



AccuDose Series Proportioner Model 3876GB-2

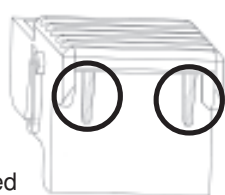
Package Should Contain:

1. Proportioner unit.
2. Supply tubing : 650mm total.
3. Foot valve assemblies & weights (5).
4. Discharge tube for each eductor.
5. Metering tip kits.
6. Mounting anchor kit.
7. Hook for 16 LPM discharge tube.
8. Instruction sheet.

Installation and Operation:

1. Remove cabinet cover. Drill holes for the three wall anchors with a 7mm drill bit, using the cabinet back as a template for correct spacing of the mounting screws. Install mounting anchors, and then screws in top two anchors. Slide key holes in cabinet back over screw heads, tighten screws, then install bottom screw. Do not mount more than (1.8 metres) above the bottom of the concentrate container, nor below the highest concentrate level (never mount your concentrate higher than the proportioner).
2. Select metering tips (up to 4) for the selector valve (see next two sections). Push each tip firmly into a separate hose barb extending from the selector valve. A tip with no hole (clear plastic) can be used to block any valve port not being used. (This may be used for dispensing water only.) Select and install a metering tip for the single product eductor (right side) in the same manner.
3. Cut tubing provided into separate supply tubes for each product to be dispensed (tubing allows for 200mm of tube per product). Supply tubes should reach from hose barbs on the selector valve body and eductor to bottom of concentrate containers. Slide ceramic weights over one end of each tube and slide foot valves into the same ends of the tubes.
4. Slip open end of each supply tube through an opening in either side of the cabinet and push over a hose barb/ metering tip on the selector valve and on the eductor.
5. Place foot valve ends of supply tubes into concentrate containers. **REMEMBER TO CHECK FOOT VALVE STRAINERS PERIODICALLY FOR CLOGGING: CLEAN IF NECESSARY.**
6. A short discharge tube is used with the 4 LPM eductor (selector valve); minimum tube length is 20 cm for correct operation. A longer tube (1.2m) is used with the 16 LPM eductor. Slide end of tube with flooding ring over eductor discharge outlet. The hose hook supplied may be installed on the long tube to allow it to conveniently hang from dispenser when not in use.
7. Replace cabinet cover. Push the sides in, behind the latch holes, to snap the cover in place. The two screws provided may be installed in the holes in the cabinet sides to prevent easy removal of cover.
8. Connect water supply hose of at least 13mm ID to water inlet swivel. (Minimum 1.76 Bar pressure, with water running, is required for correct operation.) Connect opposite end of hose to water supply. Turn water supply on.
9. Purge air from the system by depressing the buttons briefly.
10. Push button to start flow of desired water/concentrate solution, and hold until supply tube is primed (filled). Then push the button whenever dispensing is desired, and release button to stop flow of solution. **If you wish to be able to lock the button in the "on" position:** Clip or bend the two tabs behind the lower front portion of the button. (Seediagram.) This allows the button to be fully depressed and allows it to latch in the "on" position. **To unlock, pull the button out.**

Clip or bend these tabs to depress button into locked position.



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 at right can be used as a guideline. If product is noticeably thicker than water, consult the Measurement of Concentration Procedure below 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 4 LPM eductor is grey; a 16 LPM eductor is yellow. Refer to parts diagram if unfamiliar with names of system components.

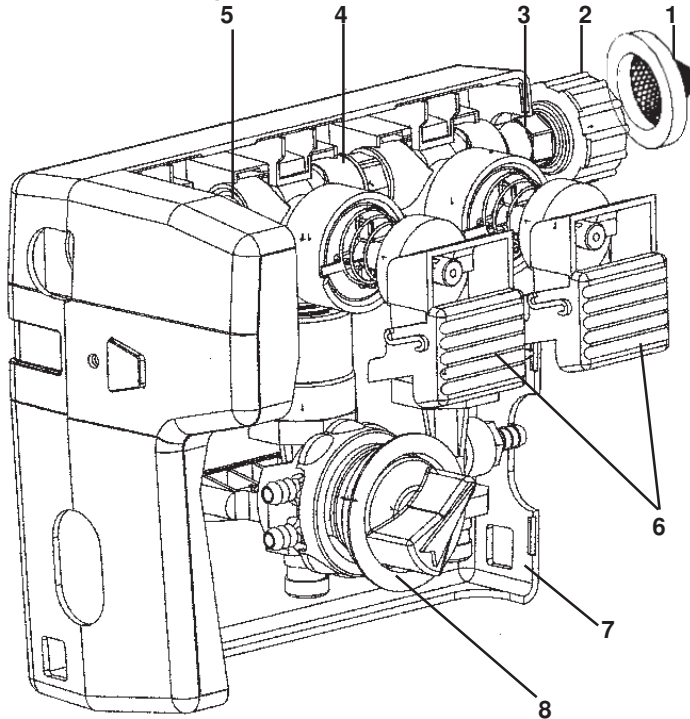
Measurement of Concentration:

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:

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

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.

AccuDose Parts Diagram:

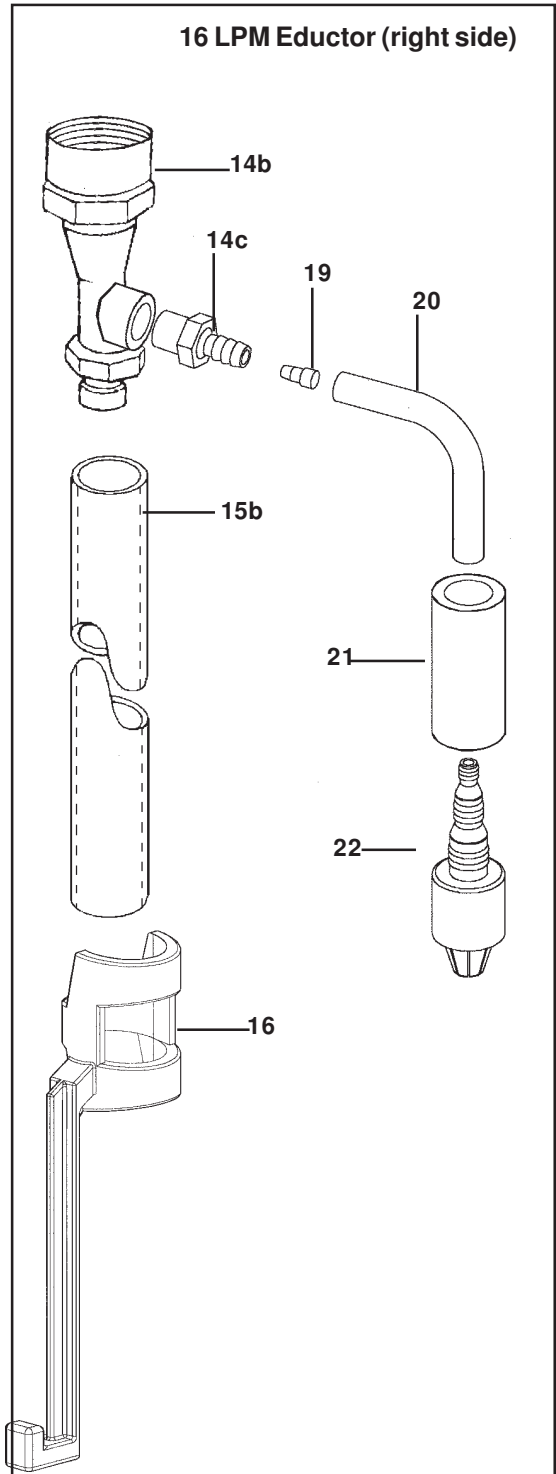
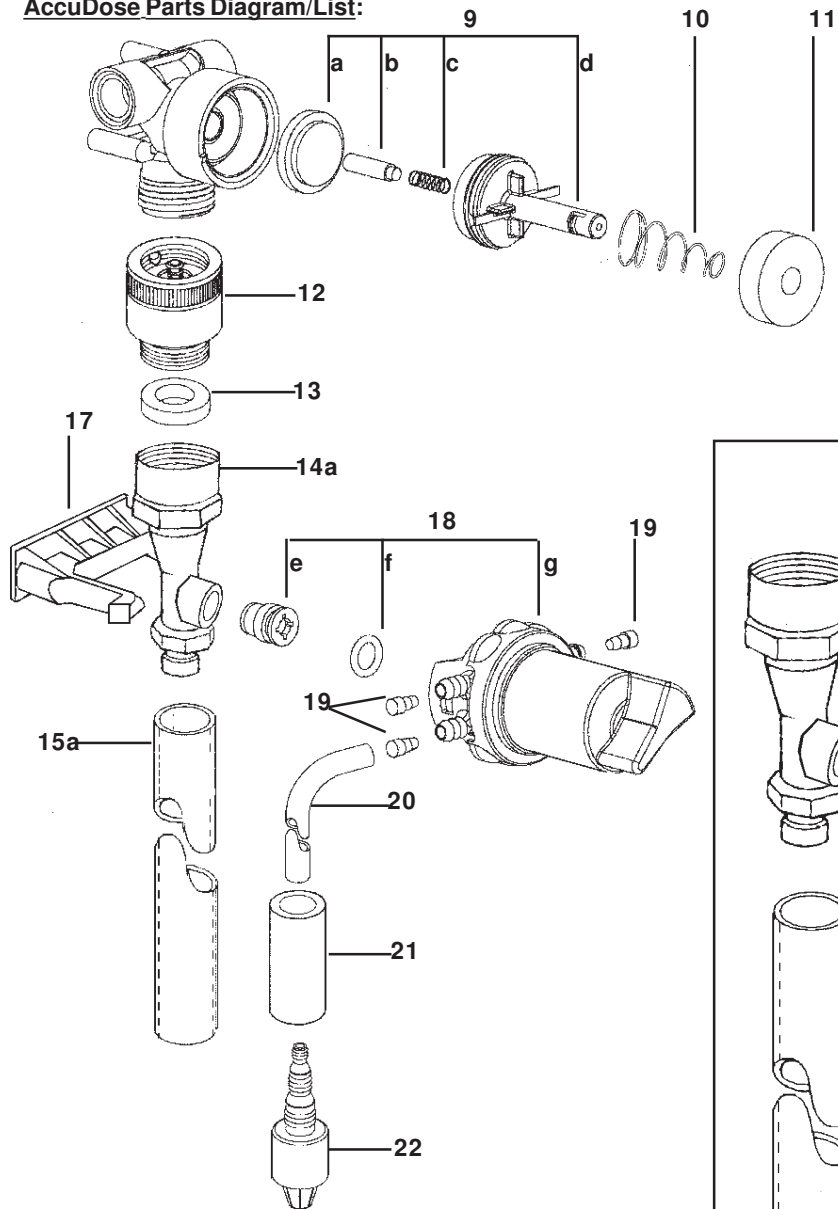


Key Part No. Description

1	238100	Strainer washer
2	10082835	Swivel collar (molded)
3	10082806	Swivel stem (molded)
4	10075911	Hex nipple
	10075950	O-ring (two per nipple)
5	10075925	Pipe plug
6	10080710	Button, dark grey (standard)
	10080711	Button, sky blue
	10080712	Button, red
	10080713	Button, green
	10080714	Button, light grey
	10080715	Button, yellow
7	10080895	Cabinet
8	10020700	Selector valve grommet
	10020900	Back up ring for grommet
9	10075980	Valve parts kit
		a. diaphragm, b. armature, c. spring, d. valve bonnet
10	10079010	Spring
11	10079000	Magnet
12	10035310	Siphon breaker
13	270702	Washer
14 a	440215	4 LPM Eductor assembly
b	441210	16 LPM Eductor assembly
c	3401-R	Eductor hose barb only
15 a	6422-A	4 LPM outer discharge tube
b	10074815	16 LPM outer discharge tube

APPROXIMATE DILUTIONS AT 2.86 BAR FOR WATER-THIN PRODUCTS (1.0 CP)				
Tip Color	Orifice Size	Std. Drill Number	Ratio (per Eductor Flow)	
			4 LPM	16 LPM
No Tip	.187	(3/16)	2:1	3:1
Grey	.128	(30)	2:1	3:1
Black	.098	(40)	2:1	4:1
Beige	.070	(50)	3:1	8:1
Red	.052	(55)	4:1	14:1
White	.043	(57)	5:1	20:1
Blue	.040	(60)	6:1	24:1
Tan	.035	(65)	8:1	30:1
Green	.028	(70)	12:1	45:1
Orange	.025	(72)	16:1	56:1
Brown	.023	(74)	18:1	64:1
Yellow	.020	(76)	24:1	90:1
Aqua	.018	(77)	32:1	128:1
Purple	.014	(79)	45:1	180:1
Pink	.010	(87)	128:1	350:1

AccuDose Parts Diagram/List:



Key Part No. Description

- 16* 10080730 Hose hook, dark grey (standard)
- 10080731 Hose hook, sky blue
- 10080732 Hose hook, red
- 10080733 Hose hook, green
- 10080734 Hose hook, light grey
- 10080735 Hose hook, yellow
- * Hose hooks are for 16 LPM discharge tubes
- 17 10061100 Support
- 18 10080920 Selector valve replacement kit:
e. Suction stub, f. O-ring, g. selector valve assembly
- 19 690014 Metering tip (kit)
- 20 500870 Tubing, 6mm x 2.1 m
- 21 509900 Weight
- 22 10076301 Foot valve -- Viton (EPDM also available. Order 10076302.)

NOT SHOWN:

- 641750 Security screws (for cabinet sides)

Troubleshooting Chart:

Problem	Cause	Solution
1. No discharge	<ul style="list-style-type: none"> a. No water b. Magnetic valve not functioning c. Excessive water pressure d. Eductor clogged 	<ul style="list-style-type: none"> a. Open water supply b. Install valve parts kit c. Install regulator if water pressure exceeds 4.3 bar (flowing) d. Clean* or replace
2. No concentrate draw	<ul style="list-style-type: none"> a. Clogged foot valve b. Metering tip or eductor has scale build-up c. Low water pressure d. Discharge tube(s) not in place or flooding ring missing from inner discharge tube e. Concentrate container empty f. Inlet hose barb not screwed into eductor tightly g. Clogged water inlet strainer h. Selector out of position 	<ul style="list-style-type: none"> a. Clean or replace b. Clean (descale)* or replace c. Minimum 1.43 (with water running) required to operate unit properly d. Push tube firmly onto eductor discharge hose barb; be sure inner discharge tube is installed and has flooding ring. e. Replace with full container f. Tighten, but do not overtighten g. Disconnect inlet water line and clean strainer h. Assure selector is in position desired
3. Excess concentrate draw	<ul style="list-style-type: none"> a. Metering tip not in place b. Chemical above eductor 	<ul style="list-style-type: none"> a. Press correct tip firmly into barb on eductor b. Place concentrate below the eductor
4. Failure of unit to turn off	<ul style="list-style-type: none"> a. Water valve parts dirty or defective b. Magnet doesn't fully return c. Push button stuck 	<ul style="list-style-type: none"> a. Clean* or replace with valve parts kit b. Make sure magnet moves freely. c. Remove button and clean cabinet/button to remove any dirt lodged in slide recess
5. Excess foaming in discharge	<ul style="list-style-type: none"> a. Air leak in pick-up tube b. Inner discharge tube not in place 	<ul style="list-style-type: none"> a. Put clamp on tube or replace tube if brittle b. Install inner discharge tube

* 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 vacuum breaker and unthread 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.

