

### Safety Precautions



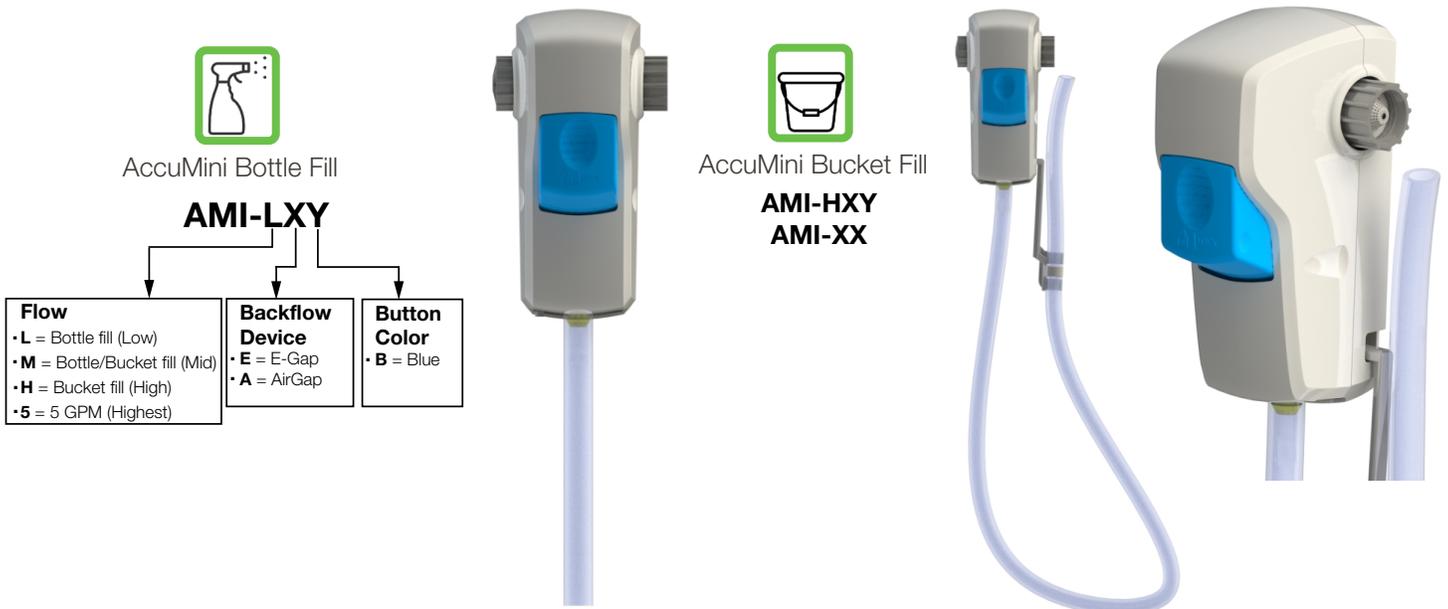
**WARNING!** Read and fully understand the user manual before operating this product.

#### THANK YOU FOR YOUR INTEREST IN OUR PRODUCTS

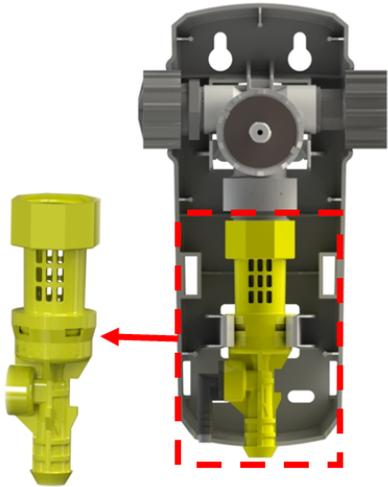
Please use this equipment carefully and observe all warnings and cautions.

- WEAR** protective clothing and eyewear when dispensing chemicals or other materials or when working in the vicinity of all chemicals, filling or emptying equipment, or changing metering tips.
- ALWAYS** observe safety and handling instructions of the chemical manufacturer.  
 direct discharge away from you or other persons or into approved containers.  
 dispense cleaners and chemicals in accordance with manufacturer's instructions. Exercise CAUTION when maintaining your equipment.  
 reassemble equipment according to instruction procedures. Be sure all components are firmly screwed or latched into position.
- KEEP** equipment clean to maintain proper operation.
- ATTACH** only to water tap outlets (25 psi Minimum, 85 psi Maximum and Maximum water temperature 120° F).
- NOTE** If the unit is used to fill a sink, or the discharge hose can be placed into a sink, the unit must mounted be so the bottom of the cabinet is above the overflow rim of the sink.  
 Device shall be installed in a vertical orientation.  
 A plumbed, dedicated line is preferred for installation. When a dedicated line is not available, installation shall ensure that no cross-connections between hot and cold water are created, and that atmospheric vacuum breakers integrated into the building water supply are not negatively affected by being under pressure for over 12 continuous hours.

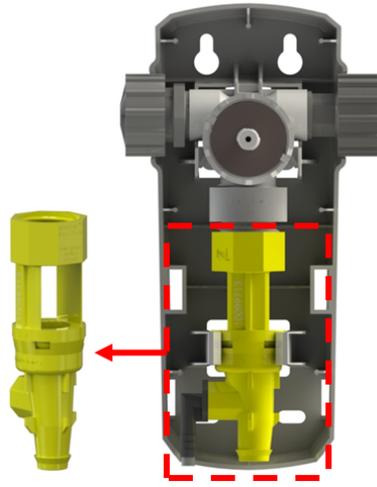
## introduction



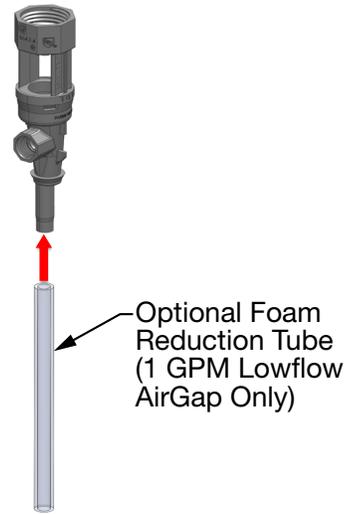
# introduction (continued)



E-Gap Backflow Device

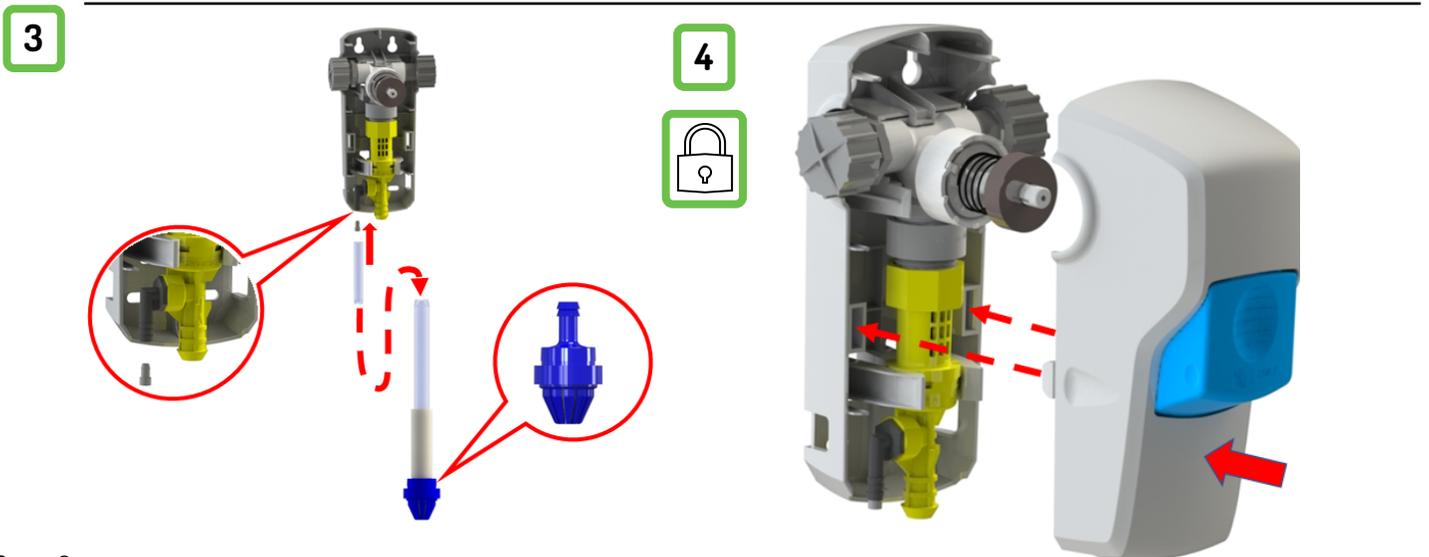
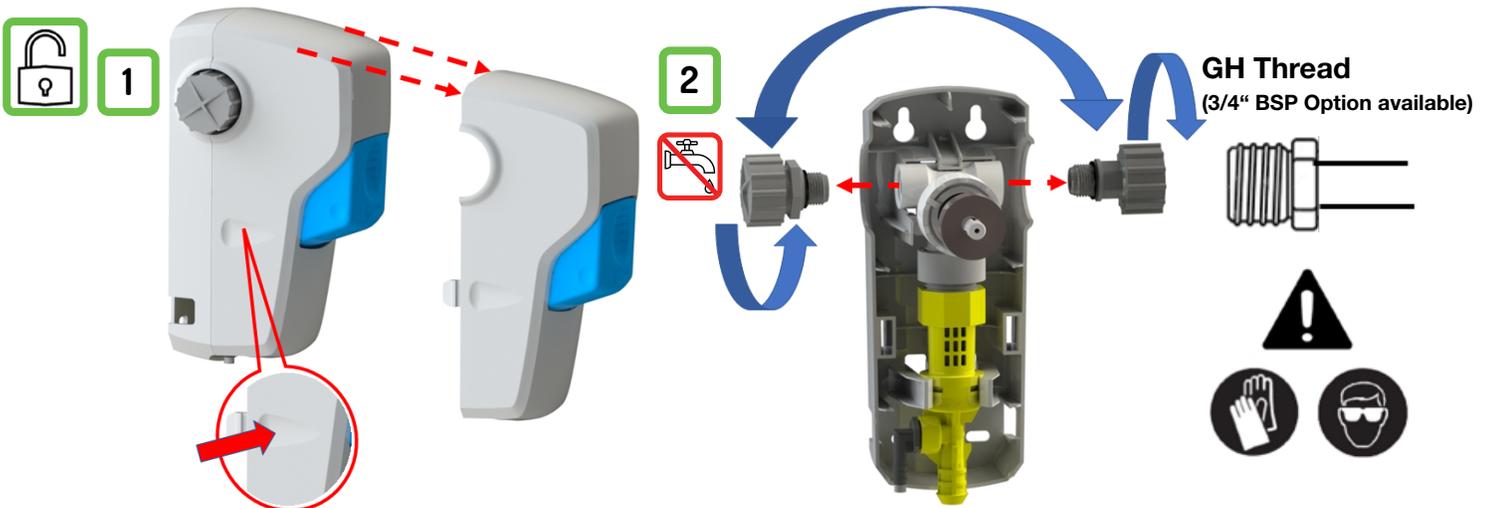


AirGap Backflow Device



# installation

**Note:** The Installation process for E-Gap and AirGap versions are the same.



# metering tip selection

APPROXIMATE AIRGAP AND E-GAP DILUTIONS AT 40 psi FOR WATER-THIN PRODUCTS (1.0 CP)					
Tip Color	Orifice Size	AirGap Ratio (per Eductor Flow)		E-Gap Ratio (per Eductor Flow)	
		1 GPM	3.5 GPM	1 GPM	3.5 GPM
No Tip	.187	2.6:1	4:1	3:1	3.5:1
Gray	.128	2.6:1	4:1	3:1	4:1
Black	.098	2.5:1	5:1	3:1	4:1
Beige	.070	3:1	8:1	4:1	8:1
Red	.052	5:1	13:1	5:1	14:1
White	.043	7:1	22:1	7:1	20:1
Blue	.040	9:1	26:1	8:1	24:1
Tan	.035	11:1	34:1	10:1	30:1
Green	.028	17:1	52:1	16:1	45:1
Orange	.025	19:1	64:1	20:1	56:1
Brown	.023	22:1	71:1	24:1	64:1
Yellow	.020	32:1	102:1	32:1	90:1
Aqua	.018	39:1	128:1	38:1	128:1
Purple	.014	64:1	213:1	64:1	180:1
Pink	.010	128:1	447:1	128:1	350:1

## Metering Tip Selection:

The final concentration of the dispensed solution is related to both the size of the metering tip opening and the viscosity of the liquid being siphoned. For water-thin products, the chart can be used as a guideline. If product is noticeably thicker than water, consult the Measurement of Concentration procedure to achieve your desired water-to-product ratio. Because dilution can vary with water temperature and pressure, actual dilution achieved can only be ascertained by using the Measurement of Concentration procedure. The clear, undrilled tip is provided to permit drilling to size not listed should you need a dilution ratio that falls between standard tip sizes.

**NOTE:** A 1 GPM eductor is gray; a 3.5 GPM eductor is yellow. Refer to parts diagram if unfamiliar with names of system components.

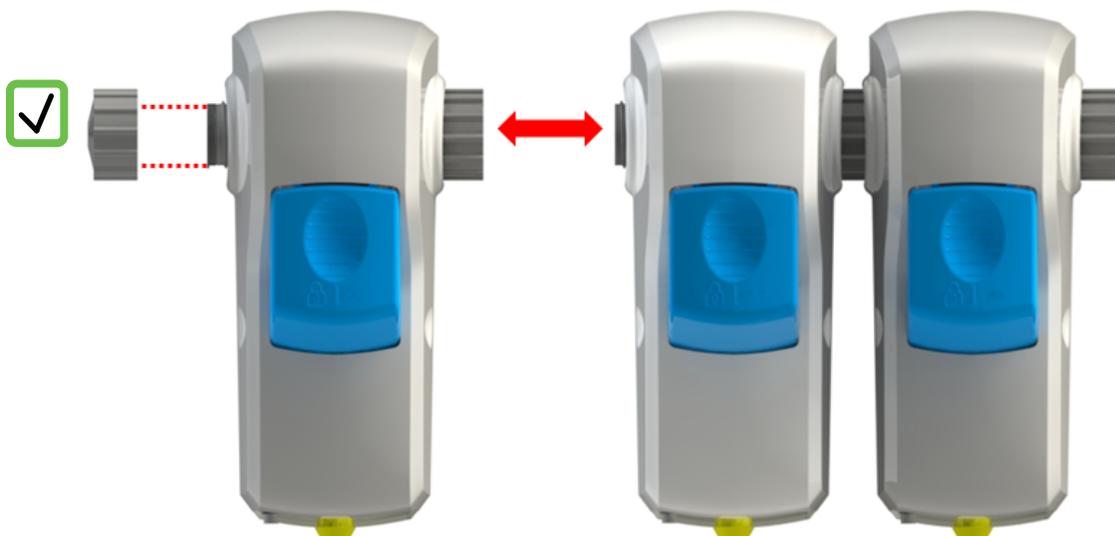
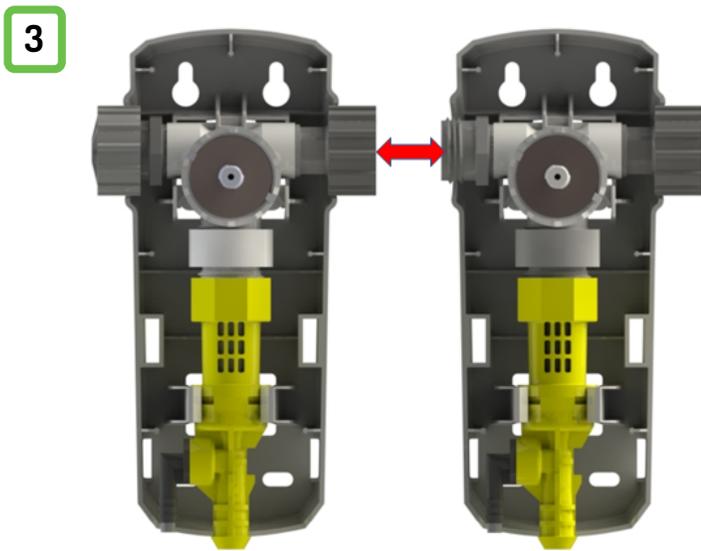
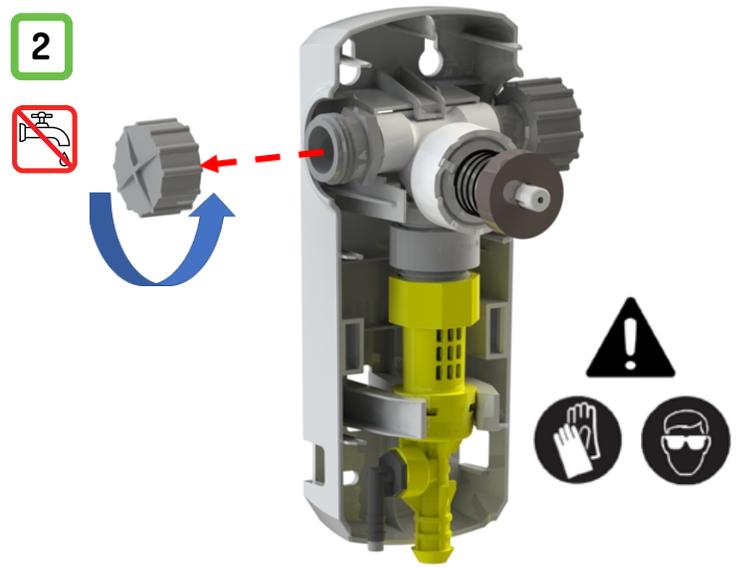
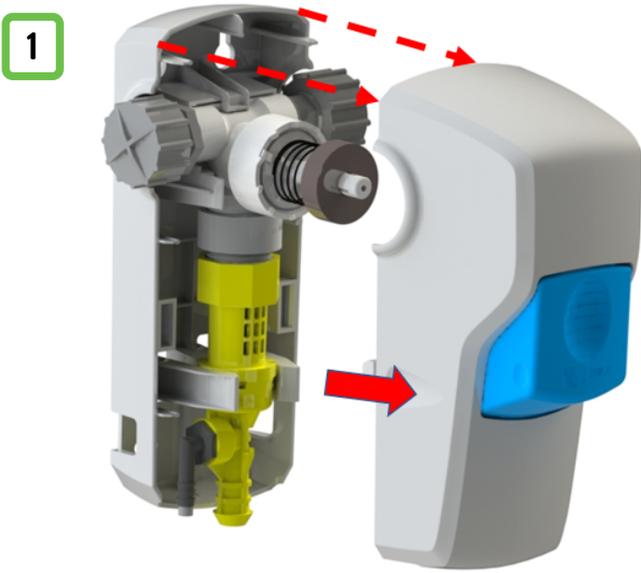
## Measurement of Concentration:

You can determine the dispensed water-to-product ratio for any metering tip size and product viscosity. All that is required is to operate the primed dispenser for a minute or so and note two things: the amount of dispensed solution, and the amount of concentrate used in preparation of the solution dispensed. The water-to-product ratio is then calculated as follows:

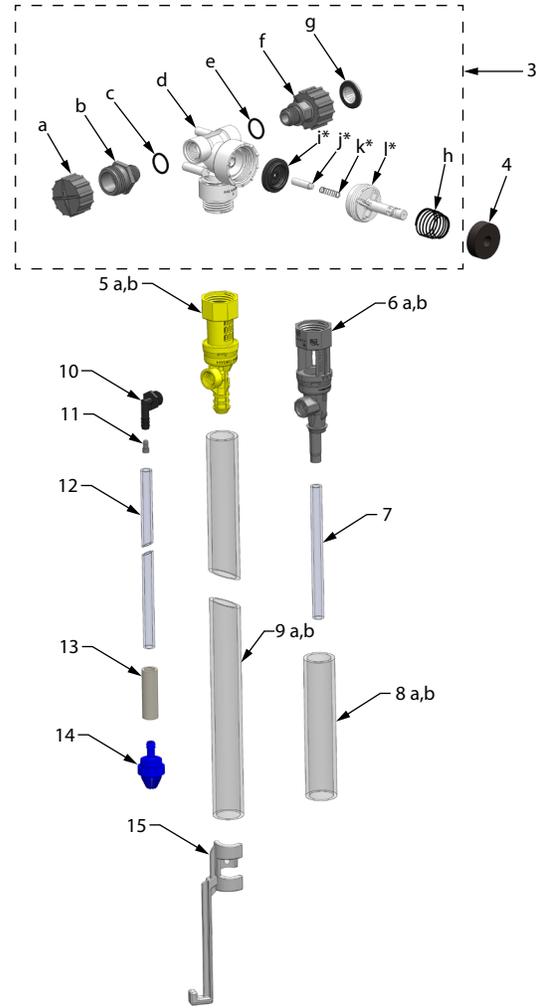
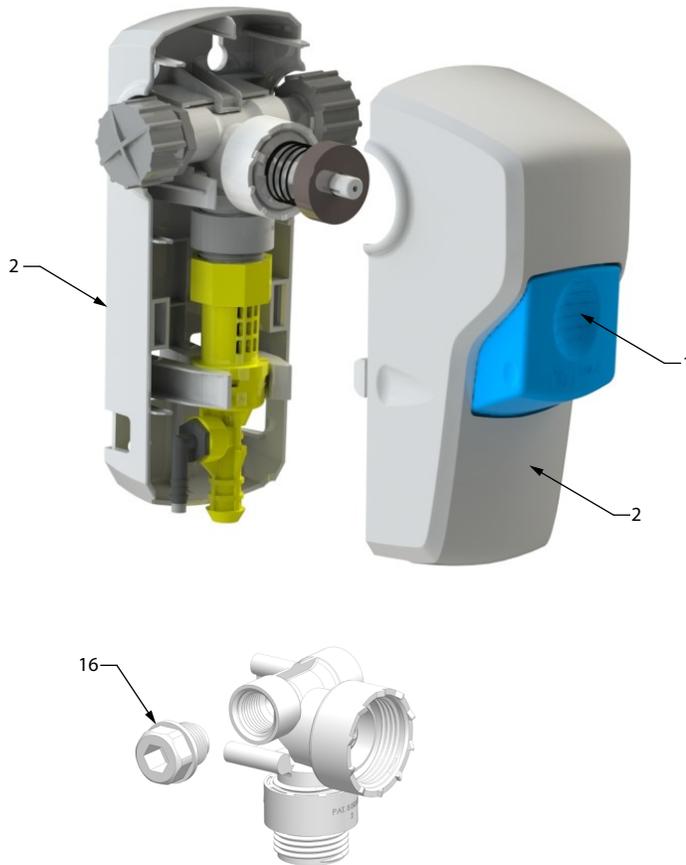
$$\text{Dilution Ratio (X:1) where X} = \frac{\text{Amount of Mixed Solution} - \text{Amount of Concentrate Drawn}}{\text{Amount of Concentrate Drawn}}$$

Dilution Ratio, then, equals X parts water to one part concentrate (X:1). If the test does not yield the desired ratio, choose a different tip and repeat the test. Alternative methods to this test are 1) pH (using litmus paper) and 2) titration. Contact your concentrate supplier for further information on these alternative methods and the materials required to perform them.

# daisy-chain



# parts diagram/list

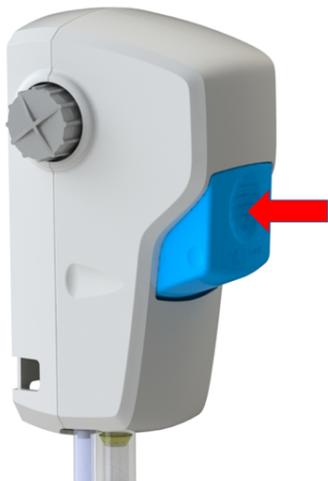


Key	Part No.	Description
1	HYD10101300	AccuMini button
2	Contact Hydro	AccuMini cover + Rear
3	HYD10100286	Water Body Assembly
a		Hose cap
b		Hose fitting
c		O-ring
d		Water body
e		Inlet stem
f		Inlet collar
g		Strainer washer
h		magnet spring
i*		diaphragm
j*		armature
k*		diaphragm spring
l*		valve bonnet
4	HYD10079000	Magnet
5		Eductor E-Gap version
a	HYD10088830	1 GPM eductor - Gray
b	HYD10088840	3.5 GPM eductor - Yellow

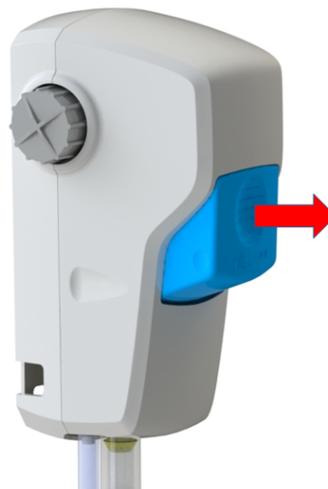
Key	Part No.	Description
6		Eductor AirGap version
a	HYD10099710	1 GPM eductor - Gray
b	HYD10099713	3.5 GPM eductor - Yellow
7	HYD10099721	Optional Foam Reduction Tube (1 GPM Lowflow AirGap only)
8		1 GPM Outer Discharge Tube
a	HYD10088822	E-Gap 1 GPM Discharge Tube
b	HYD10064794	AirGap 1 GPM Discharge Tube
9		3.5 GPM Outer Discharge Tube
a	HYD90048495	E-Gap 3.5 GPM Discharge Tube
b	HYD505804	AirGap 3.5 GPM Discharge Tube
10	HYD10077500	Angled Barb with Viton O-Ring
11	HYD690014	Metering tip kit
12	HYD500870	Tubing 1/4" x 7'
13	HYD509900	Weight
14	HYD10089410	Footvalve - Viton (EPDM also available. Order 10076302)
15	HYD10080730	Hose hook, Dark gray (Standard)
16	HYD10098573	Optional Kit, Pipe plug & O-ring

\* These parts are also included with Valve Parts Kits (HYD10075980)

## quick fill operation



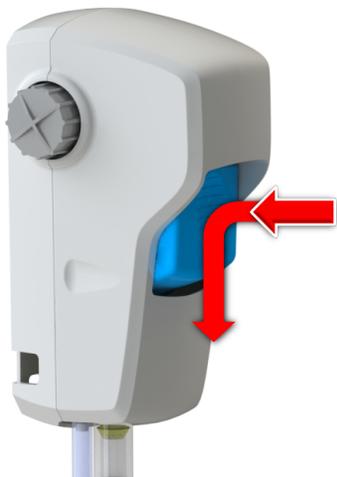
Push the button in to start the flow.



Release the button to stop the flow.

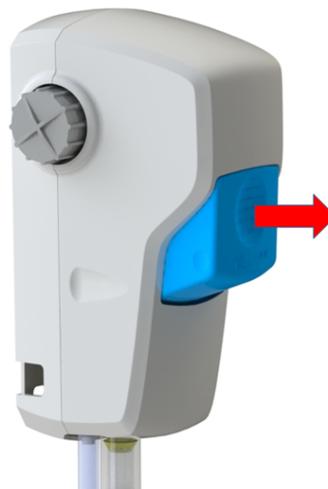
## button lock and unlock operation

1



Push the button in and slide it down to lock. Modest resistance to lock is by design.

2



Slide the button up to unlock and button will automatically reset.

# troubleshooting

Problem	Cause	Solution
1. No discharge	a. No water	a. Open water supply
	b. Excessive water pressure	b. Install regulator if water pressure (with water running) exceeds 85 psi.
	c. Clogged water inlet strainer	c. Disconnect inlet water line and clean strainer
	d. Magnetic valve not functioning	d. Install valve parts kit
	e. Eductor clogged	e. Clean* or replace
2. No concentrate draw	a. Clogged foot valve	a. Clean or replace
	b. Metering tip or eductor has scale build-up	b. Clean (descale*) or replace
	c. Low water pressure	c. Minimum 25 psi (with water running) required to operate unit properly
	d. For E-Gap version, discharge tube not in place	d. Push tube firmly onto eductor discharge hose barb.
	e. Concentrate container is empty	e. Replace with full container
	f. Clogged water inlet strainer	f. Disconnect inlet water line and clean strainer
	g. Inlet hose barb not screwed into eductor tightly	g. Tighten, but do not over tighten
	h. Air leak in pick-up tube	h. Put clamp on tube or replace tube if brittle
	i. For AirGap version, no flooding feature in the eductor	i. Replace eductor if all other items in problem 2 are ok
	3. Excess concentrate draw	a. Metering tip not in place
b. Chemical above eductor		b. Place concentrate below eductor
4. Failure of unit to turn off	a. Water valve parts dirty or defective	a. Clean or replace with valve parts kit
	b. Magnet doesn't fully return	b. Make sure magnet moves freely replace spring if short or weak
	c. Push button stuck	c. Remove button and clean cabinet/button to remove excess dirt lodged in slide recess
5. Excess foaming in discharge	a. Air leak in pick-up tube	a. Put clamp on tube or replace tube if brittle
	b. For 1 GPM AirGap version, excessive air mixed with chemical	b. Put foam reduction tube on eductor nozzle
6. Water Discharge from AirGap Backflow Device	a. Restricted discharge hose	a. Be sure discharge hose is not immersed, kinked or elevated. Be sure there is no liquid in the discharge hose when beginning to operate dispenser.
	b. High water pressure	b. Install pressure regulator if flowing water pressure exceeds 85 psi.

\* In hard water areas, scale may form inside the discharge end of the eductor, as well as in other areas of the unit that are exposed to water. This scale may be removed by soaking the eductor in a descaling solution (deliming solution). To remove an eductor located in the cabinet, firmly grasp water valve and unscrew the eductor. Replace in same manner. Alternatively, a scaled eductor can be cleaned (or kept from scaling) by drawing the descaling solution through the unit. Operate the unit with the suction tube in the descaling solution. Operate the unit until solution is drawn consistently, then flush the unit by drawing clear water through it for a minute. Replace concentrate container and put suction tube into concentrate.

# warranty

## Limited Warranty

**Seller** warrants solely to **Buyer** the products will be free from defects in material and workmanship under normal use and service for a period of one year from the date of completion of manufacture. This limited warranty does not apply to (a) hoses; (b) products that have a normal life shorter than one year; or (c) failure in performance or damage caused by chemicals, abrasive materials, corrosion, lightning, improper voltage supply, physical abuse, mishandling or misapplication. In the event the products are altered or repaired by **Buyer** without **Seller's** prior written approval, all warranties will be void.

**No other warranty, oral, expressed or implied, including any warranty of merchantability or fitness for any particular purpose, is made for these products, and all other warranties are hereby expressly excluded.**

**Seller's** sole obligation under this warranty will be, at **Seller's** option, to repair or replace F.O.B. **Seller's** facility in Cincinnati, Ohio any Products found to be other than as warranted.

## Limitation of Liability

**Seller's** warranty obligations and **Buyer's** remedies are solely and exclusively as stated herein. **Seller** shall have no other liability, direct or indirect, of any kind, including liability for special, incidental, or consequential damages or for any other claims for damage or loss resulting from any cause whatsoever, whether based on negligence, strict liability, breach of contract or breach of warranty.



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