

Description:

Rainwater filter for bigger roof areas. The Twin Filter can be installed in a pilot shaft or in frost-protected regions directly on the wall. Normally standard concrete shafts are used (Ø 1000 mm). The filter can be delivered to the site pre-installed in the shaft.

Two step cleaning system, therefore high level of filtering efficiency, independent of flow rate.

Due to the steep inclination of the filter cartridge the dirt is continuously cleaned away into the sewer. The cleaned water is collected in a tank and directed into the storage.

Connection capacity for roof areas:
up to 1254 m² at 2 x DN 150

Because of a Bypass-Installation a bigger area can be connected.

Inlet rainwater: 2 x DN 100 / DN 150
Inlet storage: 2 x DN 100 / DN 150
Outlet to sewer: 2 x DN 100 / DN 150

The filter has to be cleaned depending on the contamination 1 - 2 times during the year



How it works:

1. As water arrives the level builds up and is equally distributed across the two cascades
2. Pre-cleaning through the cascades, Coarse dirt is led across the primary filter cascades directly to the sewer
3. Pre-filtered water then flows over the secondary filter sieve (mesh size 0,65 mm) Due to the special mesh structure and the steep inclination of the sieve, any dirt washes directly into the sewer
4. The cleaned water is being absorbed in the middle tank and directed through one or the two connections into the storage
5. Dirt goes to the sewer through the shaft



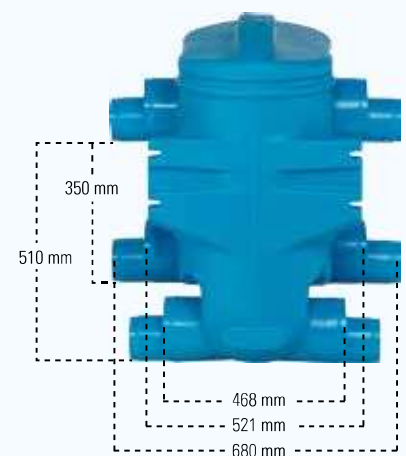
Technical Data:

Inlet rainwater: 2 x DN 100 / DN 150
Inlet storage: 2 x DN 100 / DN 150
Outlet to sewer: 2 x DN 100 / DN 150

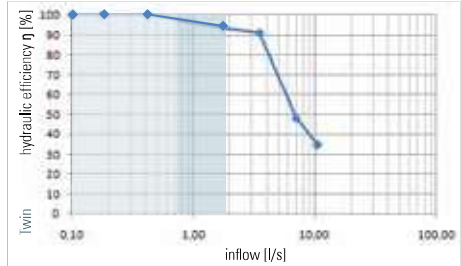
Height difference between inlet and
a. outlet to the storage: 350 mm
b. outlet to the sewer: 510 mm

Housing and cascade material: Polyethylene
Material filter sieve: Stainless steel 1.4301
Mesh size: 0,65 mm

Weight: 16 kg



Example:
3P Twin Filter installed
in a concrete shaft



Source: Prof. Dr.-Ing. Mathias Uhl Muenster University of Applied Sciences

DN 100: 80% of the average intensity of rainfall in Germany is under 15 l/(sxha), resulting a volume flow rate of 0,64 l/s with a roof area of 426 m².

DN 150: 80% of the average intensity of rainfall in Germany is under 15 l/(sxha), resulting a volume flow rate of 1,88 l/s with a roof area of 1254 m².

Diameter of tube	maximum flow rate	connectable area max. 200 l/(sxha)	connectable area max. 300 l/(sxha)
DN	l/s	m²	m²
100 x 2	12,8	640	426
150 x 2	37,6	1880	1254

Text for invitation of tenders:

Pos.	Quantity	Article	Price in €
1.1	_____	3P Twinfilter Filter made of Polyethylene for the installation in a pilot shaft (Ø 1000 mm) Inlet rainwater optional 1 or 2 x DN 100 / DN 150 Outlet to storage optional 1 or 2 x DN 100 / DN 150 Outlet to sewer optional 1 or 2 x DN 100 / DN 150 Height difference between inlet rainwater and outlet to storage: 350 mm Height difference between inlet rainwater and outlet to sewer: 510 mm Filter insert with integrated fine filter: 0,65 mm, Material sieve netting: stainless steel Connection capacity according to DIN 1986: for roof areas up to 1254 m² at 2 x DN 150 and a rainfall intensity of 300 l/(sxha)	_____
1.2	_____	Concrete shaft for 3P Twin Filter including installation of 3P Twin Filter Inner diameter 1000 mm, Height 75 cm, Cone Ø 100 / 60-60h with Goebel lid resilient up to 5 t Shaft has to be equipped with Forsheda Seals corresponding to the connections	_____

Packing unit 3P Twin Filter:
Pallet: 4 pieces