Aqua Filling System™ (AFS)
Universal Battery Watering System

Installation Instructions

**Water Input Assembly (D)**
1) # x AFS (A)
2) 1 x Coil of PVC Tubing (C)
3) 1 x Water Input Assembly (D)

**Optional:**
4) 2 x End Plugs (B)
5) # x AFS Caps (E)

**Required:**
- **Tubing (C)**
- **Water Input Assembly (D)**
- **AFS (A)**

**Operation**

Connect to a suitable water supply.

The water stops automatically.

Working pressure is between 4-44psi (0.2-3 bar).

**AFS Removal**

Remove by inserting an insulated screwdriver (or similar) under the lip of the AFS.

Gently pry the AFS out by levering around the lip.

Do not try to remove the AFS by pulling on the tubing.

OPTION: Place AFS cap over the barbs.

OPTION: Place End Plug in the tubing.

4-44psi (0.2-3 bar)

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Installation

**HEALTH AND SAFETY PRECAUTIONS**

Batteries contain sulphuric acid, always wear approved protective clothing (gloves, goggles and apron).

**Installation**

**AFS-VD1 and AFS-VQ1**

<table>
<thead>
<tr>
<th>T1</th>
<th>T2</th>
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<tbody>
<tr>
<td>Bottom of the float when fully extended (x) in mm</td>
<td>Liquid level at shut off in mm</td>
</tr>
<tr>
<td>47</td>
<td>36</td>
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<td>52</td>
<td>40</td>
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<td>62</td>
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<td>67</td>
<td>54</td>
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**AFS-VA1**

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<td>Bottom of the float when fully extended (x) in mm</td>
<td>Liquid level at shut off in mm</td>
</tr>
<tr>
<td>45</td>
<td>34</td>
</tr>
<tr>
<td>50</td>
<td>38</td>
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<td>55</td>
<td>43</td>
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<td>60</td>
<td>48</td>
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<td>65</td>
<td>52</td>
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Check manufacturers guidelines for fill heights. If there are no guidelines available then always use the longest setting possible, ensuring there is a 5mm gap from the top of the separators to the underneath of the float in the extended position.

All fill heights are measured from the underside of the AFS cap (top of the vent well).

Ensure there is clear access to the AFS tubing ports.

Fully push the free end of the tubing on to the first AFS and push until it stops.

Measure the tubing to the middle of next AFS ensuring a small amount of slack.

Cut the tubing square at this point using a tube cutter or scissors ensuring end of tubing is not crushed.

Push the cut end of the tube in to the second AFS and press firmly.

With the remaining tubing securely connect all of the AFS together in the same way.

Once the tubing is fitted choose a suitable position for the Input Assembly and cut the tubing.

Fix the Water Input Assembly by firmly inserting the tube in the same way as with the AFS.

Pull the pin back and then move the float to the required position.

Place an AFS into the vent hole of each battery cell and press firmly into place.

Layout using AFS End Plugs

**Closed loop layout**

90°

Cut the tubing square at this point using a tube cutter or scissors ensuring end of tubing is not crushed.

Electrolyte

Vent Well

Xmm

Vent Well

Electrolyte