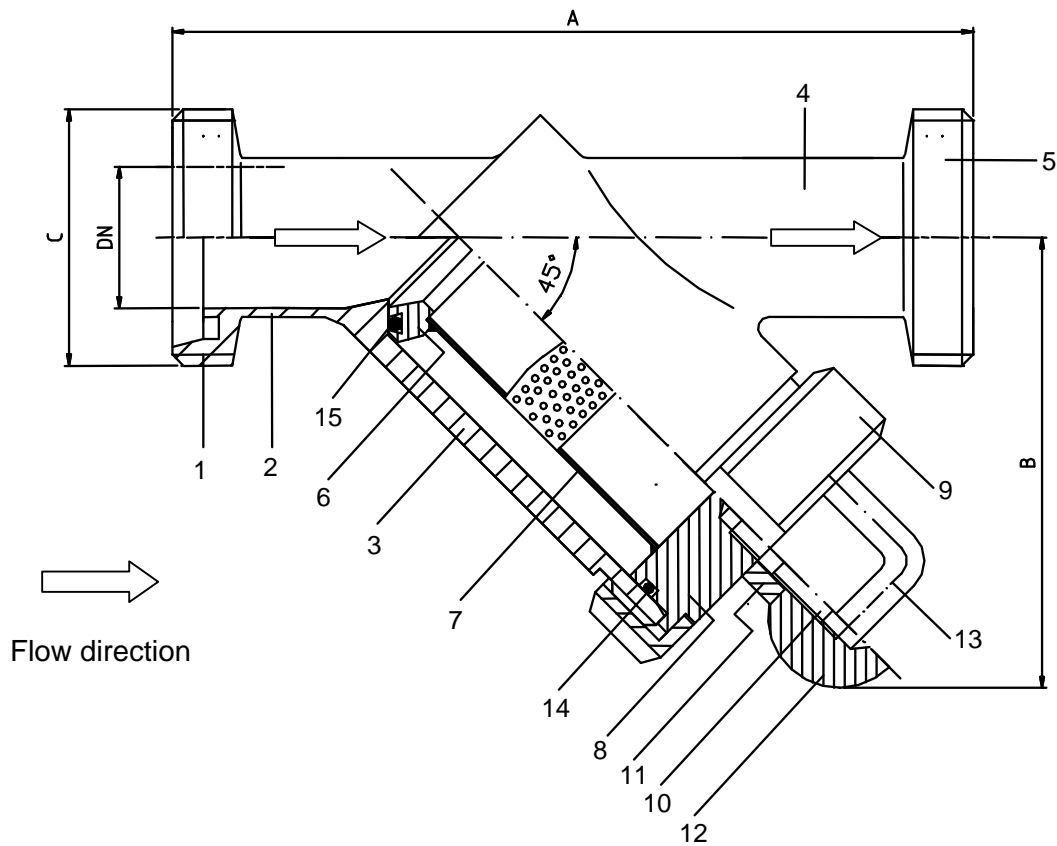


Fig. 1 Sectional view of dirt collecting filter DIN GG (dimensions see chapter 10.1)

Tab. 1 Bill of materials of dirt collecting filter DIN GG

Item	Designation	Item	Designation
1	Inlet liner	9	Grooved nut F
2	Inlet pipe segment	10	Locking screw ¹
3	Sieve housing	11	Spacer ring ¹
4	Outlet pipe segment	12	Ball handle ¹
5	Outlet liner	13	Bracket ²
6	Support ring	14	O-ring
7	Strainer	15	O-ring
8	Sieve lid		

¹)DN25-DN32

²)DN40-DN100

4 Use and operating principle

The dirt collecting filter serves as filter in processing plants. By default, a perforated plate with circular holes (hole width $W = \text{Ø}1.5\text{mm}$, pitch $T = 2.5\text{ mm}$) is used. The fineness of the filter can be increased by additionally covering the screen area with a wire mesh. The dirt collecting filters can in general be equipped with different perforated plates or wire meshes. In the wire mesh variant, four different dimensions are offered by default (mesh width w [mm] x wire diameter d [mm]):

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

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. Reverse flow direction or backwashing is available upon request.

5 Transport

5.1 Checking the delivery contents



- When you receive the dirt collecting filter, check the delivery against the order 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.

5.2 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, especially an individual strainer, carefully to prevent damage from sudden impacts; exercise due care when loading/unloading.

6 Safety advice



- Prior to maintenance works, the pipeline system containing the dirt collecting filter must be depressurised and fluid-free!
- For safe maintenance of the dirt collecting filter, observe the installation instructions (chap. 7).

7 Assembly



- Observe the relevant national guidelines and regulations.

Connect the dirt collecting filter via the inlet (1) and outlet liner (5) to the supply or return pipelines. To do so, attach a cone liner DIN 11851 to the pipe ends, and screw the pipe ends to the threaded liners (1, 5) by means of a matching grooved nut DIN 11851-F (M&S Art.-No. 110) and using the corresponding gaskets DIN 11851-G (M&S Art.-No. 111). Other connection options (e.g. welded parts) are available upon request.

8 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, refer to the installation instructions (chap. 7) or the cleaning instructions (chap. 9).



- M&S Armaturen GmbH cannot accept liability for claims made as a result of non-observance 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.

9 Cleaning



- Prior to cleaning works, the pipeline system containing the dirt collecting filter must be depressurised and fluid-free!
- For safe maintenance of the dirt collecting filter, also observe the installation instructions (chap. 7).

- Unscrew the grooved nut DIN 11851-F (9) using a sickle spanner
- Grab the ball handle (12) or the bracket (13), respectively and pull the strainer (7) out of the sieve housing (3)
- Clean the strainer (7) and the housing interior completely
- If necessary, replace O-rings (14)
- If necessary, replace O-rings (15)
- Insert the strainer (7) centrally into the sieve housing (3)
- Press strainer (7) tightly
- Tighten the grooved nut (9) using a sickle spanner
- Set system under pressure and test the screwed union for tightness

10 Technical Data

10.1 Dimensions

Tab. 2 Dimensions of dirt collecting filter DIN GG (cf. Fig.1)

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

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

Tab. 3 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						

Tab. 4 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

11 Material 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 version)

Inner surface: depending on specification

Outer surface: depending on specification