



## COMPLETE CELL TOPPING-UP EQUIPMENT

This equipment has been designed to aid the topping-up of water for large sizes or numbers of cells, especially where the electrolyte levels cannot easily be seen.

The complete topping-up watering equipment comprises two basic units: a cell topper and a watering cart equipment connected by a flexible hose. The filling pistol, which has a flow rate of 8 liters/min., shuts off at the right level when the correct spacer tube is used.

### filling pistol



**Total filling pistol length:** 625 mm

**Packaging dimensions (mm):** 800x195x50 (LxWxH)  
**Kit of 8 spacer tubes supplied** (marked A to H)

**To function correctly, the filling pistol requires**  
1 to 1,7 bar

### Watering cart equipment



**Container capacity:** 37.5 l  
(made in polypropylene)

**Charger:** 120 V / 230 V with exchangeable AC  
plug models

**Hose:** 2.7 m in length

**Battery:** VRLA 12 V / 7.2 Ah  
Dimensions (mm): 150x64X94 (LxWxH)

**Dimensions (mm):** 430x430x940 (LxWxH)

**Packaging dimensions (mm):** 400x400x950  
(LxWxH)

**Weight:** 13 kg (empty)

### Filling pistol operation

1. Select the appropriate spacer tube for cell type that is to be topped-up. Refer to the spacer tube list in the tables below for correct spacer tube identification. The spacer tubes are individually marked with an identity letter.
2. Attach spacer tube to the front end of the probe.
3. Orient the spacer tube so that the stepped inside diameter is put onto the probe first; it must face up. The smooth (non-stepped) diameter must face down.
4. Push the spacer tube completely against the probe top so that there is no visible space between the spacer tube and the probe top. Refer to the pictures below for correct positioning of spacer tube on the probe.
5. Insert probe into cell.
6. Press and hold handle until you feel the pistol stop dispensing water. You will be able to feel this in the handle.
7. Release the handle.
8. Remove the probe from the cell.  
**Note:** There will be some water that drips out of the probe after the handle is released. Let this drain into the cell or to another desirable location.
9. Repeat above steps for each cell to be topped-up.

#### Correct installation for specified spacer tubes in the table



Spacer Tubes "A" to "F" and H



Spacer Tube "G"

### Watering cart equipment operation

1. Remove the black cap and fill the tank with distilled or deionized water (per IEC 60993). Replace the black cap when full.
2. Connect the output hose of the watering cart to the bottom of the filling pistol's handle.
3. Turn the power switch to the ON position. The switch is located on the back of the cart. The pump will energize for a few seconds and then stop.
4. Insert the probe of the filling pistol into the battery cell. Squeeze the handle until you feel the pistol shut off. The pump will also shut off at the same time. Release the handle. Remove the probe and tap to eliminate any drops. Move to the next cell.
5. Repeat step 4 above for each cell to be topped-up.
6. Once all topping-up is complete, turn the power switch to the OFF position.
7. Charge the cart battery as needed. The battery needs 13 hours to fully charge. Leaving the battery on charge for extended periods will shorten battery life.

**Note:**

- The watering cart cannot be operated while the charger is connected to the battery.
- The expected run time of the watering cart, with a fully charged battery, is 2 hours continuous. Longer run times are likely with intermittent use of the system.

## Parts list equipment

Item	Pocket plate Part Number	Sintered/PBE Part Number
Complete topping-up equipment with universal charger 120 V/230V (with filling pistol, spacer tube kit, charger+plugs)	08-00195-02	220325
Filling Pistol (with spacer tube kit)	01-02002-01	220323
Spacer tube kit (with spacer tubes marked A to H)	01-02007-01	220 974
Battery Charger (120/230 V) + plugs (2-Pin Euro plug, 3-Pin UK plug, 2-Pin US plug)	01-02011-01	220 975

## Pocket plate cells - Spacer tube list

Battery Type	Capacity Range (Ah)	Spacer Tube to be used
SBL	7.5 - 30, 45, 59	A
SBL	37 & 48, 70, 90	B
SBL	102 - 1540	B
SBM	11 - 30	A
SBM	43 - 84	B
SBM	86 - 1390	B
SBH	8.3 - 16, 49	A
SBH	19 - 39,51	B
SBH	59 - 920	B
SNL	10 - 59	A
SNL	70 - 355	B
SNM	9 - 55	A
SNM	70 - 335	B
SNH	9 - 34	A
SNH	40 - 210	B
SPL	80 - 420	B
STL+	38 - 460	B
SUN+	45 - 1110	B
SCL P	10 - 70	H
SCL	11 - 69	B
SCL	76 - 128	C
SCL	157 - 411	B
SCM	11 - 59	B
SCM	65 - 118	C
SCM	145 - 341	B
SCM S - steel	32 - 118	A
SCM S - steel	145 - 435	B
SCH	11 - 50	B
SCH	58 - 137	C
SCH	147 - 265	B
SCH S - steel	67 - 128	A
SCH S - steel	147 - 320	B

**Sintered/Pbe cells - Spacer tube list**

Battery Type	Capacity Range (Ah)	Spacer Tube to be used
SPH B	16 - 47	A
SPH	11	A
SPH	16 - 52	D
SPH	60 - 80	B
SPH	90 - 190	A
SPH	220 - 320	C
SRM P/FR	25 - 66	D
SRM P/FR	80 - 105	D
SRM P/FR	125 - 270	F
SRM 320 LFR	320	A
SRM 340 CP/CFR	340	E
SRM F3	80, 100, 140, 160, 180	C
SRM F3	120, 140L	D
SRM F3	250C	E
SRX P/FR	22 - 80	D
SRX P/FR	90 - 220	C
SRX LP/LFR	175	A
SRX C	50	C
SRX F3	220	A
SRX P-LC	250	B
STH B	11 - 47	A
STH	21 - 80	D
STH	90 - 190	E
SM 100 P/FR	95	F
SM 100 LFR	95	C
SM 155 P/FR	155	A
SM 110 S	110	B
SRM - steel	46 - 80	B
SRM - steel	105 - 440	G
SRX / SRX E - steel	72 - 370	C
SRX stainless	90 - 250	B
SRX 44 E - steel	44	B