

## REFILL

### Demineralisation station for the treatment of refill and top-up water

#### Description

REFILL is a water treatment station for the complete demineralisation of the refill and make-up water for heating and cooling systems that are run in the low-salt mode according to VDI 2035.

The REFILL full desalination station is designed for permanent installation between the drinking water pipe and the heating or cooling system and can be integrated into existing automatic pressure maintenance and refilling systems.

In addition to the ion exchanger cartridge for full demineralisation, REFILL consists of one Stainless steel wall bracket with integrated water meter, the MINiGarde conductivity indicator for capacity monitoring, a sampling valve and two 90° elbow valves.

Depending on the version, REFILL is delivered including a combined automatic filling and RPZ valve to meet the requirements of the EN 1717.

The water treated with REFILL meets the requirements for low-salt refill and top-up water in accordance with the applicable guidelines. Within the capacity range, the total hardness is <math><0.1\text{ }^\circ\text{dH}</math> and the electrical conductivity is at a level of <math><10\text{ }\mu\text{S/cm}</math>.



<b>Application</b>	Deionisation of the top-up and filling water for heating and cooling systems.
<b>Operating temperature</b>	5 to 50°C
<b>Operating Pressure</b>	6 bar at 20°C, 3 bar at 50°C 10 bar at 20°C – Model REFILL-VA

#### Included Equipment

- Stainless steel wall bracket with ball valves, water meter, capacity indicator, sampling valve and cartridge holder.
- Ion exchange cartridge with mixed bed resin for deionisation of water.
- Funnel for easy resin handling.
- Depending on the version, including a combined automatic filling and RPZ valve.

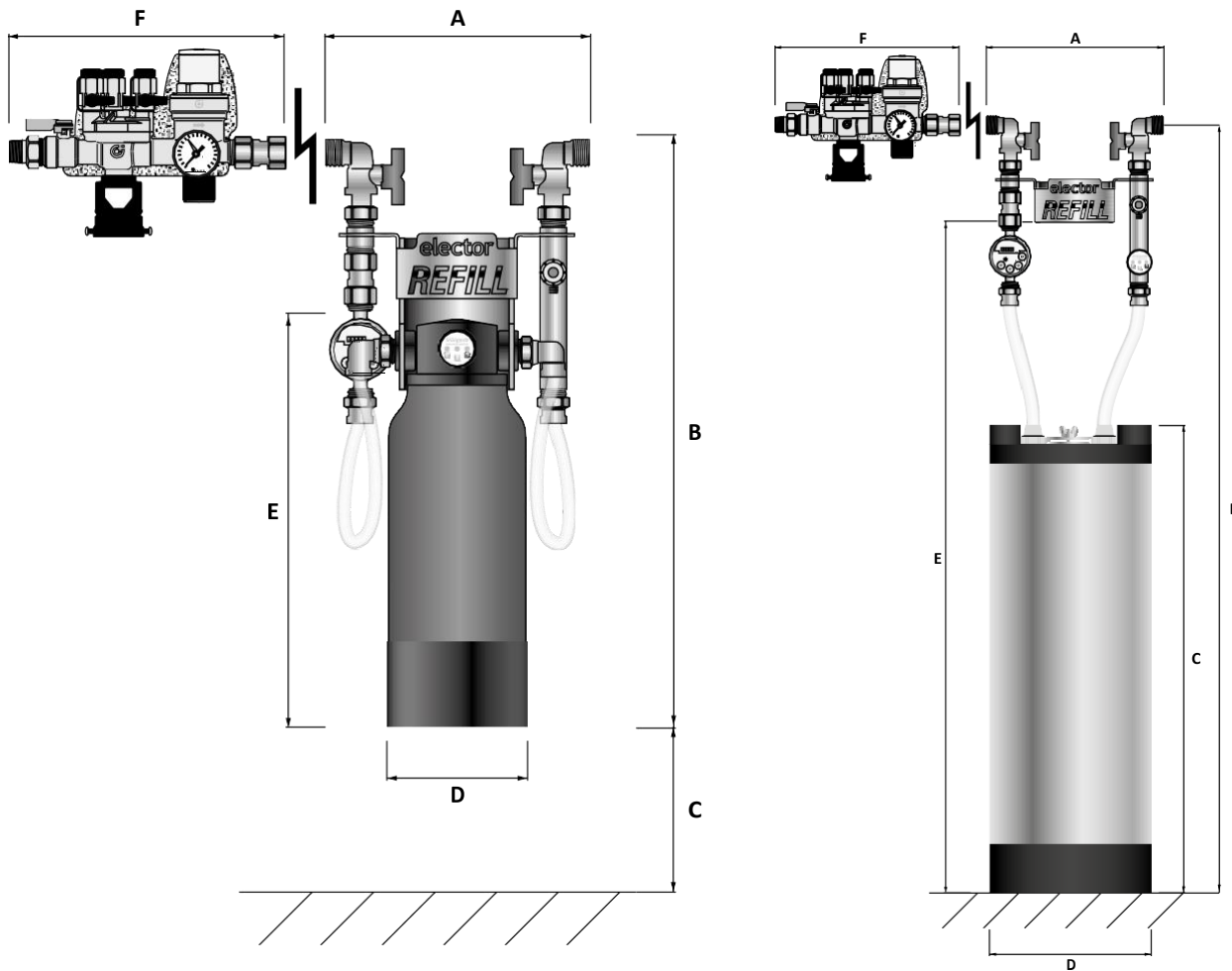
#### Design

Item no.	Model	Assembly	Cartridge material	Cartridge content l	Capacity *@ 10°dH / 17,8°fH	Recommended flow rate l / h
41004	REFILL 50plus - basic	Wall	Polyglass	2.7	~ 0.3 m <sup>3</sup>	100
41024	REFILL 50plus – inc. Filling valve					
41005	REFILL 100plus - basic			6.5	~ 0.8 m <sup>3</sup>	260
41025	REFILL 100plus – inc. Filling valve					
41009	REFILL 150plus - basic	Wall / cartridge floor standing	Stainless Steel	10.5	~ 1.2 m <sup>3</sup>	420
41026	REFILL 150plus – inc. Filling valve					
41018	REFILL-VA.14 basic			13.5	~ 2 m <sup>3</sup>	560
41029	REFILL-VA.14 plus – inc. Filling valve					
41007	REFILL-VA.26 basic	40	~ 3.9 m <sup>3</sup>	25	1040	
41027	REFILL-VA.26 plus – inc. Filling valve					
41008	REFILL-VA.40 basic			~ 6 m <sup>3</sup>	1600	
41028	REFILL-VA.40 plus – inc. Filling valve					

\*The capacity refers to a switch-off time of 10  $\mu\text{S/cm}$  conductivity of the deionised water. The actual capacity depends on the flow rate, the temperature of the water and the type and age of the mixed bed resin used.

# REFILL

Dimensions



Dimensions in mm

Item no.	Model	Assembly	A	B	C	D	E	F
41004	REFILL 50plus - basic	Wall	265	600	~260	140	420	-
41024	REFILL 50plus - inc. Filling valve							255
41005	REFILL 100plus - basic			725	159	560	-	
41025	REFILL 100plus - inc. Filling valve						255	
41009	REFILL 150plus - basic	Wall / cartridge floor standing	variable via flexible hose. Max. C + 180 + 2000 mm	530	219	430	-	
41026	REFILL 150plus - inc. Filling valve						255	
41018	REFILL-VA.14 basic			398	239	variable via flexible hose. Max. C + 2000 mm	-	
41029	REFILL-VA.14 plus - inc. Filling valve						255	
41007	REFILL-VA.26 basic			703	703	-	-	
41027	REFILL-VA.26 plus - inc. Filling valve						255	
41008	REFILL-VA.40 basic			1029	1029	-	-	
41028	REFILL-VA.40 plus - inc. Filling valve						255	

### Optional Additions

For the REFILL water treatment station, we can provide you with additional conductivity meters with switching contacts or automatic filling and pressure maintenance controls with leakage monitors.