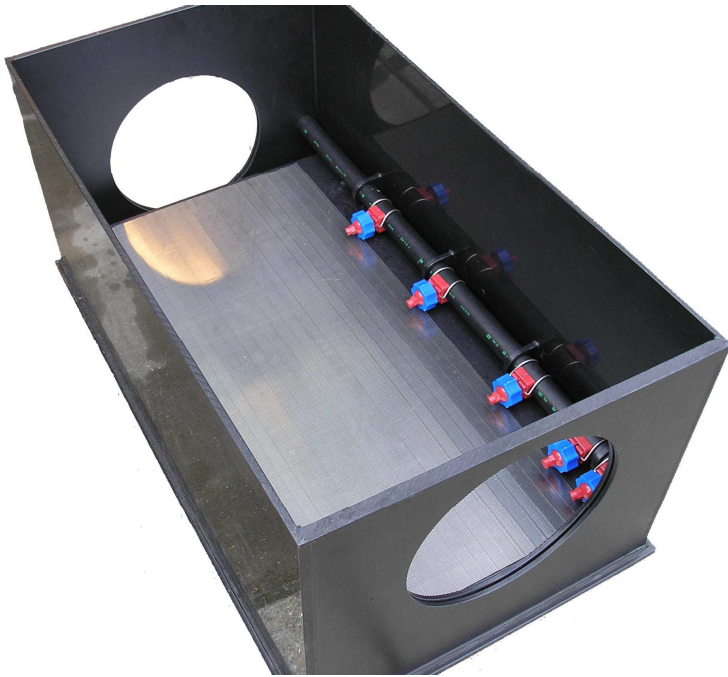


Rainwater Filter TF

Item No G11137, G11138, G11141, G11142, G11143, G11144



Typical applications:

- Rainwater filtration via horizontal stainless steel filter grid
- Installation within rainwater storage tank or separate filter manhole, versions for above ground indoor/outdoor or below ground are available on request

Functional principle:

This commercial Trident filter has been developed to be used in medium to large size rainwater harvesting systems. The highly efficient filtration process via horizontal stainless steel filter grid with optimised profile ensures maximum rainwater collection rate and filter efficiency, passive self-cleaning and optimal non-

potable water quality in the rainwater storage tank. This produces precious, hygienic and soft rainwater for gardens, washing machines, toilet supply as well as for numerous industrial and commercial applications, e.g. water for cooling towers, car/lorry washing or other process water where rainwater usage is clearly of advantage.

- **Rainwater main filtration:** Leaves and the majority of particles are retained on the grid until the self-cleaning process starts. The construction and the dimensions of the grid make a high collection rate of up to 99% possible.
- **Self-cleaning:** The filter grid should be located below the maximum water level of the tank. If the tank overflows, the filter will be under water and the floatable dirt will be transferred into the surface water drainage system. Remaining debris, encrusted dirt and bio film will be removed by the sprinklers. The sprinklers can be connected to the rainwater system (connection 1") and their water spray direction can be adjusted. This improves the self-cleaning effect of the filter.

Features:

- Connectable roof areas 1,650 – 10,000 m²
- Maximum collection rate 49.5 – 300 l/s
- Minimum height-difference between inlet and overflow from 101 to 145 mm
- Minimum height-difference between inlet and outlet from 150 to 398 mm
- Filter efficiency - up to 99%
- Passive self-cleaning via horizontal filter grid

- Includes semi-automatic cleaning device (sprinklers) for semi-/fully automatic maintenance (filter monitoring and active fully automatic filter cleaning via Rainmanager control unit available as optional add-on)

Technical data

Item	Item no.	Design flow rate	Roof area)*	Inlet inner dia	Inlet storage tank	Grid size	No. of sprinklers
		l/s	m ²	mm	mm	mm	
Rainwater filter TF 4	G11137	49.5	1,650	250	2x 110	0.7	3
Rainwater filter TF 4	G11138	49.5	1,650	250	2x 110	0.7	0
Rainwater filter TF 5	G11141	60	2,000	250	200	0.7	4
Rainwater filter TF 6	G11142	90	3,000	315	250	0.7	5
Rainwater filter TF 7	G11143	180	6,000	400	315	0.7	8
Rainwater filter TF 9	G11144	300	10,000	500	400	0.7	9

)* The actual connectable roof area depends on the local rainfall and is site-specific.

Item	Item no.	Vertical distance inlet / overflow	Vertical distance inlet / outlet	Overflow inner dia.	Rainwater supply for self-cleaning version
		mm	mm	mm	Connection – flow rate – pressure
Rainwater filter TF 4	G11137	145	150	250	1" – 0.94 l/s – 1.5 bar
Rainwater filter TF 4	G11138	145	150	250	
Rainwater filter TF 5	G11141	101	268	250	1" – 0.94 l/s – 1.5 bar
Rainwater filter TF 6	G11142	101	298	315	1" – 1.14 l/s – 1.5 bar
Rainwater filter TF 7	G11143	101	343	400	1" – 1.61 l/s – 1.5 bar
Rainwater filter TF 9	G11144	101	398	500	1" – 2.08 l/s – 1.5 bar

Item	Item no.	Filter dimensions			Operational weight (approx.)
		Length	Width	Height	
		mm	mm	mm	kg
Rainwater filter TF 4	G11137	585	585	450	50
Rainwater filter TF 4	G11138	585	585	450	50
Rainwater filter TF 5	G11141	880	730	535	34
Rainwater filter TF 6	G11142	1,130	730	585	42
Rainwater filter TF 7	G11143	1,600	600	735	65
Rainwater filter TF 9	G11144	2,180	730	835	89

Note: Design collection flow rates are calculated values. They have been proved right in practical installations for all listed standard sizes, but are not experimentally tested and thereby cannot be guaranteed for all applications. The rainwater inlet and filtered water outlet connections are orifices. The overflow connection is an orifice with lip seal.

Materials

Filter grid	Stainless steel
Filter housing	HPDE 20mm

Product advantages

- The standard range covers the requirements for roof areas between 1,650 and 10,000m².
- Minimum level loss between inlet and overflow from 101 to 145 mm.
- Various locations for filter installation possible:
 - below ground within the rainwater storage tank or separate filter manhole,
 - above ground – indoor or outdoor for wall or tank mounting (no filter chamber required) – available on request.
- Maximum rainwater collection rate and filter efficiency – up to 99%, even during intense rain events.
- Minimal maintenance required due to the self-cleaning horizontal stainless steel filter grid. For manual filter maintenance the grid can be easily taken out.

Optional add-ons:

- Filter grid monitoring and active fully automatic filter cleaning via Rainmanager control unit. This feature provides fully automatic filter cleaning on demand and is recommended for filters that are installed at locations with limited access. Further information and prices are available on request; please contact our office.
- Sprinklers for the rainwater filter TF 4.

Aquality Trading and Consulting Ltd. reserves the right to make technical changes.