

HydroFilter PE 400

Rainwater Filter



HydroFilter PE 400

Advanced rain and stormwater filter for moderately contaminated runoff - suitable for catchment areas up to 175m².

Key elements of the device are the filter and sediment separator. The filter occupies the full width of the device between the inlet and outlet ports, and remains under water at all times. Water flows by gravity upwards through the filter. Treatment involves four main processes: sedimentation, filtration, precipitation and adsorption.

Cleaned water has excellent water quality.

Life expectancy of the replaceable filter is 2-5 years.

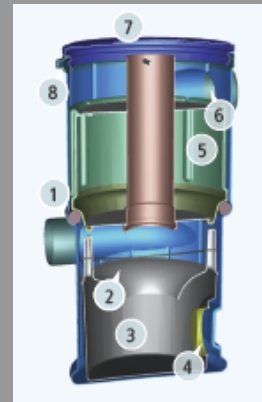


Key Attributes

- No moving parts
- Few components
- Strong and durable
- Light weight
- Easily installed
- Low maintenance
- Clear overhead access
- Removes particles and dissolved substances
- Sediment immobilised
- Low head design
- Provision for overflow
- Up-flow treatment process
- Excellent water quality

Components

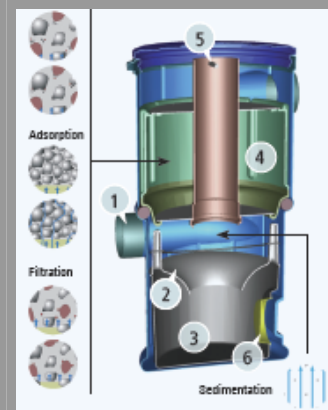
1. Inlet port
2. Sediment separator
3. Sediment trap
4. Cleaning flap
5. Filter with overflow pipe
6. Outlet port
7. Lid
8. Bayonet lugs for fitting Telescopic Extension



Method of operation

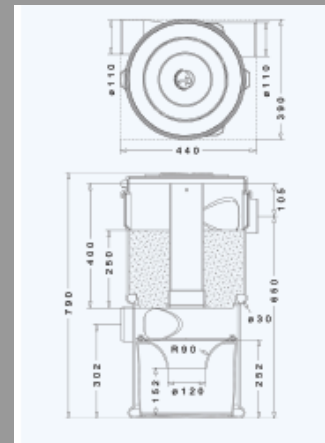
1. Rainwater runoff from roofs, driveways and parking areas piped to inlet port. Angled inlet exerts radial flow on incoming water.
2. Concave shaped sediment separator creates centrifugal force (vortex), causing particles to separate out.
3. Particles fall through the centre of the separator and are trapped in chamber beneath (**sedimentation**).

4. Filter located in central section of device between inlet and outlet ports. Small particles retained on bottom surface of filter as water flows upwards through filter (**filtration**). Dissolved substances removed within filter through **precipitation** and **adsorption** processes.
5. Tube provided in centre of filter module to allow for overflows in event of blockages or severe rain events.



Technical Data

Catchment area	traffic (100m ²); roof (175m ²)
Structural material	polyethylene (5mm wall thickness)
Filter material	porous medium - HydroCon proprietary formulation
Weight	housing (5,2kg); lid (1kg); separator & trap (1.8kg); filter (<14kg); total (22kg max)
Net volume	housing (75l); trap (16l); filter (22.5l)
Dimensions	height (790mm); width (390/440mm)
Connections	diameter (110mm)
Filter seal	diameter (30mm); length (1100mm)
Telescopic Extension	material (polyethylene); weight (5kg)



Residential installation:

The HydroFilter PE 400 is ideally suited for treating runoff from contaminated surfaces - roofs, driveways and other hard surfaces around residential and commercial premises. Device may also be used to treat water from dams and other farm and rural residential water sources.

Device is generally installed underground as a pre-tank filter. With some above ground tanks, it may also be located above ground.



Maintenance:

Under normal conditions, the filter should be maintenance free for 2-5 years. With moderately contaminated runoff, complete single filter module should be periodically removed (using handle located inside the top of overflow pipe) and back-flushed, Replace with new module when necessary.

Sediment trap should be checked periodically and cleaned. Trap can be extracted from device after removing filter module. Trap has side flap to facilitate cleaning. If suction equipment available, filter module can be back-flushed in situ and sediment removed by suction hose via overflow tube.

Accessories:

Telescopic Extension

Telescopic Extension allows the HydroFilter PE 400 to be installed 250mm to 750mm below ground



HydroCon Filters

Standard (runoff from roofs and non-trafficable areas)

Traffic (moderately contaminated runoff from areas with average daily traffic < 5,000 vehicles)

Order/Tender Specification

	Quantity
HydroFilter PE 400 Assembly	<input type="text"/>
Standard Filter	<input type="text"/>
Traffic Filter	<input type="text"/>
Telescopic Extension	<input type="text"/>

Sales and technical enquiries

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