

Assembly and installation instructions

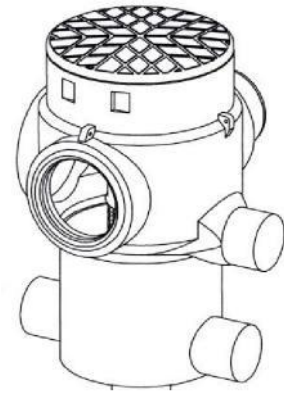
Prefilter Maxi Plus



1. Application area

The pre-filter Maxi Plus is installed underground and cleans the inflow water before it enters the rainwater container. It has no height offset.

The pre-filter Maxi plus is laid out according to DWA M 153. The technical equipment of the filter is designed for a maximum load such as courtyard surfaces, passenger car parking areas and less used streets (DWA-A 138 chart 1 Points 1 to 5; 1/02).



Maximum collection surfaces

Maxi Plus pre-assembled

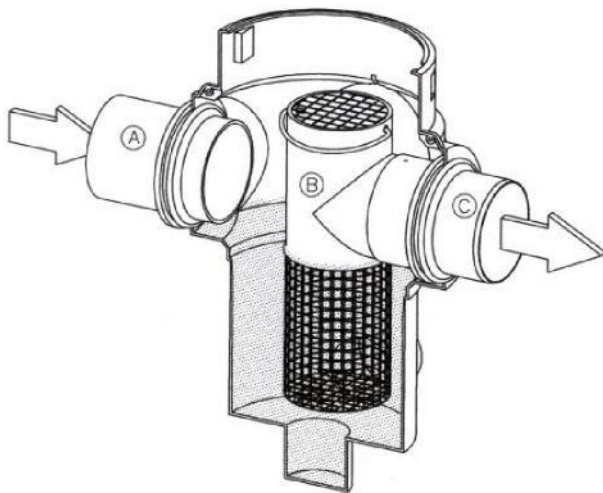
Surface, load	Max. surface [m ²]
Roof surfaces and terrace surfaces	500
Streets with <300 cars/d, car parking areas with less traffic, bicycle lanes and pavement	125
Streets with 300 – 5000 cars/d	20

The single surfaces can be combined proportionately. More detailed information is available with the service.

By parallel connection of several filters the collection surface can be increased.

The installation depth of the filter can be increased by adding a pipe extension (order No. RWZT2153; technical documentation DORW3108).

1. Function



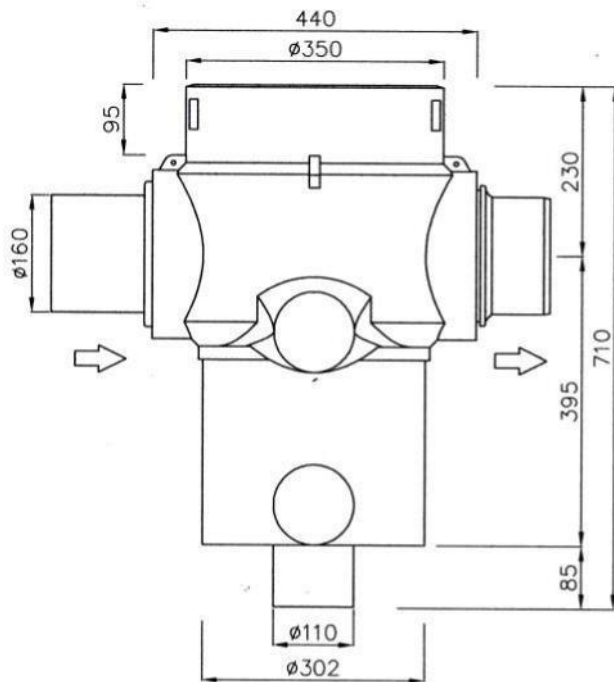
The rainwater flows through the inflow (A) into the filter case, then through the meshes into the filter cartridge (B, mesh width 0.5 mm) and the cleaned water flows out through the outflow (C) into the tank.

Particles of a certain size, which are heavier than the water, settle in the filter case (D). This settling process is improved by the retention time and design of the filter cartridge. Settling of particles lighter than water is improved by the filter meshes in which only small particles or droplets, with accordingly few impetus, stick. Other incoming small particles or droplets form bit by bit by the bigger impetus which rises (coalescence

effect).

Because of the design of the filter case – remobilisation, the large entry pipe and the mesh width of the filter (size of maximum 0.5 mm)- heavy rainfall will not impair the quality of filtered water.

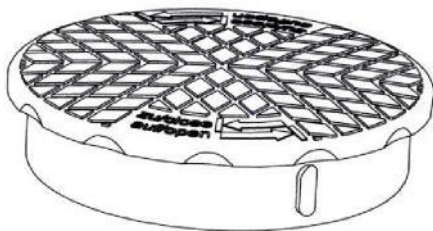
3. Main dimensions



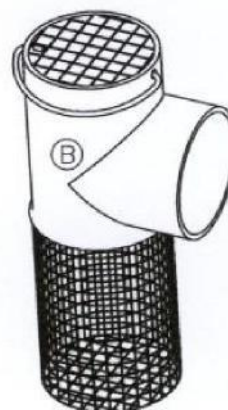
4. Operation and servicing

The cover can be very simply opened by turning and pulling up. This allows you to check the amount of the debris produced in the filter.

Before removing any debris, the filter cartridge has to be removed from the filter and then cleaned.



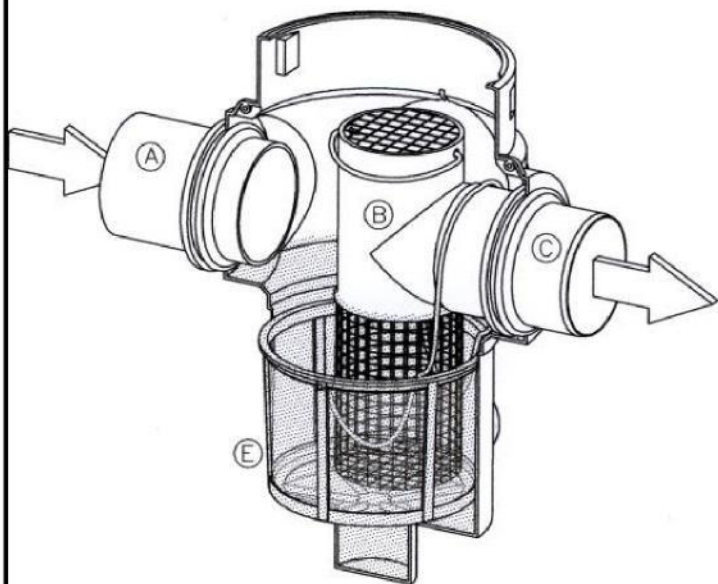
On top: removed cover



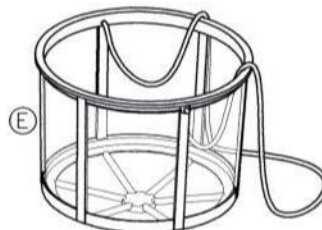
On the right: dismantled filter cartridge

5. Special equipment

5.1 Leaf collecting basket (accessory)



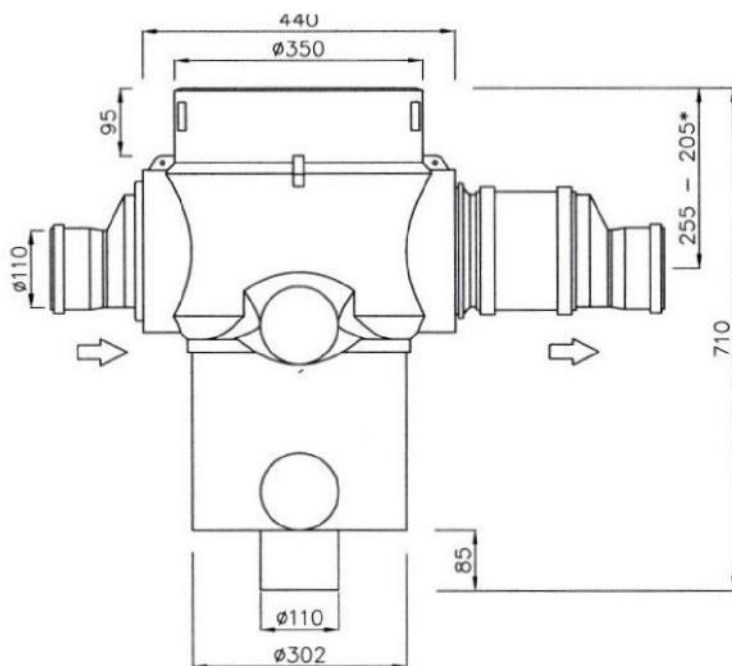
The leaf collecting basket (E) eases the removal of built up debris. It is taken out after removing the filter cartridge (B, see also point 4.) by means of the withdrawal rope.



E: leaf collecting basket, on the right removed

A, B, C: see point 2.

5.2 Connection to DN 100



The connection to pipes DN100 can be carried out with customary KG pipe (2 reductions; 1 slip-on sleeve, see drawing on the left).

* other reducers allow a fine adjustment of the installation depth.

6. Installation walk-on version

Excavation pit: Care must be taken to avoid damage to existing pipework, vegetation or buildings, when installing the MAXI filter. The latter is especially important when there is a deep installation of the MAXI filter.

Filling material: The filling material should be load-bearing, well compacted, frost free, ideally this would be a wide-graded sand-/gravel mixture (e.g., grain size 0/32). Do not backfill with material such as topsoil, rubble or clay soil. Excavated soil can only be used if it corresponds to the above mentioned criteria.

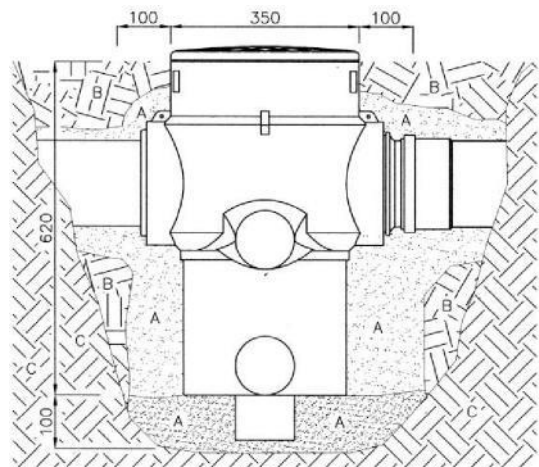
Connection pipes - it is very important that the outflow pipe has an incline equal to or greater than the incline of the inflow pipe to the filter. Failure to observe this will cause the filter to back up/overflow during heavy rainfall. This also applies to the auxiliary overflow.

Installing the MAXI Filter

1. Excavate the hole.
2. Lay a 100 mm thick bed of filling material, compact it well (machine, or three operations with hand tamper 15 kg / squared timber or similar)
3. Insert and adjust the filter, attaching the pipe connections.
 1. Fill in the filling material in about 100 mms thick layers. The thickness of the filling material around the filter body should be about 100 mms. The rest of the layer can be filled with excavated earth. Every layer has to be compacted, e.g. with a hand tamper 15 kg / squared timber or similar mechanical device.

This kind of filling should be carried out up to 100 mms from the top edge of the ground.

4. The rest filling can be chosen arbitrarily



A Filling material according to point 6
B Filling with excavation or similar
C Ground Soil