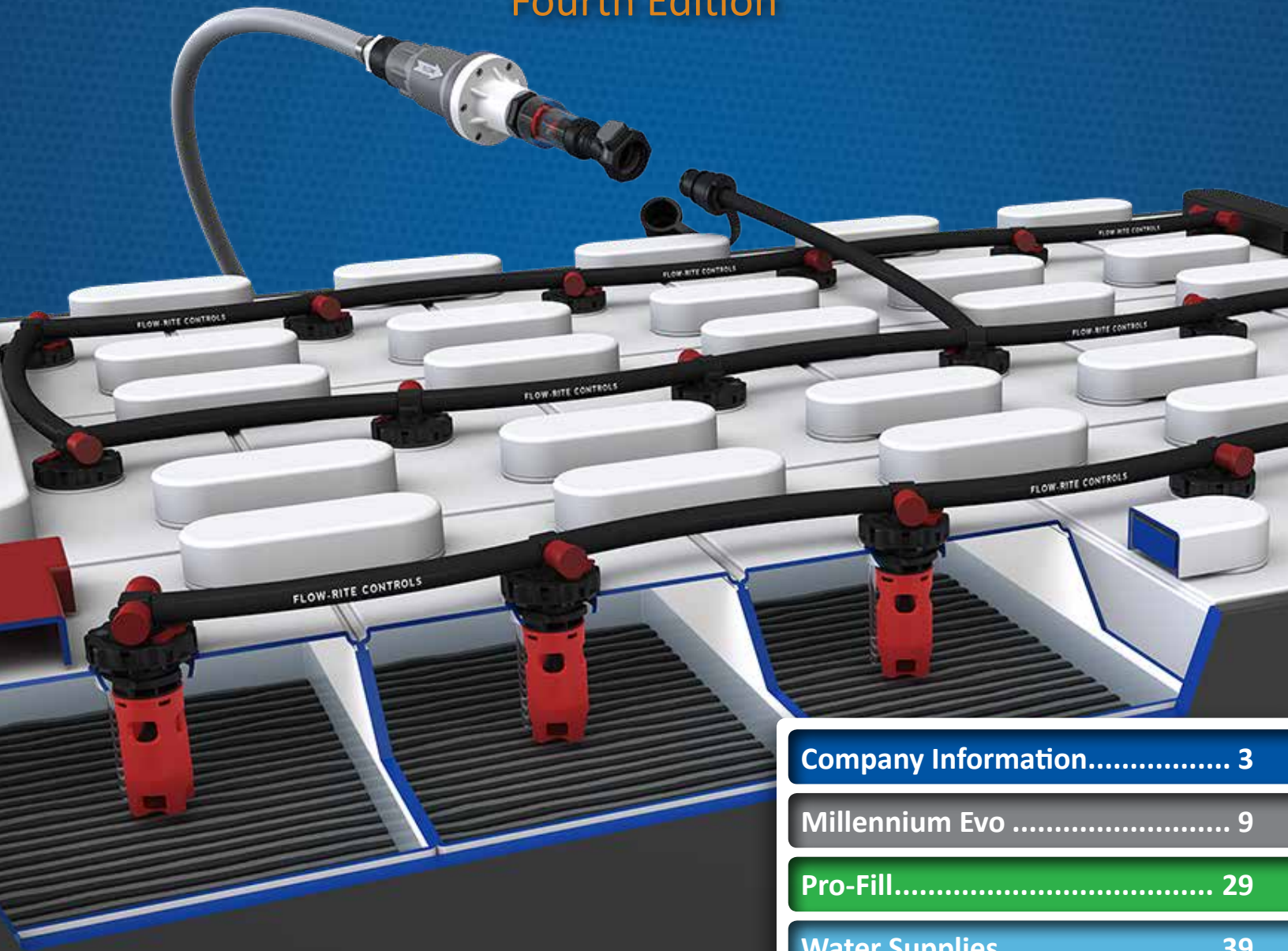


# FLOW-RITE®

## Battery Care Products Fourth Edition



Company Information..... 3

Millennium Evo ..... 9

Pro-Fill..... 29

Water Supplies ..... 39

Accessories..... 51

Qwik-Fill / Pro-Fill RV..... 59





# TABLE OF CONTENTS

<b>Company Information.....</b>	<b>3</b>
North American Contacts .....	4
Flow-Rite International Contacts .....	5
Flow-Rite SPW Timeline.....	6
Mission Statement.....	7
Quality Statement .....	7
Sales Policies.....	7
<b>Millennium Evo .....</b>	<b>9</b>
Features and Benefits.....	10
Order Guide for Kits.....	13
Pre-cut Clampless Kits .....	15
Clampless Preassembled Kits .....	17
Flow-Rite’s Service Kits .....	18
Layout Diagrams .....	19
Bulk Kits .....	20
Clampless Replacement Valves .....	21
Clampless Replacement Parts .....	22
Technical Specifications .....	24
Troubleshooting Guide .....	26
Valve Date Code Key .....	27
<b>Pro-Fill.....</b>	<b>29</b>
Features and Benefits.....	30
Universal Pro-Fill Kits Part Number Scheme.....	32
Pro-Fill Universal Kits.....	34
Replacement Parts.....	35
Technical Specifications .....	37
<b>Water Supplies .....</b>	<b>39</b>
Regulated Hose Supply .....	40
Portable Watering Cart.....	41
Deionizer .....	42
Gravity Tanks .....	43
Portable Water Supply.....	44
Mini Pump .....	45
Hand Pump.....	46
Water Supply Accessories.....	47
Water Supply Replacement Parts .....	48
<b>Accessories.....</b>	<b>51</b>
Battery Steward .....	52
Level Indicators.....	54
Tools .....	56
Water Wise.....	57
<b>Qwik-Fill / Pro-Fill RV .....</b>	<b>59</b>
Qwik-Fill - Retail.....	60
Qwik-Fill - OEM.....	61
Pro-Fill RV Edition .....	62



## COMPANY INFORMATION



### Flow-Rite Headquarters

960 74th Street SW  
Byron Center, MI 49315  
USA  
(616) 583-1700  
(616) 878-5151 fax  
sales@flow-rite.com



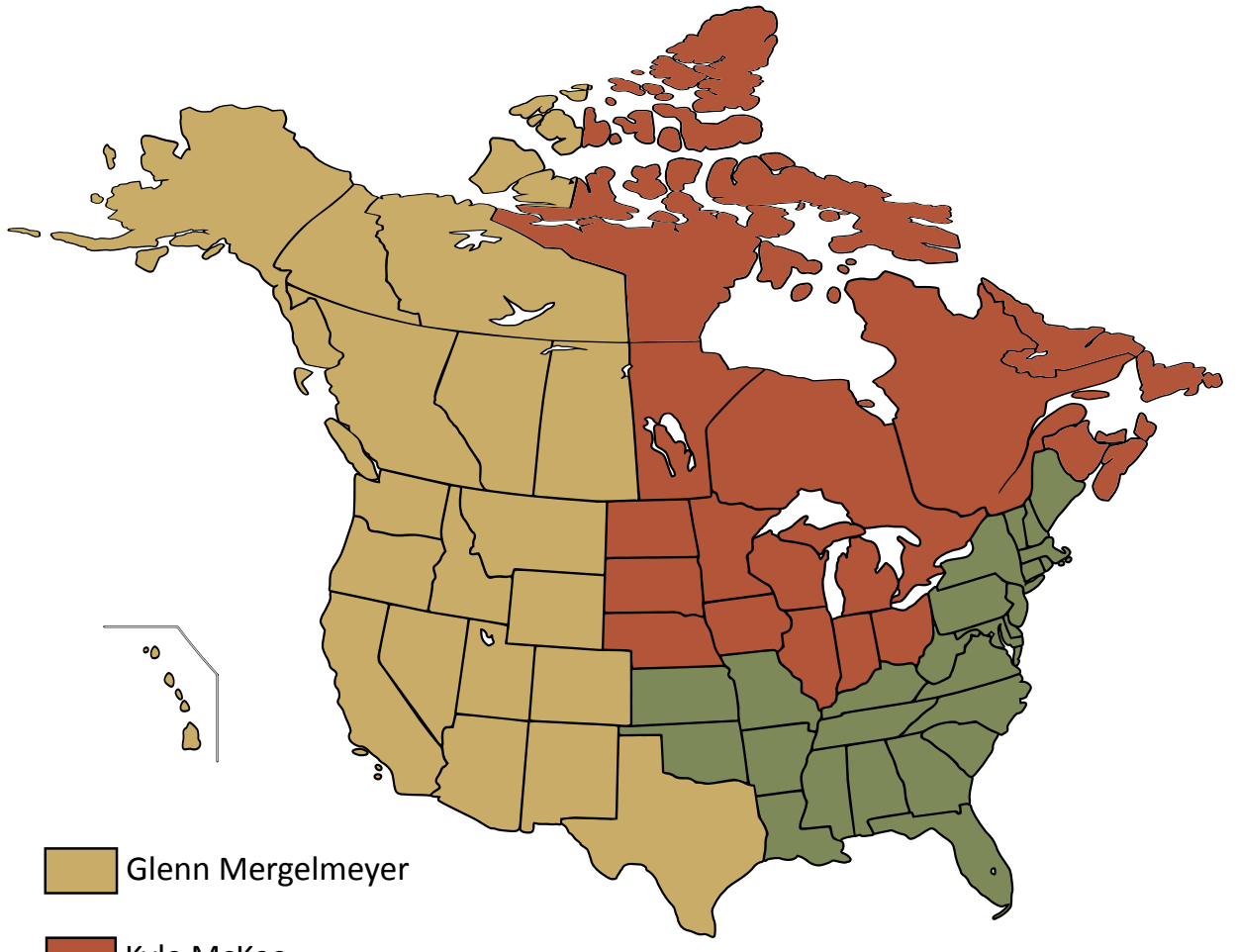
# COMPANY INFORMATION

## North American Contacts

**Michael Leonard**  
*Sales & Marketing Director*  
 mleonard@flow-rite.com  
 cell 248-321-5907

**Jay Gardiner**  
*OEM/National Accounts  
 Business Manager*  
 jgardiner@flow-rite.com  
 cell 630-217-0204

**Todd Cowan**  
*Business Development  
 Manager - Monobloc*  
 tcowan@flow-rite.com  
 cell 616-318-9682



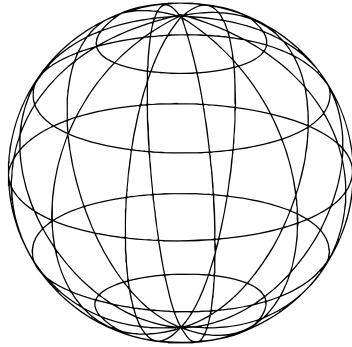
Glenn Mergelmeyer  
 Kyle McKee  
 Rob McKnight

**Glenn Mergelmeyer**  
*Regional Manager*  
 gmergelmeyer@flow-rite.com  
 cell 562-977-7751

**Kyle McKee**  
*Regional Manager*  
 kmckee@flow-rite.com  
 cell 616-552-3228

**Rob McKnight**  
*Regional Manager*  
 rmcknight@flow-rite.com  
 cell 616-430-0871

## International Contacts



### Steven Wong

*International Business Manager*

*SWong@Flow-Rite.com*

*+852 93512339 (HK)*

*+86 15018949285 (China)*



### Latin America

#### Raul Lanuza

*Sales & Operations Manager*

*rlanuza@flow-rite.com*

*cell 616-558-9722*



### China

#### Golden Wang

*General Manager*

*Flow Rite Trading (Shanghai) Co., Ltd.*

*Rm612, No. 1088, West Yan'an Road,  
Changning Dist., Shanghai, China 200052*

*T: 86 21 6237 2437*

*F: 86 21 6237 2498*

*gwang@flow-rite.com*



### South Korea

#### Owen (WooLee) Chae

*Technical Sales Representative*

*Flow-Rite - South Korea*

*Suite 1301, Yongseong Biztel,  
109 Hangangdae-ro,*

*Yongsan-gu, Seoul, South Korea*

*HP: +82 010 3332 3200*

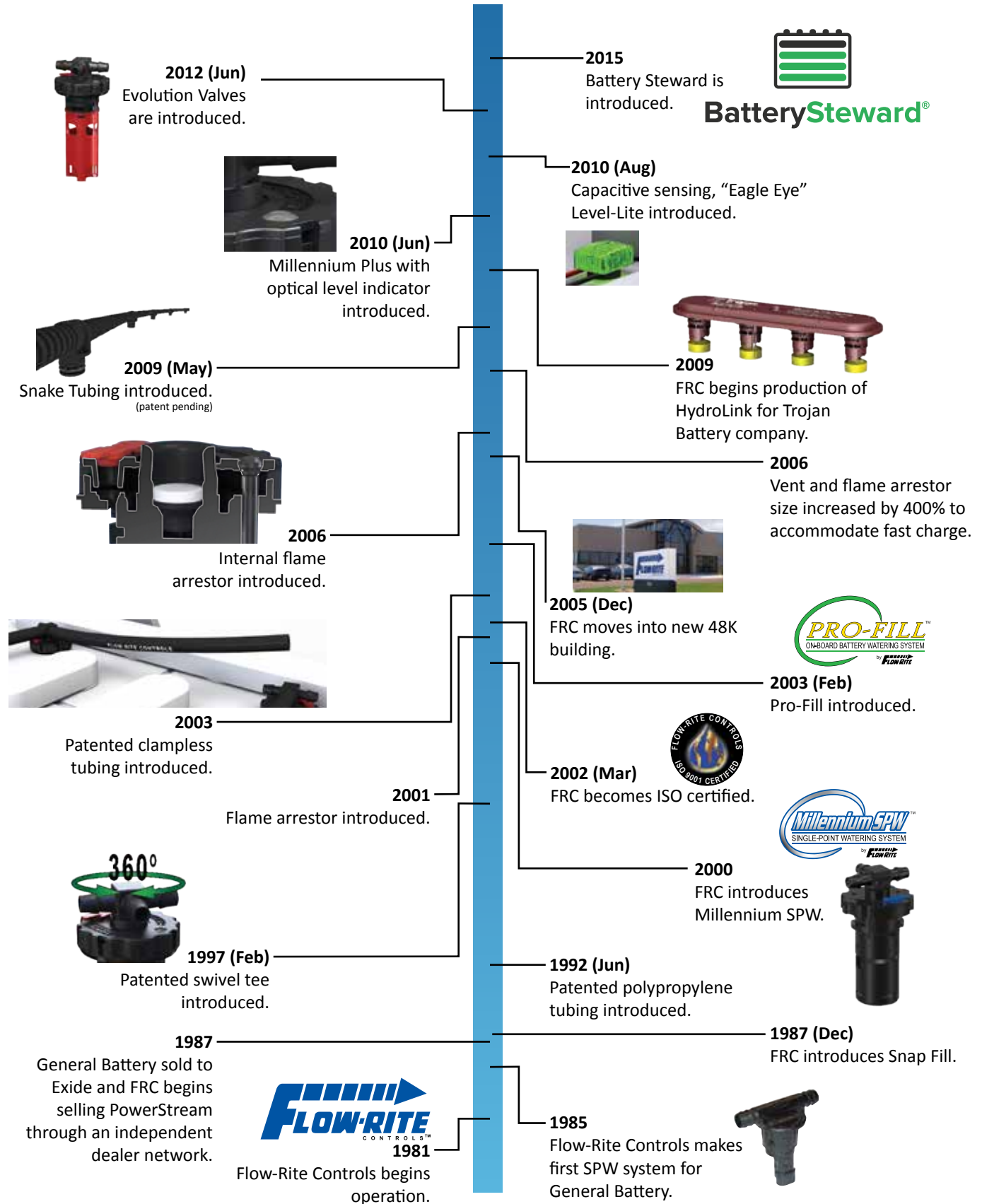
*Direct: +82 02 790 2471*

*ochae@flow-rite.com*



# COMPANY INFORMATION

## Flow-Rite SPW Timeline





## Mission Statement

Flow-Rite exists to change the world by providing unique and useful solutions to our customers.

## Quality Statement

Flow-Rite Controls, Ltd. is totally committed to offering the best performing, highest quality products in each market we serve. We promise our customers that we will continue to improve the quality of our existing products, as we continue our effort to expand our business into new markets. We at Flow-Rite Controls, Ltd., affirm this commitment and have established a comprehensive quality assurance system that allows our company to meet all of the requirements of the ISO 9001:2008 quality assurance standard.

## Sales Policies

### Orders

All orders must be submitted in writing. Purchase orders can be faxed to (616) 277-5137 or emailed to [orders@flow-rite.com](mailto:orders@flow-rite.com).

### Payment Terms

Cash in advance, C.O.D., Visa, Mastercard, Discover, American Express or Net 30 days for companies with approved credit. Any account with outstanding balances older than 15 days past the invoice date will be placed on credit hold.

### Freight Terms

EXW - Ex Works: Flow-Rite Controls, Byron Center, MI, USA

### Shipping Policy

All orders placed that contain SPW valves or nonstocked items are built to order and have typical lead times of 3-5 business days. Actual lead times vary based on order volume. For specific lead time, please contact the factory.

### Return Policy

- No restock fee for parts returned in new condition within 30 days.
- 15% restock fee for parts returned in new condition after 30 days.
- All dated products will be eligible for return up to 90 days. Non-dated products in new condition will be eligible for return past 90 days if they are current production. Non-current production items will be eligible for return at Flow-Rite's discretion.
- Used items and valves that have been exposed to acid will not be eligible for return.







**FOR ALL OF YOUR  
INDUSTRIAL BATTERY WATERING NEEDS**



**AGVs**



**FORK LIFTS**



**LOCOMOTIVES**



**POWERED  
PALLET JACKS**



**SCRUBBERS  
& SWEEPERS**



**STANDBY  
POWER**

## Features and Benefits

Millennium Evo™ is the most innovative, advanced, versatile, and user friendly system on the market today. Advanced materials and molding capabilities produce the most robust and the best performing valve to date. At a glance, you can see many of the superior features listed below. What's more impressive is the structure inside the valve that allows the Millennium Evo valve of working independently of water pressure\*, allowing you to use a variety of water supply options.

### **Date Code**

Valves include a 5 year warranty and are date coded to verify 100% testing.

### **3-Port Swivel Tee**

Rotates 360° for easier installation

### **Color Coded Flip Top**

Flip top color matches shroud color for easy valve identification.

### **Optical Level Indicator\*\***

Built-in indicator provides a quick and easy way to see when individual cells require water.

### **Maximum Venting**

Raised vents provide more room inside the cell for fluid expansion.

### **Protective Shroud**

Protects the displacer from any potential damage.

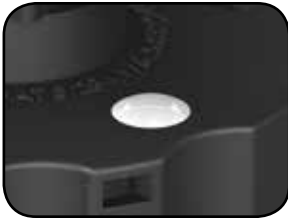
### **Gasket Retention Tabs**

Two small tabs keep the gasket in place for simplified installation.  
(highlighted orange for illustrative clarity)



\* 3-35 static psi

\*\* Not available on all valve configurations



### Optical Level Indicator

Check your electrolyte levels without having to remove your watering system. The built-in indicator is white when the cell is low on water and black when full. Since it operates independently from the valve, it is the only built-in indicator on the market that can truly be used to accurately verify cell electrolyte levels.



### Color Coded Flip-Top Cell Access

Check specific gravity levels with ease. Flip-Top access port gives direct cell access without the need for drilling cell covers or removing the watering system. New color coding allows for easy verification of valve length after the valves have been installed.



### Clampless Polypropylene Tubing

Patented clampless tubing installs in half the time of tubing that requires clamps and holds twice as well. Unlike clear PVC tubing, our patented tubing will not break down and cause system failure.



### 3-Port Swivel Tee

Patented Three-Port Swivel Tee rotates a full 360 degrees, allowing for a more versatile installation. Eliminates kinked tubing, the need for additional plumbing pieces, and allows you to place the feed tube wherever it's most convenient, not just at the end.



### Low Profile

The patented low profile design keeps all components of the watering system out of harm's way by making sure that they all sit below the intercell connectors.



### Wide Pressure Range

Millennium's patented technology eliminates the need to buy expensive water supplies to generate high pressure and flow. Our variable pressure system will work from 3 to 35 PSI, with minimum flow rate of 2 GPM (measured through the purger). Flow-Rite offers the most complete range of water supplies including regulated hose supplies, AC/DC powered carts, portable units, gravity tanks, deionizers, and hand pumps.



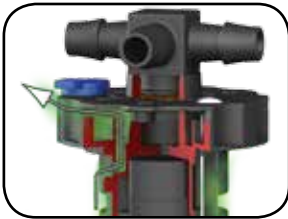
### Protective Shroud

The shroud protects the internal displacer from potential damage from plate growth, during installation and shipping & handling. When installed, it protects the valve from foreign particles (in the battery) entering and “clogging” the watering system.



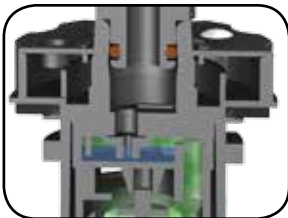
### Acid Resistant Components

All Millennium components, including the tubing, are made of the same (polypropylene) plastic as the battery. This means all materials are acid, temperature, and impact resistant to withstand the harsh environment found inside and on top of the battery.



### De-Gas Chamber

The Millennium valve has a built in de-gassing chamber (similar to the factory vent caps) which allows the cell to expel the naturally occurring hydrogen and oxygen gases. The standard cap seen here disperses the gases in a manner which dilutes them with the outside air, reducing the risk of ignition.



### Internal Water Trap

In the event of a fire, this eliminates the possibility of flame propagation between cells via the watering system.



### Flame Arrestor (optional)

The optional flame arrestor makes Millennium the safest battery watering system on the planet. A necessary safety feature for all stationary batteries, utility vehicle batteries, and other batteries used in potentially dangerous enclosed environments. The flame arrested valve now includes an internal flame arrestor that protects against flame propagation in applications where the internal water trap is subject to drying out.

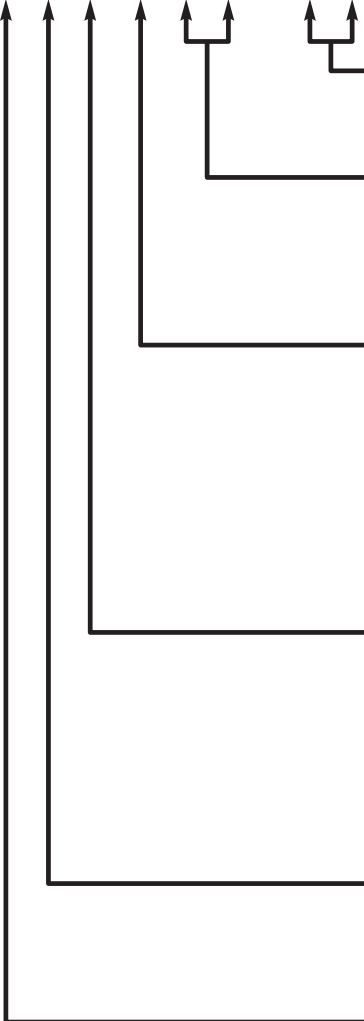


### 5 Year Warranty

We stand behind all of our SPW systems. We offer a full 5 year warranty on all Millennium Evo components (excluding water supplies). Each valve is date stamped with the shift, day, month and year to ensure quality. All products are made in the U.S.A. by Flow-Rite Controls, an ISO 9001:2008 company. Please visit [www.flow-rite.com](http://www.flow-rite.com) for complete warranty details.

## Order Guide for Kits

BK - X X X - X X X - 5 X X



- # of Battery Cells**  
For batteries with fewer than 10 cells, enter a "0" for the first character.
- Cap Options**  
00 = None (*Select with flame arrested valves*)  
01 = Flip Top & Optical Level Indicator (*Standard, N/A with External Flame Arrestors. Optical is not available on M30 or GNB Valves*)
- Valve Length\***  
1 = Yellow (*short*)  
2 = Black (*Standard*)  
3 = Red (*Long*)  
4 = White (*XL*)  
5 = Gray (*Crown MaxHaul 155MX*)  
7 = Orange, no shroud (*Crown MaxHaul 110MX*)  
G = GNB (*after May 2012*)\*  
K = Extended Black
- Tubing Options**  
0 = Clampless Tubing - precut 6.75"  
A = Clampless tubing - preassembled 5.50" spacing (*5-17 plate, 2-post batteries tubing routed in-between*)  
B = Clampless tubing - preassembled 6.00" spacing (*19-29 plate, 4-post batteries*)  
C = Clampless tubing - preassembled 6.75" spacing (*5-17 plate, 2-post batteries tubing routed around*)
- Millennium SPW Kit Type**  
C = Standard Clampless (*No Flame Arrestors, Black Cover*)  
Y = Flame Arrested (*Internal & External, Yellow Cover*)  
O = Flame Arrested (*Internal Only, Orange Cover*)
- Cap Style**  
1 = Bayonet  
2 = 35P (*35 mm push-in DIN*)  
3 = 4 Lug Bayonet  
4 = M30 (*30 mm threaded*)









\* For a detailed list of valves lengths for battery models, please see page 14. Please contact Flow-Rite for information regarding valve lengths for pre-May 2012 GNB valve lengths.

*Note: It is the distributor's responsibility to determine the correct valve length. The following information is provided as a guide only. If you are uncertain which to use, we strongly recommend measuring the cell depth. Chart is accurate as of printing but batteries are subject to change.*

Battery Cross Reference Chart			
Battery Brand	Model #	Valve Length	Cap Style
Battery Builders	All	Black	Bayonet
Bulldog	All	Black	Bayonet
Crown	C-Line, V-Line, Crown Brand	Black	Bayonet
Crown	Max Haul 110 MX	Orange	Bayonet
Crown	Max Haul I55MX	Gray	Bayonet
Deka	D-Series, MaxPower(All)	Black	Bayonet
Douglas	All	Black	35P
EnerSys	E55L, E75L, E85, E90, E100, E110	Black	Bayonet
EnerSys	E140, E155, 130A	Red	Bayonet
EnerSys	E85D, E90D, E100D, E125, E125D	White	Bayonet
General Battery Co. (GBC)	100G	Black	Bayonet
General Battery Co. (GBC)	125G	Red	Bayonet
General Battery Co. (GBC)	75G, 85G	White	Bayonet
GNB made after 5/1/2012	Flat Plate, Liberator, and Tubular	GNB	Bayonet
Hawker	All	Black	Bayonet
Hup	100P	Black	Bayonet
Hup	125P	Red	Bayonet
Hup	85P	White	Bayonet
Interstate Powercare	All	Black	Bayonet
Powerflow	All	Black	Bayonet
Railroad / Stationary	Locomotive Starting Batteries and Some Stationary	XL Black	Bayonet
Reaco	All	Black	Bayonet



## Pre-cut Clampless Kits

Contents			
 <b>Millennium Evo Valve</b> Qty = 1 per cell	 <b>Coupler with Dust Cover</b> Qty = 1 per kit <i>Note: May already be preinstalled on feed tube.</i>	 <b>Clampless Tubing</b> Qty = 5 precut sections per 6 cells (plus 1 feed tube)	 <b>Red End Caps</b> Qty = 9 per 6 cells
 <b>Battery Refill Record</b> Qty = 1 per kit	 <b>Spanner Tool</b> Qty = 1 per kit <i>Note: Not included with 35P kits.</i>	 <b>Battery Steward</b> Qty = 1 per kit	 <b>Instructions</b> Qty = 1 per kit

Bayonet Kits						
Size	Yellow	Black	Red	White	Gray	GNB (After May 2012)
6 Cell	BK-1CO-101-506	BK-1CO-201-506	BK-1CO-301-506	BK-1CO-401-506	BK-1CO-500-506	BK-1CO-G00-506
9 Cell	BK-1CO-101-509	BK-1CO-201-509	BK-1CO-301-509	BK-1CO-401-509	BK-1CO-500-509	BK-1CO-G00-509
12 Cell	BK-1CO-101-512	BK-1CO-201-512	BK-1CO-301-512	BK-1CO-401-512	BK-1CO-500-512	BK-1CO-G00-512
18 Cell	BK-1CO-101-518	BK-1CO-201-518	BK-1CO-301-518	BK-1CO-401-518	BK-1CO-500-518	BK-1CO-G00-518
20 Cell	BK-1CO-101-520	BK-1CO-201-520	BK-1CO-301-520	BK-1CO-401-520	BK-1CO-500-520	BK-1CO-G00-520
24 Cell	BK-1CO-101-524	BK-1CO-201-524	BK-1CO-301-524	BK-1CO-401-524	BK-1CO-500-524	BK-1CO-G00-524
36 Cell	BK-1CO-101-536	BK-1CO-201-536	BK-1CO-301-536	BK-1CO-401-536	BK-1CO-500-536	BK-1CO-G00-536
40 Cell	BK-1CO-101-540	BK-1CO-201-540	BK-1CO-301-540	BK-1CO-401-540	BK-1CO-500-540	BK-1CO-G00-540

35P (push in) Kits				
Size	Yellow	Black	Red	White
6 Cell	BK-2CO-101-506	BK-2CO-201-506	BK-2CO-301-506	BK-2CO-401-506
9 Cell	BK-2CO-101-509	BK-2CO-201-509	BK-2CO-301-509	BK-2CO-401-509

35P (push in) Kits				
Size	Yellow	Black	Red	White
12 Cell	BK-2C0-101-512	BK-2C0-201-512	BK-2C0-301-512	BK-2C0-401-512
18 Cell	BK-2C0-101-518	BK-2C0-201-518	BK-2C0-301-518	BK-2C0-401-518
20 Cell	BK-2C0-101-520	BK-2C0-201-520	BK-2C0-301-520	BK-2C0-401-520
24 Cell	BK-2C0-101-524	BK-2C0-201-524	BK-2C0-301-524	BK-2C0-401-524
36 Cell	BK-2C0-101-536	BK-2C0-201-536	BK-2C0-301-536	BK-2C0-401-536
40 Cell	BK-2C0-101-540	BK-2C0-201-540	BK-2C0-301-540	BK-2C0-401-540









4 Lug Bayonet Kits				
Size	Yellow	Black	Red	White
6 Cell	BK-3C0-101-506	BK-3C0-201-506	BK-3C0-301-506	BK-3C0-401-506
9 Cell	BK-3C0-101-509	BK-3C0-201-509	BK-3C0-301-509	BK-3C0-401-509
12 Cell	BK-3C0-101-512	BK-3C0-201-512	BK-3C0-301-512	BK-3C0-401-512
18 Cell	BK-3C0-101-518	BK-3C0-201-518	BK-3C0-301-518	BK-3C0-401-518
20 Cell	BK-3C0-101-520	BK-3C0-201-520	BK-3C0-301-520	BK-3C0-401-520
24 Cell	BK-3C0-101-524	BK-3C0-201-524	BK-3C0-301-524	BK-3C0-401-524
36 Cell	BK-3C0-101-536	BK-3C0-201-536	BK-3C0-301-536	BK-3C0-401-536
40 Cell	BK-3C0-101-540	BK-3C0-201-540	BK-3C0-301-540	BK-3C0-401-540

M30 Kits				
Size	Yellow	Black	Red	White
6 Cell	BK-4C0-101-506	BK-4C0-201-506	BK-4C0-301-506	BK-4C0-401-506
9 Cell	BK-4C0-101-509	BK-4C0-201-509	BK-4C0-301-509	BK-4C0-401-509
12 Cell	BK-4C0-101-512	BK-4C0-201-512	BK-4C0-301-512	BK-4C0-401-512
18 Cell	BK-4C0-101-518	BK-4C0-201-518	BK-4C0-301-518	BK-4C0-401-518
20 Cell	BK-4C0-101-520	BK-4C0-201-520	BK-4C0-301-520	BK-4C0-401-520
24 Cell	BK-4C0-101-524	BK-4C0-201-524	BK-4C0-301-524	BK-4C0-401-524
36 Cell	BK-4C0-101-536	BK-4C0-201-536	BK-4C0-301-536	BK-4C0-401-536
40 Cell	BK-4C0-101-540	BK-4C0-201-540	BK-4C0-301-540	BK-4C0-401-540

Note: M30 & GNB Valves do not include optical indicator.



## Clampless Preassembled Kits

Contents			
 <b>Millennium Evo Valve</b> Qty = 1 per cell	 <b>Coupler with Dust Cover</b> Qty = 1 per kit <i>Note: May already be preinstalled on feed tube.</i>	 <b>6 Swivel Clampless Tubing Section</b> Qty = 1 per 6 cells (plus 1 feed tube)	 <b>Red End Caps</b> Qty = 9 per 6 cells
 <b>Battery Refill Record</b> Qty = 1 per kit	 <b>Spanner Tool</b> Qty = 1 per kit <i>Note: Not included with 35P kits.</i>	 <b>Battery Steward</b> Qty = 1 per kit	 <b>Instructions</b> Qty = 1 per kit

6.75" / Bayonet Valves						
(5-15 plate 2-post batteries, tubing is routed around the intercell connectors)						
Size	Yellow	Black	Red	White	GNB (new)	35p Black
6 Cell	BK-1CC-101-506	BK-1CC-201-506	BK-1CC-301-506	BK-1CC-401-506	BK-1CC-G00-506	BK-2CC-201-506
12 Cell	BK-1CC-101-512	BK-1CC-201-512	BK-1CC-301-512	BK-1CC-401-512	BK-1CC-G00-512	BK-2CC-201-512
18 Cell	BK-1CC-101-518	BK-1CC-201-518	BK-1CC-301-518	BK-1CC-401-518	BK-1CC-G00-518	BK-2CC-201-518
24Cell	BK-1CC-101-524	BK-1CC-201-524	BK-1CC-301-524	BK-1CC-401-524	BK-1CC-G00-524	BK-2CC-201-524

6" / Bayonet Valves						
(17-29 plate 4-post batteries, tubing is routed in-between intercell connectors)						
Size	Yellow	Black	Red	White	GNB (new)	35p Black
18 Cell	BK-1CB-101-518	BK-1CB-201-518	BK-1CB-301-518	BK-1CB-401-518	BK-1CB-G00-518	BK-2CB-201-518
24Cell	BK-1CB-101-524	BK-1CB-201-524	BK-1CB-301-524	BK-1CB-401-524	BK-1CB-G00-524	BK-2CB-201-524

5.5" / Bayonet Valves						
(5-15 plate 2-post batteries, tubing is routed in-between intercell connectors)						
Size	Yellow	Black	Red	White	GNB (After May 2012)	35p Black
6 Cell	BK-1CA-101-506	BK-1CA-201-506	BK-1CA-301-506	BK-1CA-401-506	BK-1CA-G00-506	BK-2CA-201-506
12 Cell	BK-1CA-101-512	BK-1CA-201-512	BK-1CA-301-512	BK-1CA-401-512	BK-1CA-G00-512	BK-2CA-201-512

## Flow-Rite's Service Kits

Service Kits, a streamlined Millennium kit, include NEW (not reconditioned) valves, pre-cut tubing, and quick couplers for a significantly reduced price per cell and comes with a one year limited warranty. This economical option is perfectly suited for rental and used batteries.

**All kits will be packaged in plastic system kit bags, with the following components:**

- Streamlined Millennium valves without flip top or optical level indicators
- Pre-cut tubing segments
- Flow-Rite coupler
- Red end caps
- Instructions
- (Spanner tool and calendar NOT included)

Service Kits	
Part #	Description
SP-1212	12 Cell, Bayonet, Black Length, Service Kit
SP-1218	18 Cell, Bayonet, Black Length, Service Kit
SP-1224	24 Cell, Bayonet, Black Length, Service Kit
SP-1236	36 Cell, Bayonet, Black Length, Service Kit
SP-1240	40 Cell, Bayonet, Black Length, Service Kit
SP-1312	12 Cell, Bayonet, Red Length, Service Kit
SP-1318	18 Cell, Bayonet, Red Length, Service Kit
SP-1324	24 Cell, Bayonet, Red Length, Service Kit
SP-1336	36 Cell, Bayonet, Red Length, Service Kit
SP-1340	40 Cell, Bayonet, Red Length, Service Kit
SP-1412	12 Cell, Bayonet, White Length, Service Kit
SP-1418	18 Cell, Bayonet, White Length, Service Kit
SP-1424	24 Cell, Bayonet, White Length, Service Kit
SP-1436	36 Cell, Bayonet, White Length, Service Kit
SP-1440	40 Cell, Bayonet, White Length, Service Kit
SP-2212	12 Cell, 35P, Black Length, Service Kit
SP-2218	18 Cell, 35P, Black Length, Service Kit
SP-2224	24 Cell, 35P, Black Length, Service Kit
SP-2236	36 Cell, 35P, Black Length, Service Kit
SP-2240	40 Cell, 35P, Black Length, Service Kit

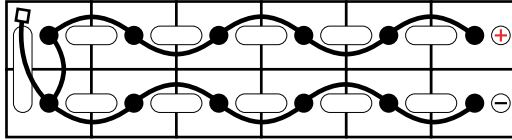


**1 FLOW-RITE CONTROLS  
1 YEAR WARRANTY**

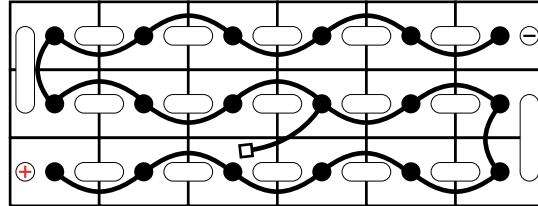
## Layout Diagrams

### 6.75" Layouts

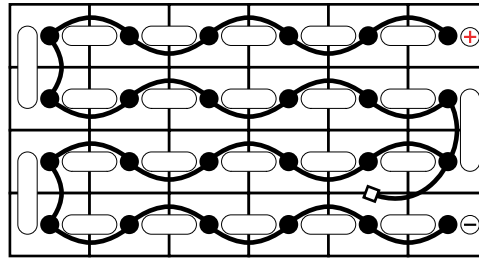
12-cell single post



18-cell single post

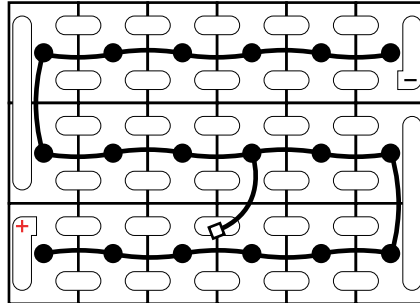


24-cell single post

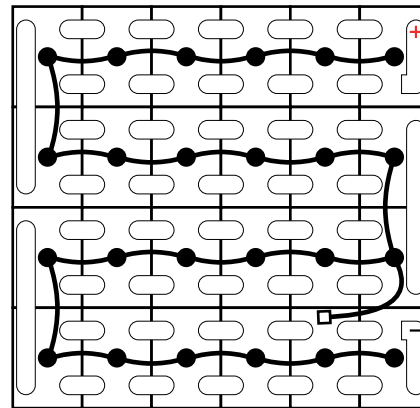


### 6" layouts

18-cell double post B

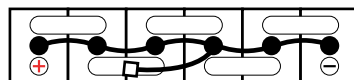


24-cell double post

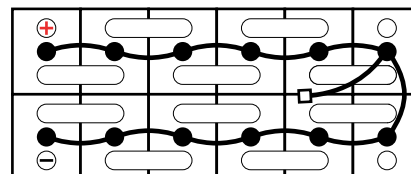


### 5.5" Layouts

6-cell single post








12-cell single post A



\* The layouts above may also utilize closed loops (not shown).

## Bulk Kits

### Contents

Each master pack contains:				
 <b>Millennium Evo Valve</b> Qty = 60	 <b>Clampless Tubing</b> Qty = 40' (uncut tubing)	 <b>Red End Caps</b> Qty = 70	 <b>Battery Steward</b> Qty = 3 per kit	 <b>Instructions</b> Qty = 1 per kit

*Note: No quick coupler, battery refill record, or spanner tool is included.*

### Master Packs (60 Valves)

Bayonet	
Bayonet cap with yellow valves	BA-MMP-11-C
Bayonet cap with black valves (standard)	BA-MMP-12-C
Bayonet cap with red valves	BA-MMP-13-C
Bayonet cap with white valves	BA-MMP-14-C
Bayonet cap with GNB valves	BA-MMP-1G-C (Does not include optical indicator)
35P	
35P cap with yellow valves	BA-MMP-21-C
35P cap with black valves (standard)	BA-MMP-22-C
35P cap with red valves	BA-MMP-23-C
35P cap with white valves	BA-MMP-24-C
4 Lug Bayonet	
4 Lug Bayonet cap with yellow valves	BA-MMP-31-C
4 Lug Bayonet cap with black valves (standard)	BA-MMP-32-C
4 Lug Bayonet cap with red valves	BA-MMP-33-C
4 Lug Bayonet cap with white valves	BA-MMP-34-C
M30	
M30 cap with yellow valves	BA-MMP-41-C (Does not include optical indicator)
M30 cap with black valves (standard)	BA-MMP-12-C (Does not include optical indicator)
M30 cap with red valves	BA-MMP-43-C (Does not include optical indicator)
M30 cap with white valves	BA-MMP-44-C (Does not include optical indicator)

## Clampless Replacement Valves

Only available in 6 packs. Includes red end caps.

Bayonet			
	Flip Top	Internal & External Flame Arrested	Internal Flame Arrested
	BA-C10-11-6P (yellow) BA-C10-21-6P (black) BA-C10-31-6P (red) BA-C10-41-6P (white) BA-C10-G0-6P (GNB) BA-C10-K0-6P (black ext) BA-C15-50-6P (gray)	BA-Y10-10-6P (yellow) BA-Y10-20-6P (black) BA-Y10-30-6P (red) BA-Y10-40-6P (white) BA-Y10-G0-6P (GNB) BA-Y10-K0-6P (black ext) BA-Y15-50-6P (gray)	BA-O10-10-6P (yellow) BA-O10-20-6P (black) BA-O10-30-6P (red) BA-O10-40-6P (white) BA-O10-G0-6P (GNB) BA-O10-K0-6P (black ext) BA-O15-50-6P (gray)

35P			
	Flip Top	Internal & External Flame Arrested	Internal Flame Arrested
	BA-C20-11-6P (yellow) BA-C20-21-6P (black) BA-C20-31-6P (red) BA-C20-41-6P (white)	BA-Y20-10-6P (yellow) BA-Y20-20-6P (black) BA-Y20-30-6P (red) BA-Y20-40-6P (white)	BA-O20-10-6P (yellow) BA-O20-20-6P (black) BA-O20-30-6P (red) BA-O20-40-6P (white)

4 Lug Bayonet	
	Flip Top
	BA-C30-11-6P (yellow) BA-C30-21-6P (black) BA-C30-31-6P (red) BA-C30-41-6P (white)

M30	
	Flip Top
	BA-C40-11-6P (yellow) BA-C40-21-6P (black) BA-C40-31-6P (red) BA-C40-41-6P (white)

## Clampless Replacement Parts

 <p><b>BA-142</b> Swivel Tee with O-Ring</p>	 <p><b>BA-144</b> Swivel Straight with O-Ring</p>	 <p><b>BA-145</b> Swivel Elbow with O-Ring</p>
 <p><b>BD-00202</b> O-Ring for Swivel Tee</p>	 <p><b>BD-00280</b> Red End Cap for Swivel</p>	 <p><b>BD-T14</b> Tubing (sold by the foot)</p> <p><b>BD-T14-500</b> 500 Foot Roll of Tubing</p>
 <p><b>BD-BRR</b> Universal Battery Refill Record Calendar</p>	 <p><b>BA-090</b> Battery Steward Labels</p>	 <p><b>BD-00871</b> 4-Prong Spanner Tool</p>
 <p><b>BD-00870</b> 35P to Bayonet Adapter</p>	 <p><b>BD-00203</b> O-Ring for 35P cap</p>	 <p><b>BD-00525</b> Gasket for Bayonet &amp; M30 caps 2006 and newer</p>
 <p><b>BD-00188</b> Cross Connector 1/4"</p>	 <p><b>BD-00189</b> Tee Connector 1/4"</p>	

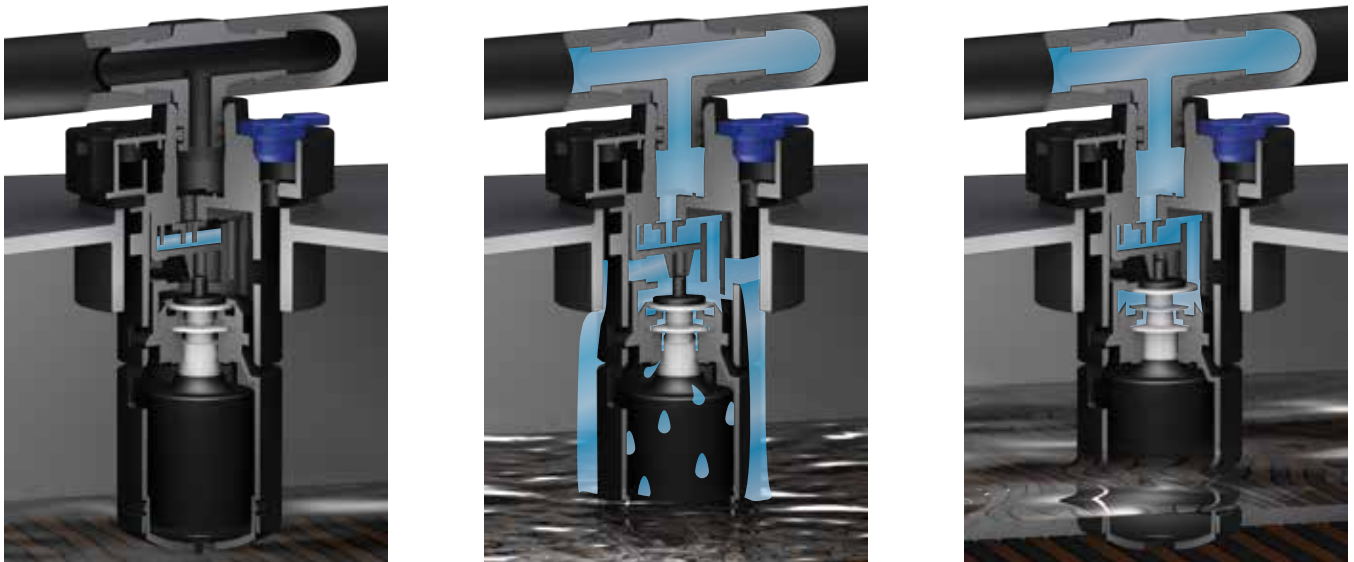
 <p><b>BA-QDV-505</b> Coupler for Millennium Evo, Pro-Fill or Stealth 1/4" barb</p>	 <p><b>BA-QDV-105</b> Coupler for PowerStream 1/4" barb</p>	 <p><b>BA-QDV-405</b> Coupler for BWT 1/4" barb</p>
 <p><b>BA-QDV-705</b> Coupler for BFS 1/4" barb</p>	 <p><b>BA-QDV-805</b> Coupler for Philadelphia Scientific Injector</p>	 <p><b>BD-QDV-005</b> Dust Cover for BA-QDV-505</p>
 <p><b>BD-00204</b> O-Ring for BA-QDV-500 and BA-QDV-505 Quick Coupler</p>		

## Technical Specifications

### Internal View

The Millennium Evo™ valve operation features a patented technology that sets the standard for reliability and versatility with single point watering. Without levers, hinges, or pivot action, Millennium Evo™ valves can operate independently of refill water supply pressure\* to accurately control cell electrolyte levels. Through Fluidic Displacer Valve Technology, the Millennium Valve uses a dual, balanced design that allows the displacement force to act directly through the center of the valve without any mechanical leverage. The Millennium Evo valve is very sensitive to the displacement force, allowing a very small displacer to be used. At the same time, it is very insensitive to variations in the water supply pressure used, making it a true multi-pressure valve.

*\*The Millennium Evo Valve requires 3-35 PSI static (no flow) pressure and a minimum of 2GPM flow rate (measured through the purger) for proper operation.*



### Operating Requirement of SPW System

Flow-Rate:	2-5 gallons per minute*
Pressure Range:	3-35 PSI (no flow, static) (0.21-2.4 bar)
Temp. Range:	Freezing - 150° F (Freezing - 65.5° C)

### Water Supply Operating Requirements

Inlet Pressure Range:	40 - 100 PSI (no flow, static) (2.76 - 6.89 bar)
Temp. Range:	33 - 150° F (1 - 65.5° C)

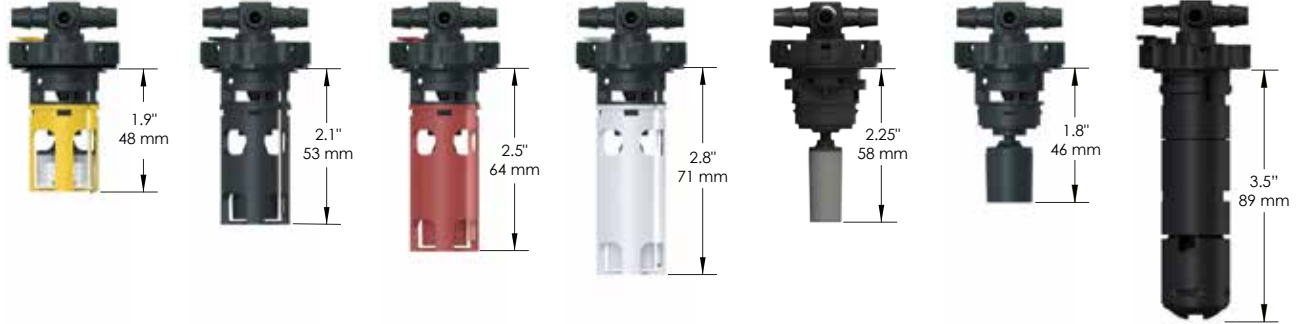
All product specifications should be met for proper operation of your Flow-Rite SPW system. Contact battery supplier or Flow-Rite Controls if you have any questions regarding product specifications or how to verify a water supply.

*\*Flow rate should be measured at the end of a purger (female / male coupler combination).*



## Technical Specifications

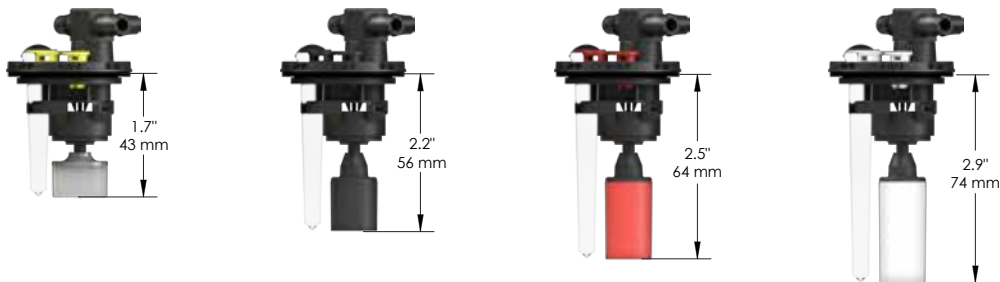
### Bayonet Valve Lengths



### 35P Valve Lengths



### 4 Lug Bayonet Valve Lengths



### M30 Valve Lengths



## Troubleshooting Guide

### • All cells overflowing

Inadequate water supply	<i>Make sure the water supply is producing 3-35 ps static pressure, and at least 2 GPM measured through the purger.</i>
Dirty filter screen	<i>Clean or replace as necessary.</i>
DC Cart Not Charged	<i>Charge Cart</i>

### • Random cells overflowing

Kinked tubing	<i>Unkink and reroute tubing.</i>
Water supply requires maintenance	<i>Clean all filter screens &amp; make sure the water supply is producing between 3-35 psi static pressure, and at least 2 GPM measured through the purger.</i>
Damaged valve	<i>Replace as necessary.</i>
Incorrect watering frequency (too often)	<i>Only water when needed on a fully charged battery.</i>

### • Electrolyte is found on top of the battery after charging

Battery was watered before being fully charged	<i>Only water a fully charged battery! For fast charge applications you should add water after equalize.</i>
Incorrect watering frequency (too often)	<i>Only water when needed.</i>
Water supply requires maintenance	<i>Clean all filter screens &amp; make sure the water supply is producing between 3-35 psi static pressure, and at least 2 GPM measured through the purger.</i>
Water supply left connected for extended period of time	<i>Disconnect water supply immediately after filling has been completed.</i>

### • Dry Cells

Kinked tubing	<i>Unkink &amp; reroute tubing.</i>
Incorrect water frequency	<i>Water more frequently.</i>
Damaged or modified water supply	<i>If water supply produces more than 35 static PSI. Ensure that the regulator is in place. Over pressurizing can damage valves permanently.</i>
Air not purged from water supply	<i>Purge air from water supply before filling battery.</i>
Incorrect water duration	<i>Water to completion. Make sure flow indicator comes to a complete stop before disconnecting water supply.</i>

• Leaks during filling cycle		
	Loose connections	<i>Check all connection points including o-ring on swivel tee, tubing connections, and water supply to SPW kit.</i>
	Damaged tubing	<i>Replace as necessary.</i>
	Damaged end caps	<i>Replace as necessary.</i>

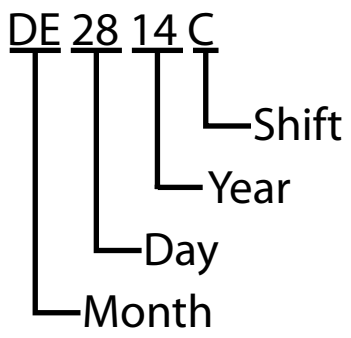
• Tubing comes off swivel tee during filling cycle		
	Improper installation	<i>Make sure the tubing is pushed all the way over the hose barb.</i>
	Damaged tubing	<i>Replace as necessary.</i>

• Red end caps come off swivel tee during filling cycle		
	Damaged end caps	<i>Replace as necessary.</i>
	Damaged or modified water supply	<i>Water supply produces more than 35 static PSI. Ensure that the regulator is in place.</i>

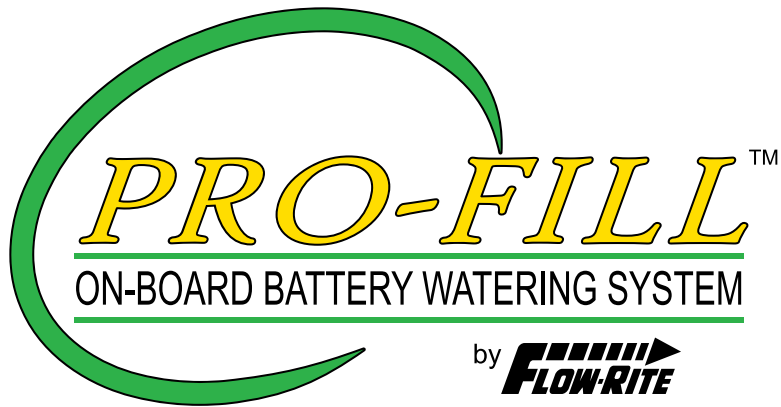
• Swivel tee pops out of valve during filling cycle		
	Improper installation	<i>Ensure Swivel is snapped into the valve fully.</i>
	Damaged or modified water supply	<i>If water supply produces more than 35 static PSI, ensure that the regulator is in place.</i>

• Swivel tee pops out of valves		
	Improper tube routing	<i>Reroute all tubing below battery cables.</i>
	Installation error	<i>Ensure swivel is snapped all the way down</i>

### Valve Date Code Key







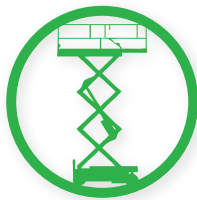
**FOR ALL OF YOUR  
COMMERCIAL BATTERY WATERING NEEDS**



**GOLF CARS  
& UTILITY VEHICLES**



**POWERED  
PALLET JACKS**



**SCISSOR  
LIFTS**



**SCRUBBERS  
& SWEEPERS**



**STANDBY  
POWER**



**RVs**

## Features and Benefits

Pro-Fill™ onboard battery watering system is the only system that has been specifically designed for the golf car/utility vehicle application. At a glance, many of the superior features are evident. Everything from the patented manifolds, standard flame arrestors, three port swivel, and clampless polypropylene tubing, to the new easy install winged caps. What's even more impressive is the structure inside the valve. The Pro-Fill valve is capable of working independent of water pressure (3-35 static PSI, with 2 GPM flow rate), allowing you to use a variety of water supply options. In addition, the Pro-Fill valve includes a built-in water barrier to block the propagation of a flame front from entering adjacent cells in the event of accidental cell gas ignition. Each valve includes an external flame arrested de-gas chamber as a standard.

### **Date Code**

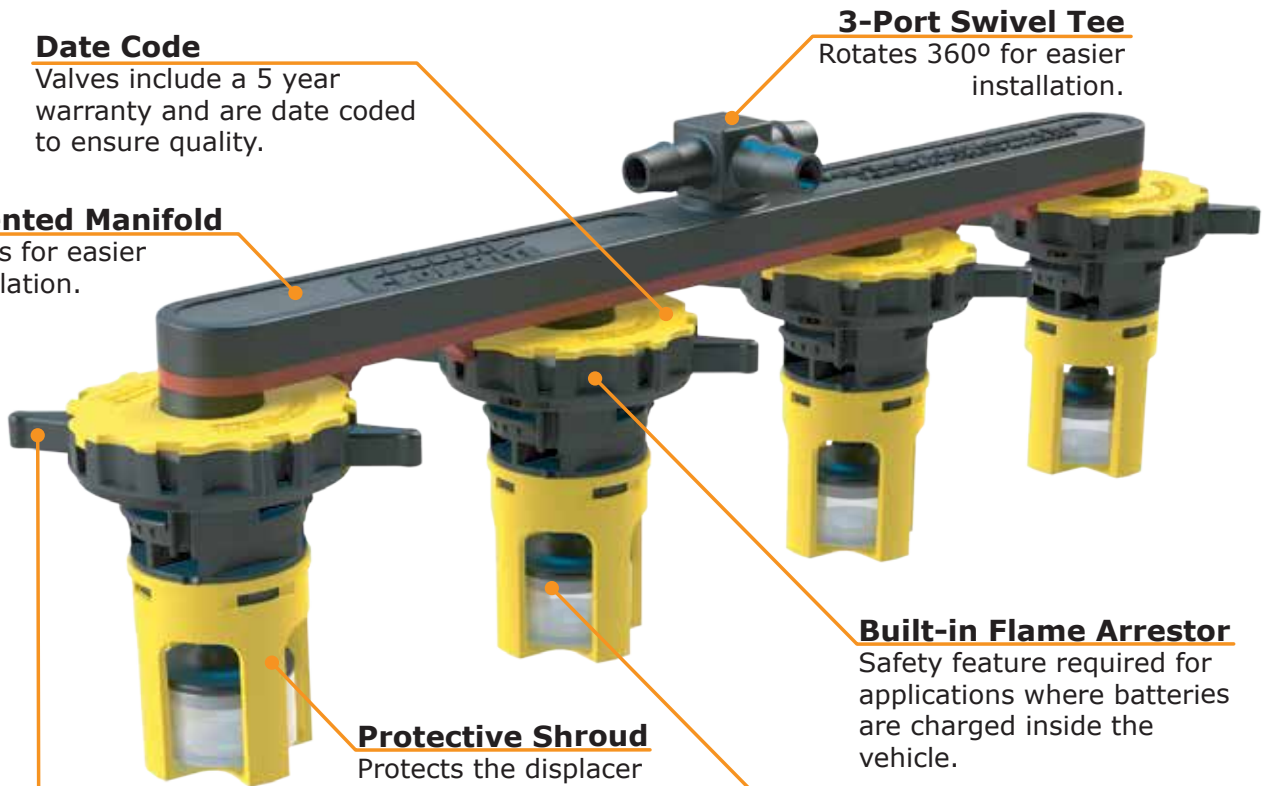
Valves include a 5 year warranty and are date coded to ensure quality.

### **3-Port Swivel Tee**

Rotates 360° for easier installation.

### **Patented Manifold**

Allows for easier installation.



### **Winged Caps**

Provides the fastest, most secure connection to the battery.

### **Protective Shroud**

Protects the displacer from any potential damage.

### **Built-in Flame Arrestor**

Safety feature required for applications where batteries are charged inside the vehicle.

### **Acid Resistant Components**

All components are made of polypropylene. This means all materials are acid, temperature and impact resistant.



### Flame Arrestor

Our flame arrestor inside of each valve makes Pro-Fill the safest battery watering system on the planet. Approved by major battery manufacturers, Pro-Fill has this built-in safety feature that is necessary for all applications such as golf car, utility vehicle, sweeper, scrubber, pallet jack, or anywhere batteries are used in an enclosed space or otherwise potentially dangerous environments.



### Patented Manifold

Our patented manifold provides for the quickest and easiest installation.



### Winged Valves

Winged valves make installation quicker and easier than before. Buy a pre-cut kit and leave your tools at home. With the pre-cut Pro-Fill system, no tools are necessary for installation.



### 3-Port Swivel Tee

Our patented 3-Port Swivel Tee rotates a full 360 degrees, allowing for the most versatile installation. No more worries about kinked tubing or the need for extra plumbing fittings. The swivel also integrates an easy-in, hard-out design to protect the O-ring.



### Clampless Polypropylene Tubing

Our patented clampless tubing installs in half the time of clamp style tubing and holds twice as well. Unlike clear PVC tubing, our patented tubing will not break down and cause system failure.



### Wide Pressure Range

With Pro-Fill's patented technology, you don't have to buy expensive water supplies to generate high pressure and flow. Our variable pressure system will work from 3 to 35 PSI (static) with a minimum flow rate of 2 GPM.



### Protective Shroud

The shroud protects the internal displacer from damage due to plate growth, installation, shipping, or any other time.



### Acid Resistant Components

Just like our predecessor systems, all Pro-Fill components are made of polypropylene. This means all materials are acid, temperature, and impact resistant.



### De-Gas Chamber

The Pro-Fill valve has a built-in de-gassing chamber (similar to the factory vent caps) which allows the cell to expel the naturally occurring hydrogen and oxygen gases. The standard cap seen here disperses the gases in a manner which dilutes them with the outside air, reducing the risk of ignition.

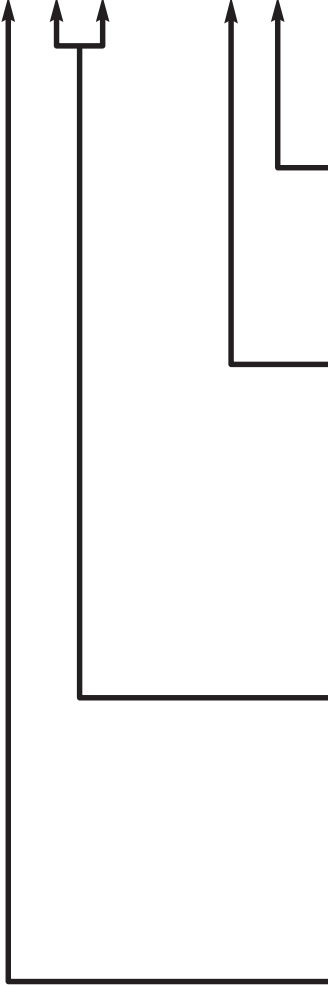


### 5 Year Warranty

We stand behind all of our SPW systems. We offer a full 5 year warranty on all Pro-Fill components (excluding water supplies). Each valve is date stamped with the shift, day, month and year to ensure quality. All products are made in the U.S.A. by Flow-Rite Controls, an ISO 9001-2008 company. Please visit [www.flow-rite.com](http://www.flow-rite.com) for complete warranty details.

## Universal Pro-Fill Kits Part Number Scheme

BG - X X X V - X X



**Valve Options**

- A = Winged black bayonet, no shroud
- G = Winged black bayonet, shroud
- J = Non-winged black bayonet, no shroud
- B = Winged black bayonet, blue cover, no shroud

**Manifold Options**

- 1 = Blue 6V
- 4 = No manifold
- 5 = Black 8V
- 6 = Red 8V
- 7 = Flex (BA-127-FLEX) 6V
- 8 = Flex (BA-128-FLEX) 12V
- B = Flex (BA-129-FLEX) 8V
- C = Flex (BA-132-FLEX) 12V

**Voltage**

- 06 = 6V
- 12 = 12V
- 24 = 24V
- 36 = 36V
- 48 = 48V
- 72 = 72V

**Kit Type**

- U = Universal



## Battery Cross Reference Chart

Note: Chart is accurate as of printing, but batteries may have changed.

6-Volt Batteries				
Battery Brand	Model #	Cell Spacing	Manifold (p/n code)	Valve Style (p/n code)
Commander	C105	2.7	BA-121-BLU (1)	BA-Y7A-10 (G)
Continental	Golf Cart	2.7	BA-121-BLU (1)	BA-Y7A-10 (G)
Crown	All	2.7	BA-121-BLU (1)	BA-Y7A-10 (G)
Deka (Pro Master)	GC10-GC45	2.7	BA-121-BLU (1)	BA-Y7A-10 (G)
Deka (Pro Master)	L16	Varies	Swivel T's (4)	BA-Y7A-10 (G)
Duracell Ultra (Batteries Plus)	GC2	2.7	BA-121-BLU	BA-Y7A-10 (G)
Energizer (Sam's Club)	GC2	3.3	BA-127-Flex (7)	BA-Y7A-10 (G)
Interstate	GC2	2.7	BA-121-BLU (1)	BA-Y7A-10 (G)
Pacer (Trojan)	All	2.7	BA-121-BLU (1)	BA-Y7A-10 (G)
Power Volt	All	3.3	BA-127-Flex (7)	BA-Y7A-10 (G)
Rocket Longest	All	Varies	BA-127-Flex (7)	BA-Y7A-10 (G)
Rolls	Series 4000, S460, S530	2.7	BA-121-BLU (1)	BA-Y7A-10 (G)
Stow-Away (Exide)	All	3.3	BA-127-Flex (7)	BA-Y7A-10 (G)
Trojan	T105, T125, T145, T605	2.7	BA-121-BLU (1)	BA-Y7A-10 (G)
Trojan	J250P, J305H, J305P, L16H	Other	Swivel T's (4)	BA-Y7A-10 (G)
Trojan	T105 Plus, T125 Plus, T145 Plus	Other	BA-127-Flex (7)	BA-Y7A-10 (A)
U.S. Battery	All	2.7	BA-121-BLU (1)	BA-Y7A-10 (G)

8-Volt Batteries				
Battery Brand	Model #	Cell Spacing	Manifold	Valve Style
Centennial	Golf Car	2.5	BA-122-RED (6)	BA-Y7A-10 (G)
Commander	C8VGC	2.5	BA-122-RED (6)	BA-Y7A-10 (G)
Crown	All	2.5	BA-122-RED (6)	BA-Y7A-10 (G)
Duracell Ultra (Batteries Plus)	GC8V	2.5	BA-122-RED (6)	BA-Y7A-10 (G)
Energizer (Sam's Club)	GC8V	2.5	BA-122-RED (6)	BA-Y7A-10 (G)
Exide	GC8V	2.5	BA-122-RED (6)	BA-Y7A-10 (G)
Rocket, Longest	8190	Other	BA-129-Flex (B)	BA-F74-10 (B)
Trojan	T-875	2.3	BA-120-BLK (5)	BA-Y7A-10 (G)
U.S. Battery	US 8VGC	2.5	BA-122-RED (6)	BA-Y7A-10 (G)

12-Volt Batteries				
Battery Brand	Model #	Cell Spacing	Manifold	Valve Style
Club Car (Trojan)	1275	2.7	BA-121-BLU (1)	BA-Y7A-10 (G)
Rocket, Longest	12165 (Straight)	Other	BA-128-FLEX (B)	BA-F74-10 (B)
Rocket, Longest	12165 (Chevron)	2.7	BA-121-BLU (1)	BA-F74-10 (B)
Trojan	1275	2.7	BA-121-BLU (1)	BA-Y7A-10 (G)
Trojan	1260 Plus, 1275 Plus, J150 Plus, J185P, J185H, J185P-AC	Other	BA-128-Flex (8)	BA-Y14-10 (J)
Trojan	J185G	2.7	BA-121-BLU (1)	BA-Y7A-10 (G)
U.S. Battery	US185, US12V-XC2	2.7	BA-121-BLU (1)	BA-Y7A-10 (G)
U.S. Battery	12V-RXV	Other	BA-132-FLEX (C)	BA-Y14-10 (J)

## Pro-Fill Universal Kits

Contents					
<b>Manifolds</b>		<b>Coupler w/ Dust Cover</b> Qty = (1) per kit Note: May already be preinstalled on feed tube.	<b>Clampless Tubing</b> Quantity varies with kit size.	<b>Red End Caps</b> Qty = (9)	<b>Instructions</b> Qty = 1 per kit
Kit Size	Qty of Manifolds				
12 volt	2 (6-volt manifolds)				
24 volt	4 (6-volt manifolds)				
36 volt	6 (6-volt manifolds)				
48 volt	8 (6-volt manifolds)				
48 volt	6 (8-volt manifolds)				

12 Volt Systems	Part Number	Description
	BG-U12V-4G	12 volt kit for (2) 6v batteries with non standard spacing
	BG-U12V-1G	12 volt kit for (2) 6v batteries with 2.7 inch cell spacing
	BG-U12V-7A	12 volt kit for (2) 6v "Trojan Plus" series batteries

24 Volt Systems	Part Number	Description
	BG-U24V-4G	24 volt kit for (4) 6v batteries with non standard spacing
	BG-U24V-1G	24 volt kit for (4) 6v batteries with 2.7 inch cell spacing
	BG-W24V-1	24 volt kit for pallet jack with (4) 6v batteries with 2.7 inch cell spacing
BG-U24V-7A	24 volt kit for (4) 6v "Trojan Plus" series batteries	

36 Volt Systems	Part Number	Description
	BG-U36V-4G	36 volt kit for (6) 6v batteries with non standard spacing
	BG-U36V-1G	36 volt kit for (6) 6v batteries with 2.7 inch cell spacing
BG-U36V-7A	36 volt kit for (6) 6v "Trojan Plus" series batteries	

48 Volt Systems	Part Number	Description
	BG-U48V-4G	48 volt kit for batteries with non standard spacing
	BG-U48V-5G	48 volt kit for (6) 8v batteries with 2.3 inch cell spacing
	BG-U48V-6G	48 volt kit for (6) 8v batteries with 2.5 inch cell spacing
	BG-U48V-1G	48 volt kit for (8) 6v batteries with 2.7 inch cell spacing
	BG-U48V-7A	48 volt kit for (8) 6v "Trojan Plus" series Batteries
	BG-U48V-8J	48 volt kit for (4) 12v "Trojan 1275 Plus" series Batteries
BG-U48V-1A	(4) 12V Batteries with 2.7 inch cell spacing	

## Replacement Parts

<p><b>G</b></p>  <p><b>BA-Y7A-10</b> Pro-Fill Valve, standard, shroud, with wings</p>	<p><b>A</b></p>  <p><b>BA-Y74-10</b> Pro-Fill valve, shroudless, clear displacer, with wings (for use on 6 volt Trojan® Plus batteries)</p>	<p><b>J</b></p>  <p><b>BA-Y14-10</b> Pro-Fill valve, shroudless, clear displacer, no wings (for use on 12 volt Trojan® Plus batteries)</p>
 <p><b>BA-121-BLU</b> Pro-Fill Manifold for 6-volt battery with 2.7 inch center to center cell spacing (Black &amp; Blue in color)</p>	 <p><b>BA-1FT-7G</b> Pro-Fill Manifold with valves for 6-volt battery with 2.7 inch center to center cell spacing (Black &amp; Blue in color)</p>	
 <p><b>BA-120-BLK</b> <i>Pro-Fill manifold for 8-volt battery with 2.3 inch center to center cell spacing (Solid Black in color)</i></p>	 <p><b>BA-5FT-7G</b> <i>Pro-Fill manifold with valves for 8-volt battery with 2.3 inch center to center cell spacing (Solid Black in color)</i></p>	
 <p><b>BA-122-RED</b> Pro-Fill manifold for 8-volt battery with 2.5 inch center to center cell spacing (Black &amp; Red in color)</p>	 <p><b>BA-6FT-7G</b> Pro-Fill manifold with valves for 8-volt battery with 2.5 inch center to center cell spacing (Black &amp; Red in color)</p>	

 <p><b>BA-127-FLEX</b> Flexible Manifold 2.6" - 3.5" spacing</p>	 <p><b>BA-128-FLEX</b> Flexible Manifold for use on 12-volt Trojan™ Plus batteries.</p>	 <p><b>BA-129-FLEX</b> Flexible Manifold 2.3" - 2.5" spacing</p>
 <p><b>BD-T14</b> Clampless Tubing (sold by the foot)</p>	 <p><b>BD-00525</b> Gasket for Bayonet cap</p>	 <p><b>BD-00280</b> Swivel Tee End Caps</p>
 <p><b>BA-QDV-505</b> Coupler</p>	 <p><b>Coupler w/ Snake Adapter</b> SNK-F124</p>	 <p><b>BA-142</b> Swivel T with O-ring</p>

## Technical Specifications

### Pro-Fill Operating Requirements

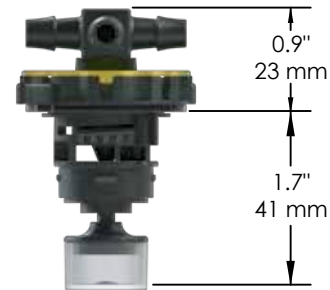
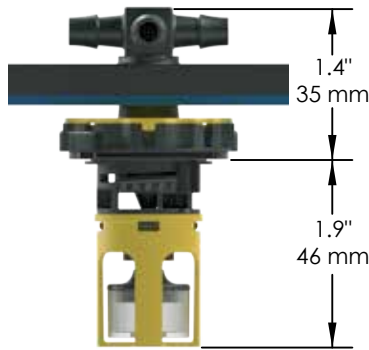
Flow Rate: 2-5 gallons per minute\*  
 Pressure Range: 3-35 PSI  
 (no flow, static) (0.21-2.4 bar)  
 Temp. Range: Freezing-150° F (Freezing - 65.5° C)

### Water Supply Operating Requirements

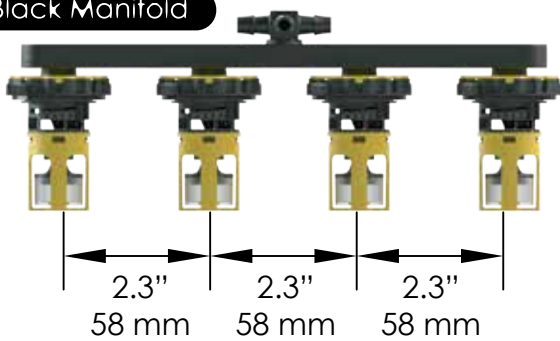
Inlet Pressure: 40 - 100 PSI  
 (no flow, static) (2.76 - 6.89 bar)  
 Temp. Range: 33 - 150° F (1 - 65.5° C)

All product specifications should be met for proper operation of your Flow-Rite SPW system. Contact your battery supplier or Flow-Rite Controls if you have any questions regarding product specifications or how to verify a water supply.

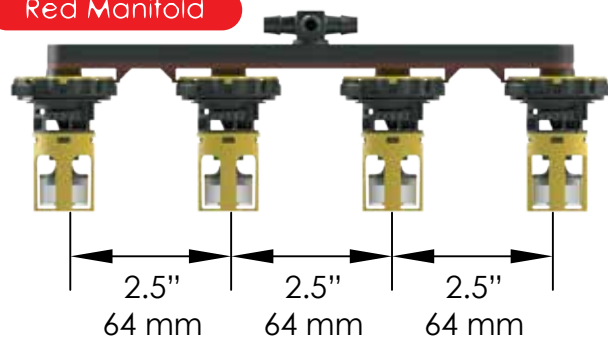
*\*Flow rate should be measured at the end of a purger (female / male coupler combination).*



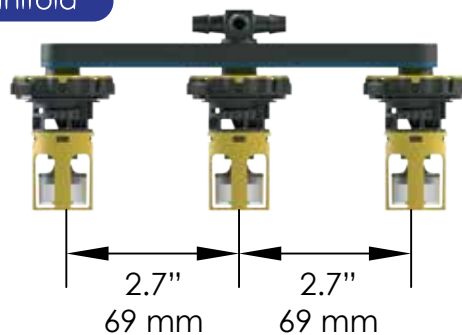
**Black Manifold**



**Red Manifold**



**Blue Manifold**



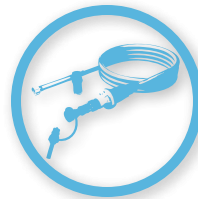
PRO-FILL



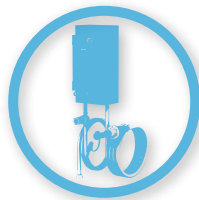
# Water Supplies



**PORTABLE  
WATERING CARTS**



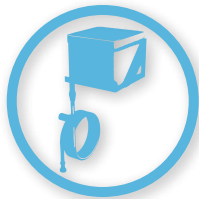
**REGULATED  
HOSE SUPPLIES**



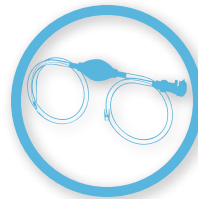
**PORTABLE  
WATER SUPPLIES**



**DEIONIZERS**



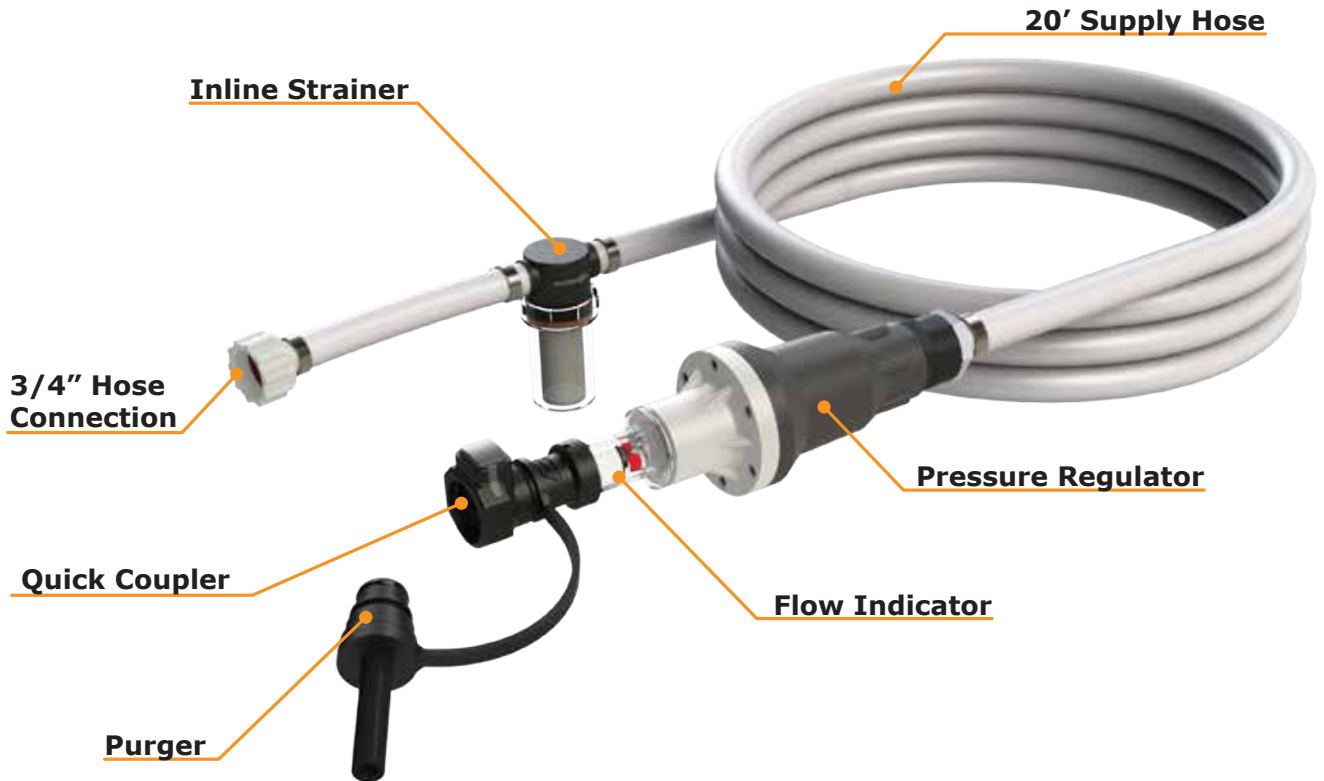
**GRAVITY TANKS**



**HAND PUMP**

## Regulated Hose Supply

Regulated Hose Supply with 20' Hose	<b>BA-MS-320-20</b>
Regulated Hose Supply with 5' Hose	<b>BA-MS-320-05</b>



The Regulated Hose Supply, our number one seller, has no bulky components to mount and no valves to open or close. No tools required —just screw the hose onto a standard garden hose bibb.

For use with batteries equipped with Millennium Evo or Pro-Fill systems with BA-QDV-505 quick coupler.

**1** FLOW-RITE CONTROLS  
1 YEAR WARRANTY



## Portable Watering Cart

AC / DC Portable Watering Cart	BA-MS-110
--------------------------------	-----------



The AC / DC portable watering cart is ruggedly constructed of lightweight, yet strong polyethylene plastic, and has a large 22 gallon holding capacity. The new cart automatically shuts down when the battery becomes low on charge, and features LED message lights to alert you to the state of the cart's battery. The cart also features a large refill hole with flip-top lid to keep out particles. A 12-volt sealed battery, with its own on-board charger, powers the watering cart's variable speed pump, or it can be plugged in and run on AC power. All components are DI water compatible.

For use with batteries equipped with Millennium Evo or Pro-Fill systems with BA-QDV-505 quick coupler.

**1 FLOW-RITE CONTROLS  
1 YEAR WARRANTY**

## Deionizer

Deionizer, Battery operated, without low pressure bypass	<b>BA-MS-340</b>
Deionizer, 110-115 VAC Light	<b>BA-MS-341</b>
Deionizer, 220-240 VAC Light	<b>BA-MS-342</b>
Replacement Cartridge	<b>BA-221</b>

Input TDS	Gal. Yield
100	760
150	507
200	380
250	304
300	253

(estimates)

### Disposable Cartridge

Removes 76,000 total dissolved solids (PPM) before needing replacement

### Water Quality Light

Green okay, red replace cartridge

### Low Pressure Bypass

Maintains pressure in the event a cartridge is not changed and becomes clogged

### 10 Foot Hose

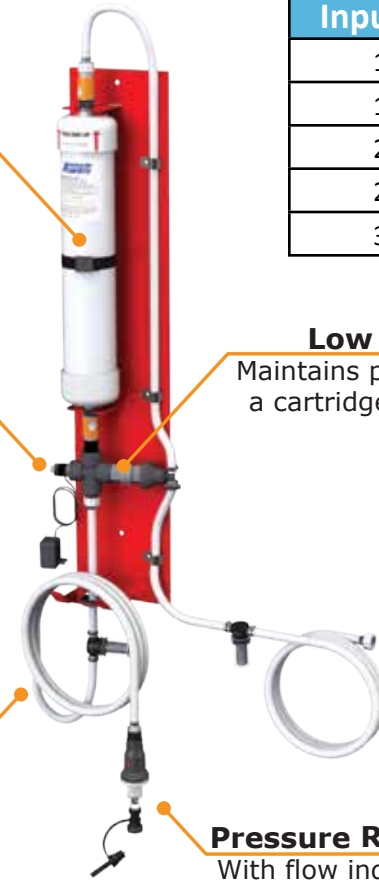
Connects to spigot

### 20 Foot Supply Hose

With inline strainer

### Pressure Regulator

With flow indicator and quick coupler



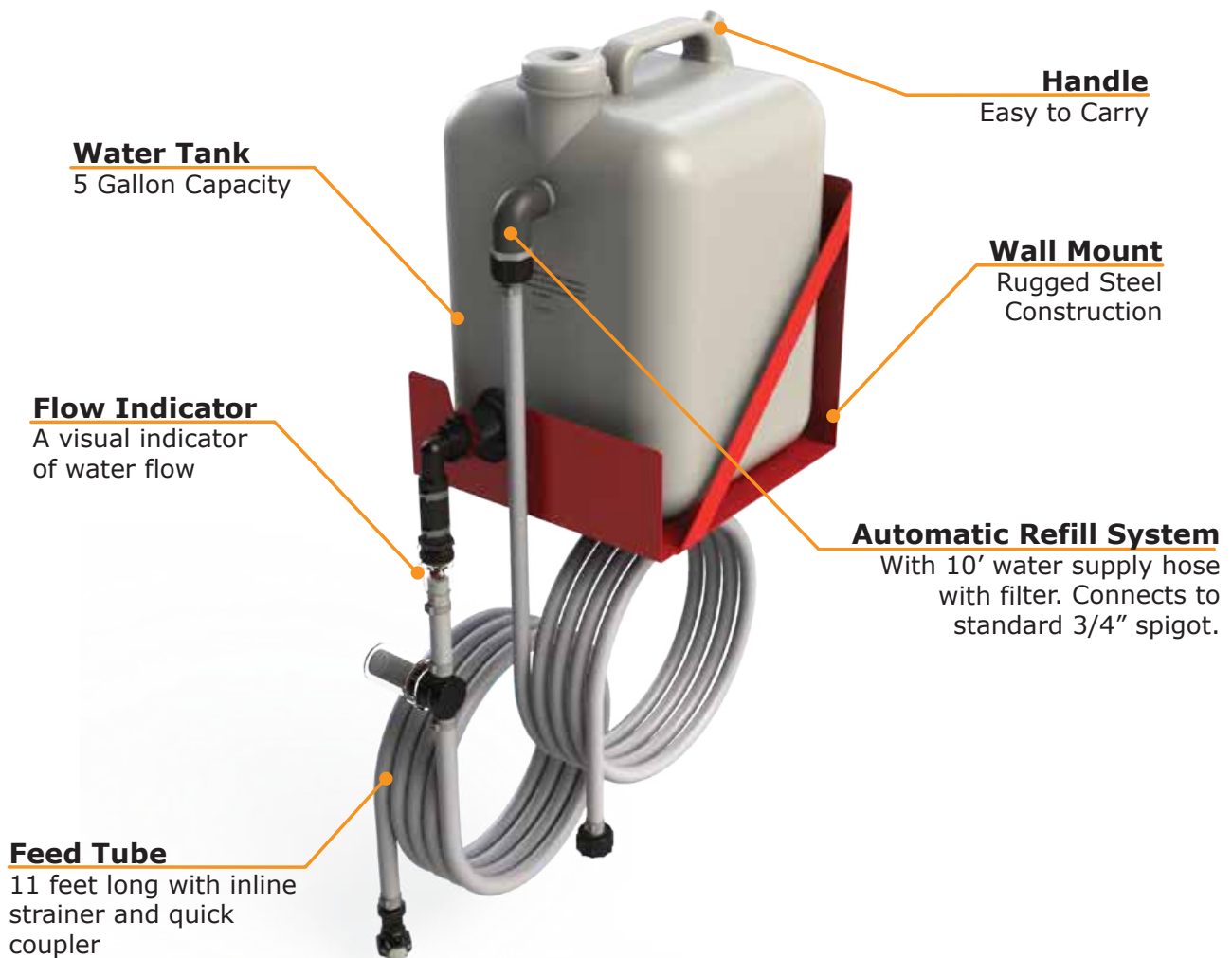
Maximizes battery life by removing ions and heavy metals that are present in tap water. The separate bed deionizer uses an ion exchange cartridge to filter the water before it enters the battery. Cartridge can be discarded when replacement is necessary. This is determined when output exceeds 50 TDS (water quality light will turn red). The low pressure bypass ensures that the deionizer will provide enough pressure and flow to operate your SPW system, even if your cartridge becomes plugged.

For use with batteries equipped with Millennium Evo or Pro-Fill systems with BA-QDV-505 quick coupler. For inlet water above 300 ppm, it is recommended that a pre-filter is used.

**1 FLOW-RITE CONTROLS  
1 YEAR WARRANTY**

## Gravity Tanks

Gravity tank with shelf and auto refill	<b>BA-MS-700</b>
Gravity tank with shelf, no auto refill	<b>BA-MS-702</b>
Gravity tank no shelf, no auto refill	<b>BA-MS-703</b>
Dropline Only	<b>BA-MS-600</b>



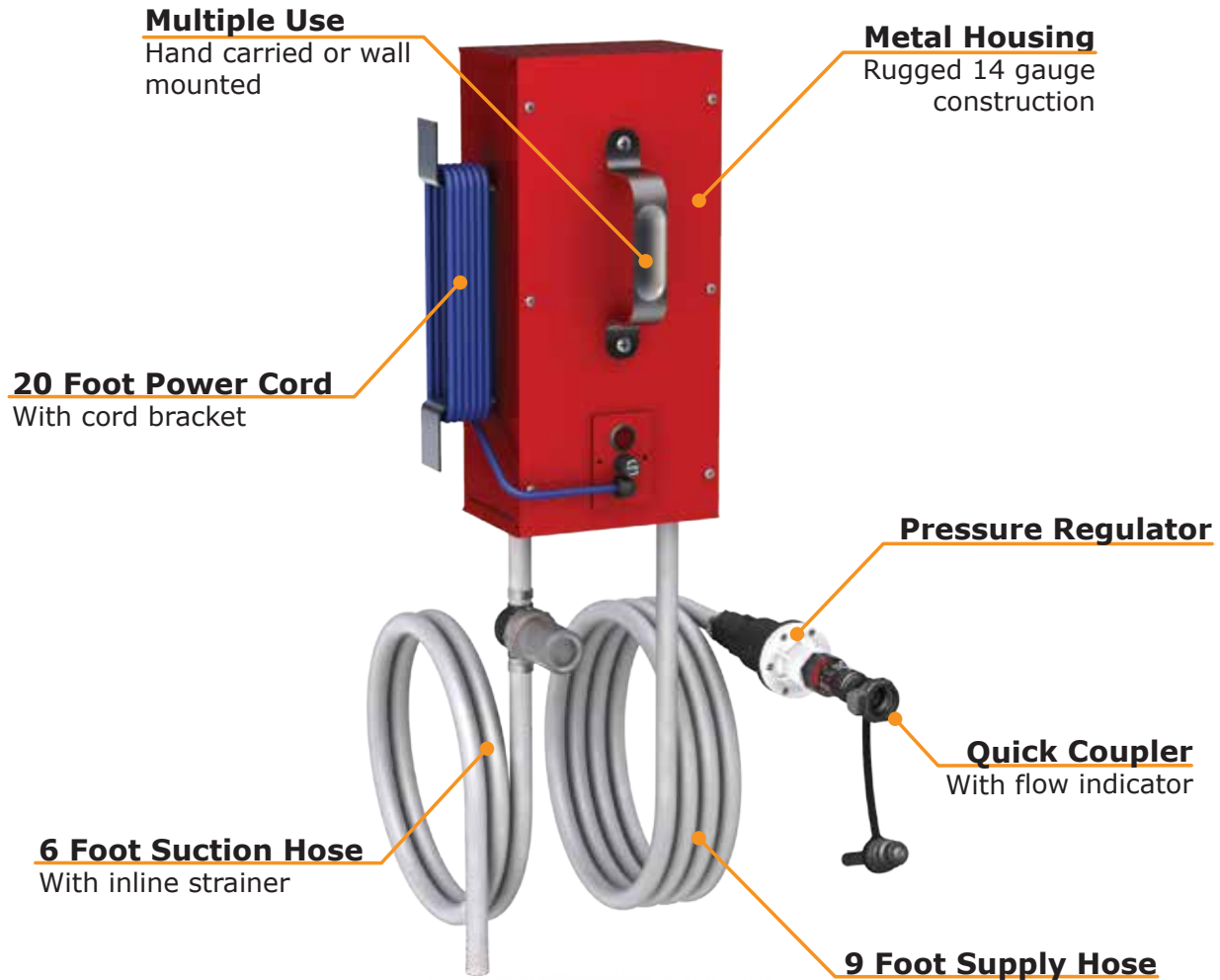
Gravity tanks may be put on a shelf or used with our rugged mounting bracket. Bottom of tank must be at a minimum of six feet above the top of the batteries being watered. Tank automatically refills itself. Compatible with deionized water.

For use with batteries equipped with Millennium Evo or Pro-Fill systems with BA-QDV-505 quick coupler.

**1 FLOW-RITE CONTROLS  
1 YEAR WARRANTY**

## Portable Water Supply

Portable Water Supply, 110-115 VAC	<b>BA-MS-606</b>
Portable Water Supply, DC Powered	<b>BA-MS-612</b>



The portable water supply automatically shuts off when filling stops and is commonly used with a portable water tank filled with distilled water. This water supply is designed for batteries equipped with Millennium SPW or Pro-Fill systems with a BA-QDV-505 quick coupler.

**1 FLOW-RITE CONTROLS  
1 YEAR WARRANTY**

## Mini Pump

Mini Pump w/ Cigarette Lighter Adapter (12V DC)	<b>BA-MS-650</b>
Mini Pump w/ Tank & 110V AC Adapter	<b>BA-MS-651</b>
Mini Pump w/ Tank & 12V DC Ring Terminals	<b>BA-MS-652</b>



**1 FLOW-RITE CONTROLS  
1 YEAR WARRANTY**

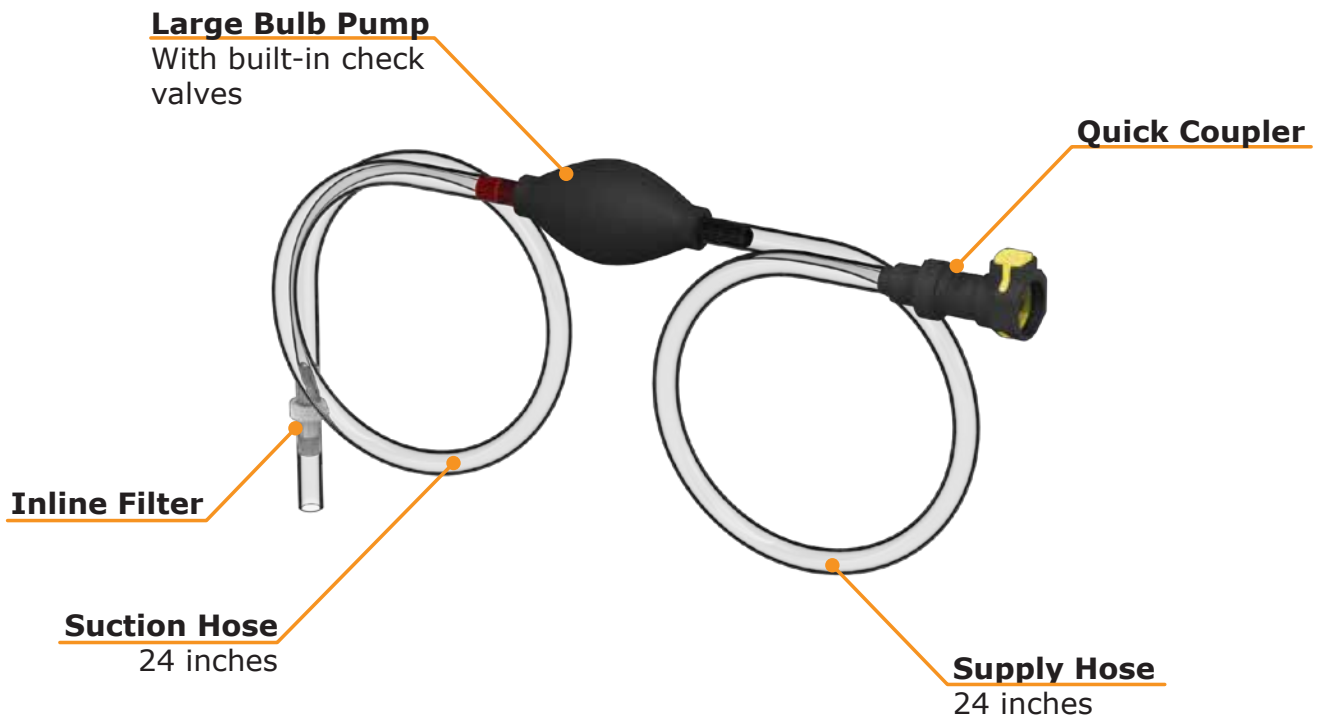
This DC powered water supply is practical for light duty applications of 24 cells or fewer. The mini pump is commonly used with a portable water tank filled with distilled water. This product works with batteries equipped with Millennium SPW or Pro-Fill systems that have a BA-QDV-505 quick coupler.

## Mini Pump Accessories

<p><b>BA-550</b> Adapter Kit Alligator Clips</p>	<p><b>BA-551</b> Adapter Kit 110V Wall Plug</p>	<p><b>BA-552</b> Adapter Kit 250V Wall China</p>
<p><b>BA-553</b> Adapter Kit 5/16" Ring Terminals</p>	<p><b>BA-554</b> 5 Gallon Tank for Mini Pump</p>	

## Hand Pump

Hand Pump	BA-MS-630
-----------	-----------



This water supply is perfect for the person who has their own golf cart, utility vehicle, or other light use application. It is commonly used with a jug filled with distilled water. The hand pump is for use with batteries that feature 24 or fewer cells and are equipped with Millennium SPW, Pro-Fill, or Qwik-Fill systems.

**1 FLOW-RITE CONTROLS  
1 YEAR WARRANTY**

## Water Supply Accessories

 <p><b>BA-QDV-110</b> Water Supply Converter Male Flow-Rite to Male Hansen</p>	 <p><b>BA-QDV-710</b> Water Supply Converter Male Flow-Rite to Female BFS (gray)</p>	 <p><b>BA-QDV-715</b> Water Supply Converter Male Flow-Rite to Female BWT (gray)</p>
 <p><b>BA-QDV-115</b> Water Supply Converter Female Flow-Rite to Female Hansen</p>	 <p><b>BA-QDV-720</b> Water Supply Converter Male BFS (gray) to Female Flow-Rite</p>	 <p><b>BA-013</b> Water Supply Converter Philadelphia Scientific to Flow-Rite</p>
 <p><b>BA-032</b> Back Flow Preventor</p>	 <p><b>BA-031</b> Hose Bibb Pressure Reducer</p>	

## Water Supply Replacement Parts

 <p><b>BA-MS-320-00</b> Hose End Assembly</p>	 <p><b>BA-FLW-20</b> Flow Indicator (1983-2013) <i>(FGHT x Female Coupler)</i></p>	 <p><b>BA-005</b> Regulator (1983-2013) for use with BA-FLW-20 <i>(FGHT x MGHT)</i></p>
 <p><b>BA-FLW-60</b> Flow Indicator (Current Style) <i>(3/4 inch NPT x 3/8 inch FNPT)</i></p>	 <p><b>BA-FLW-80</b> Flow Indicator (Current Style) <i>(3/4 inch NPT x Female Coupler)</i></p>	 <p><b>BA-003</b> Regulator (Current Style) for use with BA-FLW-80 <i>(FGHT X FNPT)</i></p>
 <p><b>BA-051</b> Purger for Millennium Evo Water Supplies</p>	 <p><b>BA-T03</b> 20' Millennium Evo Braided Hose <i>(FGHT X MGHT)</i></p>	 <p><b>BA-T04</b> 5' Millennium Evo Braided Hose <i>(FGHT X MGHT)</i></p>
 <p><b>BD-00017</b> Filter Washer with Stainless Steel Screen for Regulators</p>	 <p><b>BA-019</b> Inline Strainer for 1/2 inch ID Hoses</p>	 <p><b>BA-026</b> FGHT x 1/2 inch Barb <i>(includes 1 worm clamp)</i></p>
 <p><b>BA-QDV-233</b> Female Coupler x 3/8" Barb</p>	 <p><b>BA-QDV-232</b> Female Coupler x 1/2" Barb</p>	 <p><b>BA-465</b> 3/8" Check Valves</p>



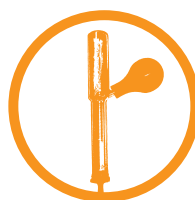
 <p><b>BD-00205</b> Hose Washer</p>	 <p><b>BD-00121</b> Replacement Cartridge <i>for Deionized Water Supply purchased 2006 or prior</i></p>	 <p><b>BD-QDV-800</b> Male Gardina Fitting</p>
 <p><b>BA-221</b> Replacement Cartridge <i>for Deionized Water Supply purchased 2007 or later</i></p>	 <p><b>BD-00367</b> Female Gardina Fitting</p>	 <p><b>BA-037</b> Deionizer Bypass Replacement Cross Assembly</p>
 <p><b>BA-512</b> Deionizer Bypass Removal Retro Kit</p>	 <p><b>BD-00321-MLR</b> Pump 12v DC <i>for BA-MS-110 &amp; BA-MS-612</i></p>	 <p><b>BD-00319-MLR</b> Pump 110v AC <i>for BA-MS-606 (115 VAC)</i></p>
 <p><b>BD-00327</b> Rocker Switch, Lighted (red), 120 V <i>Used on most AC powered water supplies</i></p>	 <p><b>BD-00326</b> Rocker Switch, Lighted (amber), 12V <i>Used on most DC powered water supplies</i></p>	 <p><b>BA-018</b> Line Strainer <i>for all Gray Carts (includes two worm clamps)</i></p>

 <p><b>BD-00323</b> Variable Speed Pump for BA-MS-105 &amp; BA-MS-106 (12v DC)</p>	 <p><b>BD-00298</b> Variable Speed Pump for BA-MS-205 (110v AC)</p>	 <p><b>BD-00607</b> Battery for BA-MS-105 &amp; BA-MS-110 carts</p>
 <p><b>BA-570</b> Water Cart Inlet Pump Hose Assembly for carts BA-MS-105, BA-MS-205 and BA-MS-110</p>	 <p><b>BA-571</b> Water Cart Outlet Pump Hose Assembly for carts BA-MS-105 and BA-MS-205</p>	 <p><b>BA-006</b> Charger for BA-MS-105 Cart</p>

# Accessories



**BATTERY  
STEWARD**



**TOOLS**



**LEVEL  
INDICATORS**



**VENT CAPS**



## ACCESSORIES

### Battery Steward



Do you keep track of your battery maintenance on a disorganized whiteboard or spreadsheet? Do you know when you should water your batteries next? How do you know the proper maintenance was completed? How much money are you wasting because of poorly maintained batteries?

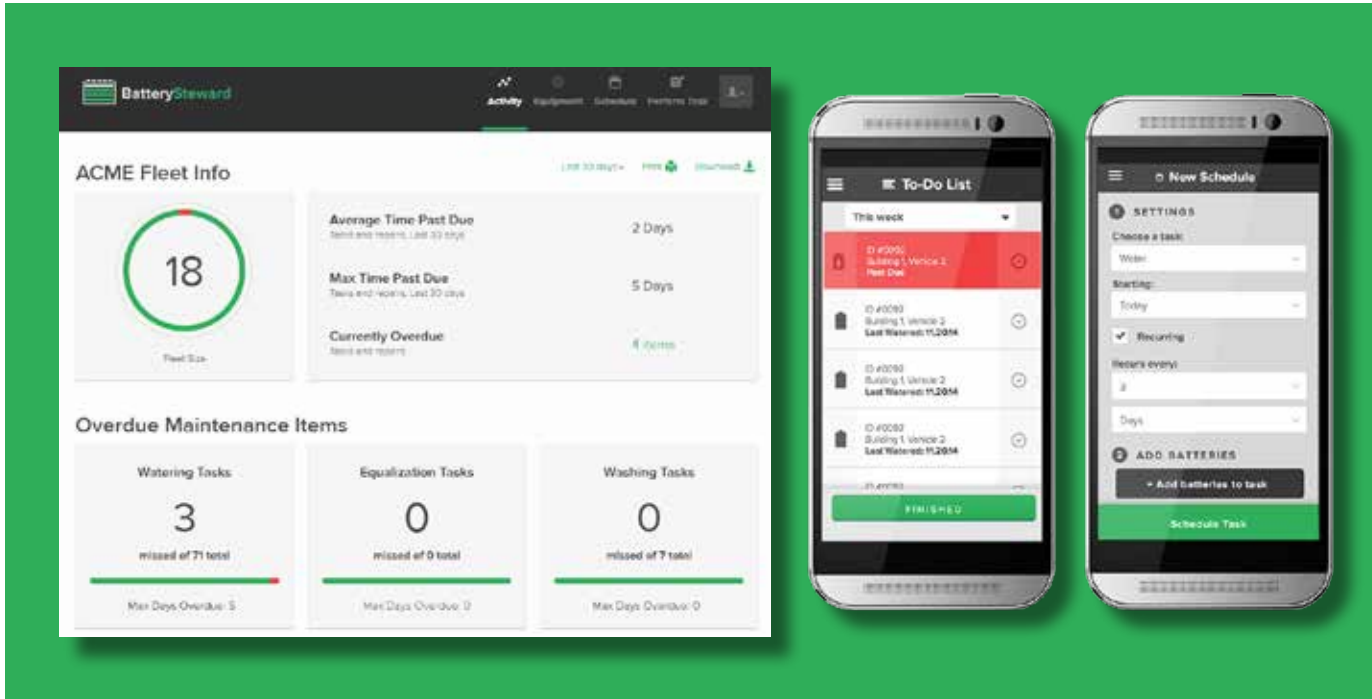
If you think it's time to start protecting your investment that keeps your operations up and running, then download Battery Steward® by Flow-Rite.

Battery Steward® is an app and web portal solution that organizes your battery care schedule, alerts you when tasks are due, records maintenance and asset data, and allows you to proactively identify neglected, misused, or abused batteries.

Download the app and create your account.



or visit [www.BatterySteward.com](http://www.BatterySteward.com)



Use your mobile device and identifying labels to create easy-to-follow battery care task lists. Tasks include watering, equalizing, and preventative maintenance.

Concerned about missing or overlooking a task? Battery Steward alerts you to when a task is due or past due.

Check off batteries by scanning the Battery Steward identifying label that has been attached to your battery.

Record and analyze important battery maintenance data through the online portal.

Identify neglected, misused, or abused batteries.



### TRACK YOUR BATTERIES

Apply a set of Battery Steward labels (FREE with Flow-Rite single-point watering kits) to 2 sides of each battery. Check off your tasks by scanning the label with your mobile device or bar code scanner.

Battery Steward Labels

**BA-090**



# ACCESSORIES

## Level Indicators

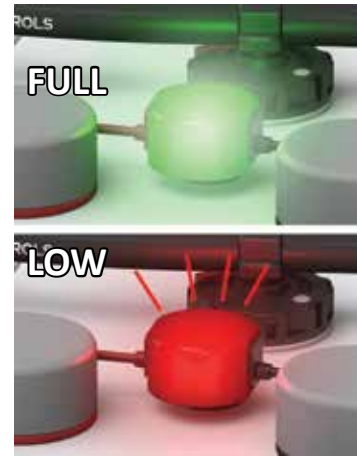
### Eagle Eye



# Eagle Eye™

Eagle Eye accurately monitors and displays the status of cell electrolyte levels with a solid green or blinking red light. Patented Capacitive Sensing Technology, found in many electronics such as touch screen monitors and cell phones, allows Eagle Eye to measure electrolyte levels without running current through the sensing probe. This eliminates any potential corrosion between the plates and the probe.

- Brightest level light on the market!
- Probe may be trimmed to size
- Nickel ring terminals are epoxy sealed to wires to prevent corrosion
- Sealed polypropylene lens protects the LED & electronics from impacts and acid migration
- 3 self resetting fuses
- Reverse polarity protected
- 100% functionally tested



**1 FLOW-RITE CONTROLS  
1 YEAR WARRANTY**



## Level Indicators

Eagle Eye - Local Standard		
	The most popular version of our level indicators is the Eagle Eye Local Standard. This is for use on 11-33 plate batteries where the top of the battery is frequently exposed.	
	1.93" / 49mm (Standard length)	BA-491
	2.91" / 77mm	BA-492
	5" / 127mm	BA-488
Eagle Eye - Remote Standard		
	Eagle Eye Remote Standard is used on 11-33 plate batteries where the battery top is not easily viewed. The remote light mounts on the dash or the side of the battery case. It is frequently used on narrow aisle lift truck batteries that remain inside the vehicle and are not readily accessible.	
	1.93" / 49mm (Standard length)	BA-494
	3.03" / 77mm	BA-490

Eagle Eye - Small Plate		
	For 5-9 plate batteries, we have our Eagle Eye – Small Plate option. These batteries do not allow room for the light housing to be placed in the same location as the probe, so this version includes a remote light that is attached to a nearby intercell connector.	
	1.93" / 49mm (Standard length)	BA-496
	3.03" / 77mm	BA-497












Standard Level-Lite		
	Our original Level Lite and best seller; when the green light is on your battery is ready to go, and when the light goes out your battery requires water.	
	Standard Length	BA-434
	Long Length	BA-435
	Short length (special order only)	BA-433

Optical Level indicators		
	For bulk packs in quantities of 100 for any of the above optical level indicators, simply add "-100" to the part number.	
	Optical Level Indicator with Sleeve, Standard	BA-134
	Optical Level Indicator with Sleeve, Long	BA-135
	Optical Level Indicator with Sleeve, Extra Long	BA-136
	Optical Level Indicator with Sleeve, Short	BA-137

Cell Inspection Plug		
	Cell Inspection Plug	BD-107
	Cell Inspection Plug Bulk Back (600)	BD-107-600

Eagle Eye Demo Unit		
	The Eagle Eye demo unit is a useful tool for Flow-Rite dealers to demonstrate the Eagle Eye level indicator. The two switches turn on and off the red and green light variations.	
	Eagle Eye Demo Unit	BA-MFT-005

## Tools

 <b>BD-00034</b> Safety Glasses	 <b>BD-00871</b> 4-Prong Spanner Tool	 <b>BD-00110</b> 2-Prong Spanner Tool																					
 <b>BA-107</b> Drill Bit	 <b>BD-00925</b> Acid Extractor	 <b>BA-007</b> Tube Cutter																					
	 <b>BA-MTF-003</b> Demo Unit	 <b>BD-00008</b> NO-OX-ID Grease																					
 <b>BA-501</b> XL Tube Cutter	 <b>BA-572</b> Water Quality Tester																						
<div style="text-align: center;">   <b>Hydrometers</b>            Our Gefo produced hydrometers feature a centered aerometer that has no lateral contact with the outer cylinder. You will receive a fast and accurate reading every time from the color coded / numerical scale.            For use with Millennium Evo flip top valves.         </div> <table border="1" data-bbox="397 1648 1247 1843"> <thead> <tr> <th>Part #</th> <th>Model</th> <th>Density Range</th> <th>Graduations (Scale)</th> <th>Vol</th> <th>Therm</th> </tr> </thead> <tbody> <tr> <td>BA-047</td> <td>Gefo Centra</td> <td>1.10-1.30 (g/ml)</td> <td>.01g</td> <td>18 cc</td> <td>No</td> </tr> <tr> <td>BA-065</td> <td>Gefo S / Th</td> <td>1.08-1.30 (g/ml)</td> <td>.005</td> <td>42 cc</td> <td>Yes 0-60 C</td> </tr> </tbody> </table> <table border="1" data-bbox="397 1858 1247 1900"> <tr> <td>Aerometer</td> <td>Replacement for BA-047 Hydrometer</td> <td>BD-00166</td> </tr> </table>			Part #	Model	Density Range	Graduations (Scale)	Vol	Therm	BA-047	Gefo Centra	1.10-1.30 (g/ml)	.01g	18 cc	No	BA-065	Gefo S / Th	1.08-1.30 (g/ml)	.005	42 cc	Yes 0-60 C	Aerometer	Replacement for BA-047 Hydrometer	BD-00166
Part #	Model	Density Range	Graduations (Scale)	Vol	Therm																		
BA-047	Gefo Centra	1.10-1.30 (g/ml)	.01g	18 cc	No																		
BA-065	Gefo S / Th	1.08-1.30 (g/ml)	.005	42 cc	Yes 0-60 C																		
Aerometer	Replacement for BA-047 Hydrometer	BD-00166																					



### Water Wise



### Introducing *Water Wise™* The World's First Ever Flip-Top Watering Cap!

Water Wise Flip-Top Watering Caps limit the nozzle depth of automatic watering guns to achieve accurate electrolyte levels without the use of adjustable O-rings. Take the guess-work out of refilling battery cells when using a watering gun!

Simply leave the Flip-Top Watering Cap in place. Your batteries will always be filled to the correct level, ensuring optimal battery life.

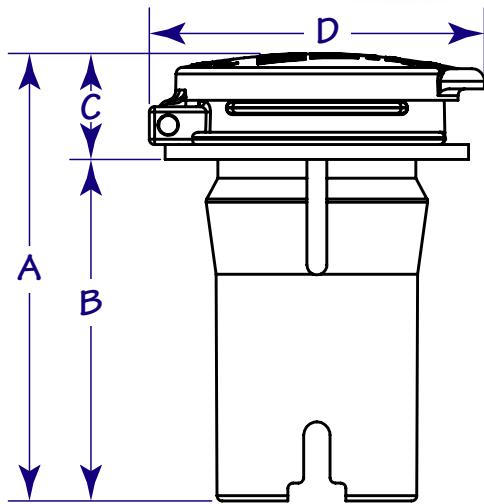
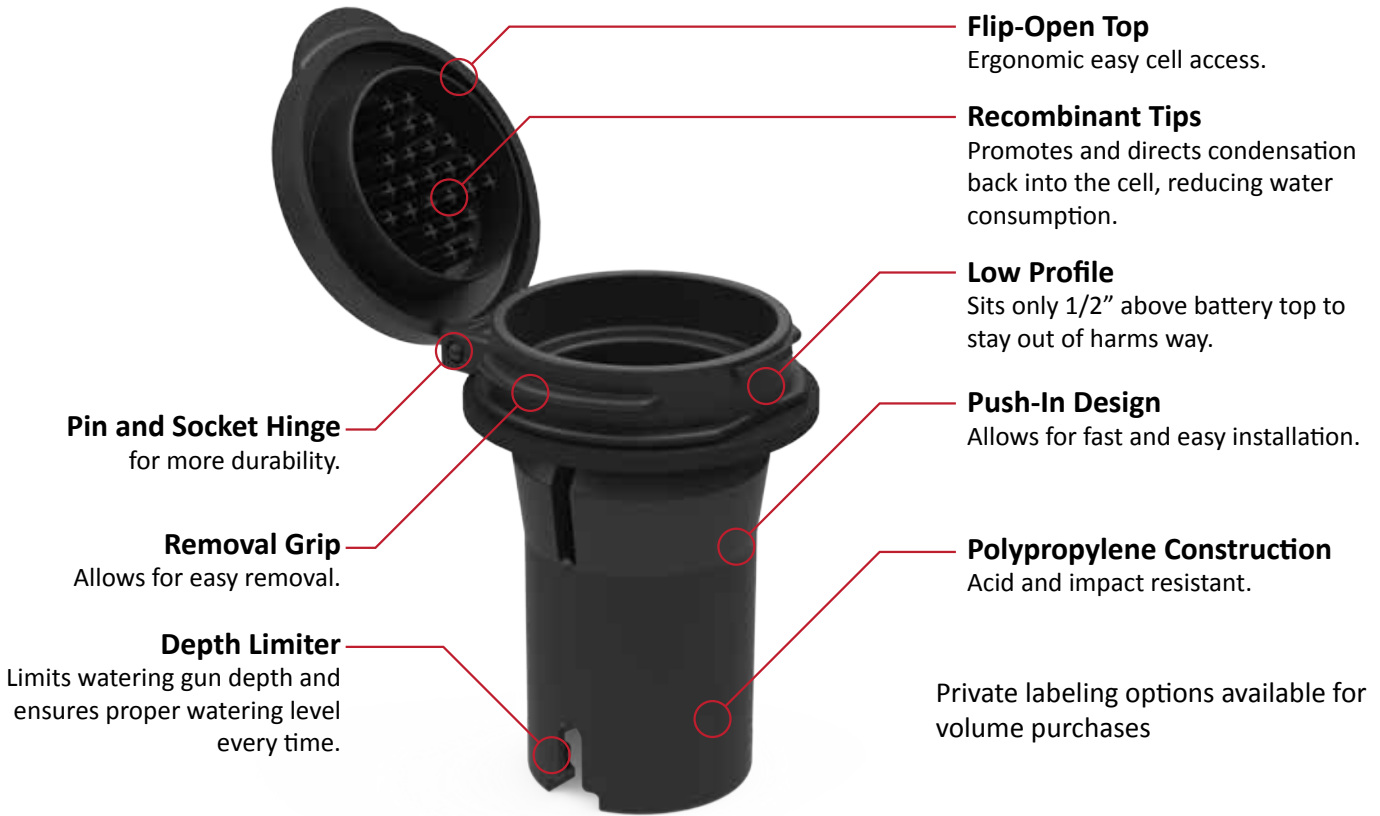
You'll have peace of mind knowing that every battery cell is watered properly and safely.

- Fast
- Reliable
- Economical
- Durable





# ACCESSORIES



Model #	Description	A	B	C	D
VNT-1W2	Water Wise, Bayonet, Push-In, Black Length	2.12"	1.62"	.5"	1.59"
VNT-1W3	Water Wise, Bayonet, Push-In, Gray Length	2.50"	2.00"	.5"	1.59"
VNT-3H1	Water Wise, 35P, Push-In, 37mm Length	2.12"	1.52"	.6"	1.59"
VNT-3H2	Water Wise, 35P, Push-In, 47mm Length	2.5"	1.90"	.6"	1.59"

# QWIK-FILL™

ON-BOARD BATTERY WATERING SYSTEM

by **FLOW-RITE**



# RV EDITION PRO-FILL™

ON-BOARD BATTERY WATERING SYSTEM

by **FLOW-RITE**



## Qwik-Fill - Retail



Qwik-Fill On-board Battery Watering Systems fit 12-volt marine deep cycle batteries group 24-27 and most group 29-31. Fill up to 3 batteries from a single remote location with simple hand pump operation.

*\*Qwik-Fill may only be operated with a hand pump water supply\**

<p><b>Kit A</b></p>	<p><b>MP-2000</b></p> <p>Includes all parts necessary to add / set-up two batteries with quick disconnect for filling. Requires squeeze bulb filling kit (sold separately in Kit C).</p>
<p><b>Kit B</b></p>	<p><b>MP-2010</b></p> <p>Includes all parts necessary to add / set-up one battery with quick disconnect for filling. Requires squeeze bulb filling kit (sold separately in Kit C).</p>
<p><b>Kit C</b></p>	<p><b>RV-2020</b></p> <p>Squeeze bulb filler assembly with intake filter and quick connect fitting.</p>

Please visit [www.flow-rite.com](http://www.flow-rite.com) for complete warranty details.

## Qwik-Fill - OEM

### Qwik-Fill OEM Packed Kits



Kit Size / Description	Part #
1 Battery Kit (no hand pump included)	QF-1010
2 Battery Kit (no hand pump included)	QF-1020
3 Battery Kit (no hand pump included)	QF-1030
3 Battery Kit (hand pump included)	QF-1100
Hand Pump	BA-MS-630

### Qwik-Fill Parts

 <p><b>BM-100-RP</b> Replacement Qwik-Fill Manifold <i>(Universal - Barbs on both sides)</i></p>	 <p><b>BA-061</b> Replacement Pack of Barbs</p>	 <p><b>BA-465</b> 3/8" Check Valves</p>
 <p><b>BA-QDV-512</b> Male Quick Coupler w/ Dust Cover <i>(Keyed 1/4" Barb)</i></p>	 <p><b>BA-QDV-201</b> Female Quick Coupler <i>(Keyed 3/8" Barb)</i></p>	 <p><b>BSA-5000</b> Squeeze Ball with Check Valves</p>

Please visit [www.flow-rite.com](http://www.flow-rite.com) for complete warranty details.

## Pro-Fill RV Edition



Kit Size / Description	Part #
2 Battery Kit (no hand pump included)	RV-2000
Hand Pump	RV-2020

### Pro-Fill RV Parts

<p><b>BA-Y7A-10-6P</b> 6-pack of Replacement Valves for Pro-Fill Systems</p>	<p><b>BA-QDV-201</b> Female Quick Coupler (Keyed 3/8" Barb)</p>	<p><b>BA-QDV-512</b> Male Quick Coupler w/ Dust Cover (Keyed 1/4" Barb)</p>
<p><b>BA-127-FLEX</b> Flexible Manifold</p>	<p><b>BD-T14</b> Clamless Tubing (purchased by the foot)</p>	<p><b>BD-00280</b> Red End Caps (sold in quantity of one)</p>
<p><b>BA-465</b> 3/8" Check Valves for Hand Pump</p>	<p><b>BSA-5000</b> Squeeze Ball with Check Valves</p>	

Please visit [www.flow-rite.com](http://www.flow-rite.com) for complete warranty details.





**Flow-Rite Controls, Ltd.**

960 74th Street SW

Byron Center, MI 49315

p. (616) 583-1700 f. (616) 878-5151

[www.flow-rite.com](http://www.flow-rite.com)

Product names, logos, brands and other trademarks referred to within this publication are the property of their respective trademark holders.

© 2016 Flow-Rite® BL-BWG Rev. 10/16