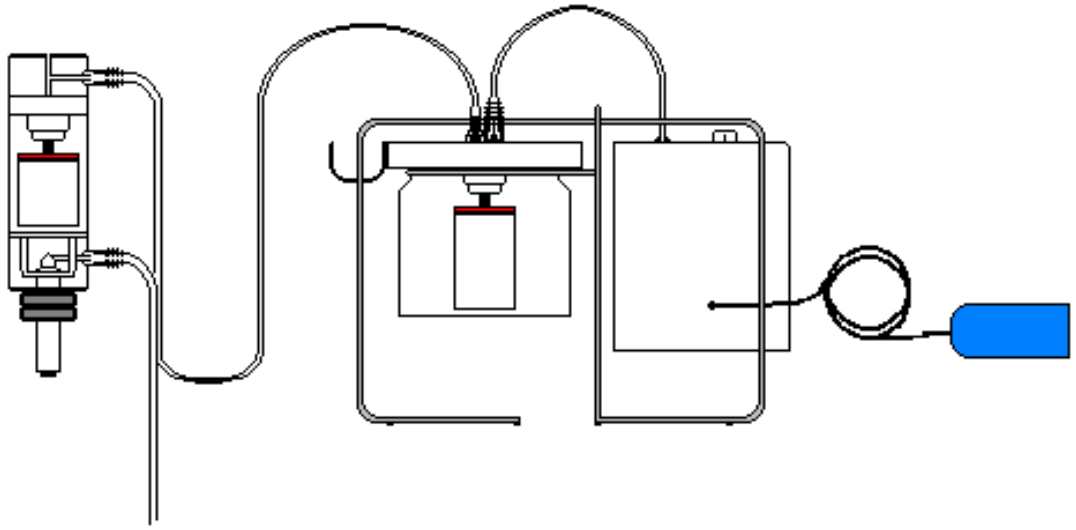
To perform filling operations for batteries or battery cells easily and safely, Omicron has designed and manufactures the FG series activators: all models fill and level sulfuric acid, bringing it to the correct level. Different models are available according to the workload. All activators are made of:

Plexiglas - AISI 316 stainless steel - PVC - MATERIALS RESISTANT TO SULFURIC ACID CORROSION.

- **VACUUM-OPERATED ACTIVATORS** (for batteries with degassing holes, inserts are required)

FG/78 BENCH-TOP ACTIVATOR	Model suitable for light workloads 1 INJECTOR • FG/78 cm 31 x 26 x 28 H35M 220V diaphragm pump, one head
RCP TROLLEY-MOUNTED ACTIVATOR	Model suitable for light workloads 1 INJECTOR • RCP cm 83 x 45 x 700 H35M 220V diaphragm pump, one head

MACHINE COMPONENTS



Ref.	Description	Model FG/78 - 220V
1	Injector	FG/78 - I
2	Motor box	FG/78 - M H35 220V
3	Machine start switch	FG/78 - P
4	Connection cable with CEI 23-12 plug	FG/78 - Cable
5	Plexiglas motor-protection tank	FG/78 - S
6	Motor safety float	FG/78 - GS
7	Electrolyte pickup tube	FG/78 - F
8	Injector holder	FG/78 - P

CHARACTERISTICS

Component	Materials / Specifications
Frame	Coated steel tubes Gray PVC plate
Pickup tubing	Vipla
Valve and float	Transparent Plexiglas
Safety tank	Transparent Plexiglas
Connection hoses	Rubber
Control button panel	Body: plastic Contacts: copper Screws: steel
Injector	Transparent Plexiglas
DIAPHRAGM electric pump 220V MP H35	Voltage (Volt): 220/240 A.C. Frequency (Hz): 50 Absorption (A): 0.45 Absorbed Power (Watt): 30 Capacity (LPM): 11 Sucked Volume (LPM): 10 Final Vacuum (mbar ABS): 320 Pressure (Bar): 2 Weight (kg): 1.3 Motor Speed (RPM): 2780 Dimensions (mm): 140 x 74 x 104

Detail No. 1 - INJECTOR

The injector is designed to allow accurate filling of batteries, in order to avoid spills and above all to introduce the exact amount of electrolyte into the battery cells so that the correct filling level of the cell is reached.

The injector is shown in the figure.

The injector body, the main element on which all components are mounted, is made of transparent Plexiglas. It has two side cavities inside which the vacuum tube and the electrolyte delivery tube are fitted. Inside the injector there is a shut-off float that stops the process once the preset filling level has been reached (B).

On the upper part of the body there is a hole which, when closed, creates a vacuum inside the cell, consequently drawing the electrolyte into the cell.

A	Injector closing hole
B	Injector float
C	Sealing gaskets

Motor safety tank

The injector is connected in series with a safety tank (5) with a capacity of 1 litre. From a system point of view, this tank is connected downstream of the injector and upstream of the suction pump by means of rubber hoses.

The safety tank therefore ensures that, in the event that the completed filling level is not observed or the float located in the injector is damaged, any electrolyte solution that would inevitably be drawn in cannot reach the pump body, with consequent damage to the pump.

In fact, the pump is designed to draw in air only.

Consequently, in the event of injector malfunction, the electrolyte solution drawn in reaches the safety tank, which is in turn equipped with an additional float valve that blocks the suction line.

TROLLEY-MOUNTED RCP 220V ACTIVATOR

Trolley-mounted version of the FG/78 filler.

One injector, 220V pump. Dimensions: 750 x 350 x 1000 mm. Plexiglas - AISI 316 stainless steel - PVC - MATERIALS RESISTANT TO SULFURIC ACID CORROSION.