

PROMAX

INSTRUCTION MANUAL



**One Hand Activation
Single Product**
[4l/m models only]



**One Hand Activation
4 Product**
[4l/m models only]



**Button Activation
Single Product**
[4, 14/16, 30 l/m models]



**Button Activation
4 Product**
[4, 14/16, 30 l/m models]

WHAT'S IN THE BOX :

1. Dispenser
2. Pick up tube - 2 m (1 roll for each product)
3. Discharge hose (2 m for 14/16 and 30 l/m or "S" shaped discharge tube for 4 l/m spray bottle fill)
4. Hose Hanger (only if hose 6.5ft is present)
5. Complete installation kit:
 - Plastic clamps (2 pcs for each product)
 - Metering tips (1 bag for each product)
 - Foot filter and non-return valve assembly (1 piece for each product)
 - Ceramic weight (1 piece for each product)
 - Anchors (3pcs)
 - Screws (3pcs)
 - Washers (3pcs)
 - Coupler (for ganging two or more units together)
 - 3/4" male GAS Fitting
 - Adhesive Labels for product identification (1 chart for each product)

TECHNICAL FEATURES :

Water supply connection	Possible from right or left		
Type of connection	¾" male GAS		
Type of disconnection	F-Gap (Flexible membrane)		
	A-Gap (Physical, Visible Gap)		
Venturi flow rates	4lt/m (Gray)	14/16lt/m (Yellow)	30lt/m (Blue)
Actuating systems	Button	Slide-up (one hand fill)	
No. of product inlets	1 (models B1 and S1)	4 (models B4 and S4)	
Maximum dimensions	H = 22 cm	W = 10 cm	D = 12 cm
Working pressure	Min 1bar		Max 9bar
	Ideal: 2 – 4bar		
Temperature	Max 160 °F (70°C)		
Notes	Possibility of adding modules after installation		

READ CAREFULLY BEFORE INSTALLING:



The correct procedures for dispenser installations are provided.



DO NOT INSTALL where the dispenser is directly exposed to vapours or chemical fumes. Do not position near sources of heat.



PROTECT YOURSELF - wear protective clothing and eyewear when installing or maintaining the system, take specific precautions as necessary



FOLLOW THE SAFETY AND HANDLING INSTRUCTION of the chemical manufacturer.



DIRECT THE DISCHARGE HOSE ONLY INTO A SPECIFIC CONTAINER, not toward yourself or another person



CALIBRATE THE DOSING as per the manufacturer's instruction



This unit is supplied with an internal backflow prevention device to avoid water supply contamination. Local compliance standards may vary. Some jurisdictions may require a backflow prevention device at the system's water inlet.



MAXIMUM WORKING PRESSURE is 9bar and is intended as a static pressure reached progressively. Water hammer pressures exceeding 9bar, resulting from the sudden opening of a water source or other causes within the facility, may damage the system. Use of an in line pressure reducer is advisable where these conditions are present. The water supply should be turned off when the system is not in use.



THE DISPENSER SHOULD BE INSTALLED approximately 1,5 m from the ground and near the chemical containers for convenient use

INSTALLATION OF A SINGLE UNIT :

Step 1



Use the bracket as a template to mark the mounting hole pattern. Drill the hole for the supplied 1/4" anchors and secure the bracket with the three supplied screws.

Step 2



Attach the system to the bracket and slide it down...

Step 3



....until the top tab clicks in place securing the system to the bracket

Step 4



Slide in the discharge hose (6.5ft or "S" tube) over the barbed fitting securing it into place

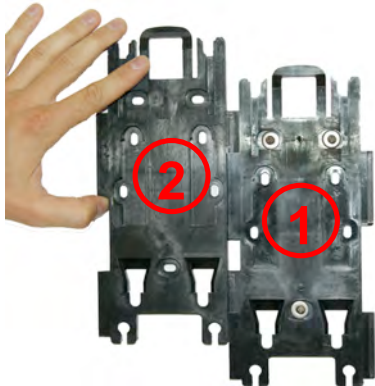
Step 5



Connect the water inlet supply hose and tighten firmly with pliers.

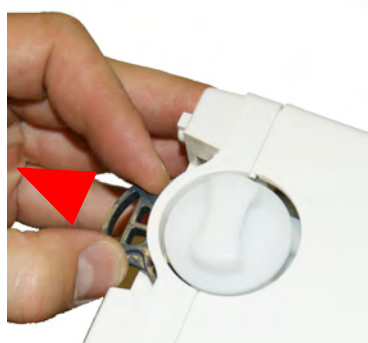
INSTALLATION OF A MULTIPLE UNIT :

Step 1A



To install a multiple unit system, start by installing the first bracket on the wall as illustrated in Step 1. Then slide the second bracket into the slot from top to bottom on the left side of bracket 1 until they are properly aligned and secure..

Step 2A



Unlock the left side of the first system by pulling the rear clip to its outward most position as shown and remove the end cap.

Step 3A



Unlock the right side of the second system by pulling the clip to its outward most position and remove the water connection.

Step 4A



Insert the coupling nipple into the first unit as illustrated

Step 5A



Connect the second unit to the first

Step 6A



Apply the combined system on to the bracket and complete the installation as per step number 3 above.

SUCTION HOSE AND TIP INSTALLATION :

Step 7



Select a suitable tip and insert it completely into the barbed tip seat as shown.

To determine the correct tip refer to the tip chart below.

Step 8



Connect the suction hoses by sliding completely over the barbed tip seat as shown

Step 9

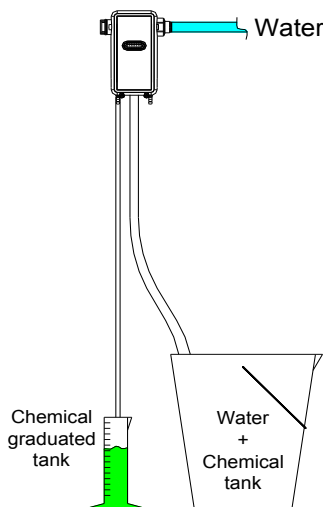


Cut the tubing to the required length. Connect the yellow foot valve / filter in to the hose as shown above. Slide the ceramic weight over the tube and as far as possible over the barbed fitting on the yellow foot valve.

Step 10

Tip calibration:

1. Fill a graduated cylinder with the concentrated product.
2. Using the chart in the manual, select and insert the tip closest to the desired dilution ratio.
3. Insert the pick up hose into the graduated cylinder.
4. Put the outlet tube into a open container and push the button or lever in order to activate the system. Draw up the product until the pick up tube is completely filled.
5. Switch the system off and insert the delivery hose in a 5 liters container.
6. Mark the level of the product in the graduated container
7. Switch the system on again until the 5 liters container is completely full.
8. Switch the system off and read the quantity of product in the graduated container.
9. The difference in the product levels for points 6 and 8 indicates the amount of product mixed per liter.



Step 11



Use a cable tie to secure the tube on the barbed tip seat. For a 4 product selector, repeat the operations from step 7 to 11 for each product

HYDRAULIC FEATURES – DILUTION RATIOS



Note: The following dilution ratios should be considered only as an initial reference. Variable factors such as water flow/pressure, distance of product container to inlet fitting and product viscosity often require field adjustments.

The dilution ratio refer to the dynamic pressure of 40 PSI (2,76bar) with water thin products.

STANDARD METERING TIP	Tip color	Diameter mm
	No tip	\
	Grey	3,25
	Black	2,54
	Beige	1,78
	Red	1,32
	White	1,09
	Blue	1,01
	Tan	0,88
	Green	0,71
	Orange	0,63
	Brown	0,58
	Yellow	0,51
	Aqua	0,46
	Purple	0,36
	Pink	0,25
	Clear	\

ULTRALEAN TIP	Lime	0,228
	Burgundy	0,208
	Pumpkin	0,168
	Copper	0,155

The dilution ratio refer to the dynamic pressure of 40 PSI (2,76bar) with water thin products.

STANDARD METERING TIP	Tip color	Diameter mm
	No tip	\
	Grey	3,25
	Black	2,54
	Beige	1,78
	Red	1,32
	White	1,09
	Blue	1,01
	Tan	0,88
	Green	0,71
	Orange	0,63
	Brown	0,58
	Yellow	0,51
	Aqua	0,46
	Purple	0,36
	Pink	0,25
	Clear	\

ULTRALEAN TIP	Lime	0,228
	Burgundy	0,208
	Pumpkin	0,168
	Copper	0,155

Flex-Gap

4 lt/min Model			
Oz/Gal	gr/lit	%	Ratio
50,1	411,7	41,2	2,4 :1
46,6	382,7	38,3	2,6 :1
43,7	359,0	35,9	2,8 :1
32,3	265,8	26,6	3,8 :1
20,1	165,2	16,5	6,1 :1
13,0	106,8	10,7	9,4 :1
11,5	94,8	9,5	10,6 :1
8,7	71,2	7,1	14,0 :1
6,1	49,9	5,0	20,0 :1
5,1	42,2	4,2	23,7 :1
3,4	28,1	2,8	35,6 :1
3,3	27,1	2,7	36,9 :1
2,6	21,6	2,2	46,3 :1
1,3	11,0	1,1	90,9 :1
0,7	5,5	0,6	181,8 :1
No hole			

0,52	4,30	0,43	233 :1
0,37	3,00	0,30	333 :1
0,28	2,30	0,23	435 :1
0,19	1,60	0,16	625 :1

14 lt/min Model			
Oz/Gal	gr/lit	%	Ratio
21,6	177,3	17,7	5,6 :1
20,8	171,0	17,1	5,9 :1
19,5	160,1	16,0	6,3 :1
14,4	118,2	11,8	8,5 :1
9,2	75,3	7,5	13,3 :1
6,0	49,4	4,9	20,2 :1
5,2	42,7	4,3	23,4 :1
3,9	31,8	3,2	31,5 :1
2,3	19,0	1,9	52,6 :1
1,8	14,6	1,5	68,5 :1
1,5	12,5	1,3	80,0 :1
1,3	10,4	1,0	96,2 :1
1,0	8,3	0,8	120,5 :1
0,6	4,6	0,5	217,4 :1
0,3	2,5	0,3	400,0 :1
No hole			

0,26	2,10	0,21	476 :1
0,19	1,60	0,16	625 :1
0,15	1,20	0,12	833 :1
0,10	0,80	0,08	1250 :1

Flex-Gap

30 lt/min Model			
Oz/Gal	gr/lit	%	Ratio
5,4	44,6	4,5	22,4 :1
5,3	43,5	4,4	23,0 :1
5,2	42,6	4,3	23,5 :1
3,8	31,2	3,1	32,1 :1
2,5	20,4	2,0	49,0 :1
1,7	14,0	1,4	71,4 :1
1,5	12,0	1,2	83,3 :1
1,2	9,5	1,0	105,3 :1
0,8	6,3	0,6	158,7 :1
0,7	5,6	0,6	178,6 :1
0,5	4,2	0,4	238,1 :1
0,4	3,6	0,4	277,8 :1
0,3	2,6	0,3	384,6 :1
0,15	1,2	0,1	833,3 :1
0,12	1,0	0,1	1000,0 :1
No hole			

0,09	0,70	0,07	1429 :1
0,06	0,50	0,05	2000 :1
0,04	0,30	0,03	3333 :1
0,02	0,20	0,02	5000 :1

ProMax – Proportioning System

The dilution ratio refer to the dynamic pressure of 40 PSI (2,76bar) with water thin products.

STANDARD METERING TIP	Tip color	Diameter mm
	No tip	\
	Grey	3,25
	Black	2,54
	Beige	1,78
	Red	1,32
	White	1,09
	Blue	1,01
	Tan	0,88
	Green	0,71
	Orange	0,63
	Brown	0,58
	Yellow	0,51
	Aqua	0,46
	Purple	0,36
	Pink	0,25
	Clear	\

ULTRALEAN TIP	Lime	0,228
	Burgundy	0,208
	Pumpkin	0,168
	Copper	0,155

Air-Gap

4 lt/min Model			
Oz/Gal	gr/lit	%	Ratio
38,8	319,0	31,9	3,13 :1
38,7	318,0	31,8	3,14 :1
37,9	311,2	31,1	3,2 :1
30,8	253,3	25,3	4,0 :1
21,9	179,6	18,0	5,6 :1
14,7	120,9	12,1	8,3 :1
12,7	104,2	10,4	9,6 :1
8,7	71,1	7,1	14,1 :1
6,7	55,1	5,5	18,2 :1
5,1	42,0	4,2	23,8 :1
4,3	35,5	3,6	28,2 :1
3,8	31,5	3,2	31,8 :1
2,8	23,0	2,3	43,5 :1
1,6	13,0	1,3	76,9 :1
0,8	6,5	0,7	153,9 :1
No hole			

0,51	4,20	0,42	238 :1
0,40	3,30	0,33	303 :1
0,34	2,80	0,28	357 :1
0,29	2,40	0,24	417 :1

16 lt/min Model			
Oz/Gal	gr/lit	%	Ratio
15,6	128,2	12,8	7,80 :1
15,5	127,7	12,8	7,83 :1
12,5	102,8	10,3	9,7 :1
12,0	98,5	9,9	10,2 :1
9,4	77,3	7,7	12,9 :1
6,3	51,6	5,2	19,4 :1
5,5	45,2	4,5	22,1 :1
4,5	36,8	3,7	27,2 :1
3,1	25,7	2,6	38,9 :1
2,3	19,0	1,9	52,6 :1
2,2	18,1	1,8	55,3 :1
1,8	14,8	1,5	67,6 :1
1,5	12,0	1,2	83,3 :1
1,1	8,7	0,9	114,9 :1
0,7	5,5	0,6	181,8 :1
No hole			

0,21	1,70	0,17	588 :1
0,16	1,30	0,13	769 :1
0,12	1,00	0,10	1000 :1
0,09	0,70	0,07	1429 :1



Note: The dilution data given are determined under 2,76 bar of pressure and 20l/m flow rate. To set a desired flow rate, a pressure regulator may needed in cases where flow pressure is excessive. Where the mininum and maximum flow properties are not available, consult a plumber to remedy the situation.

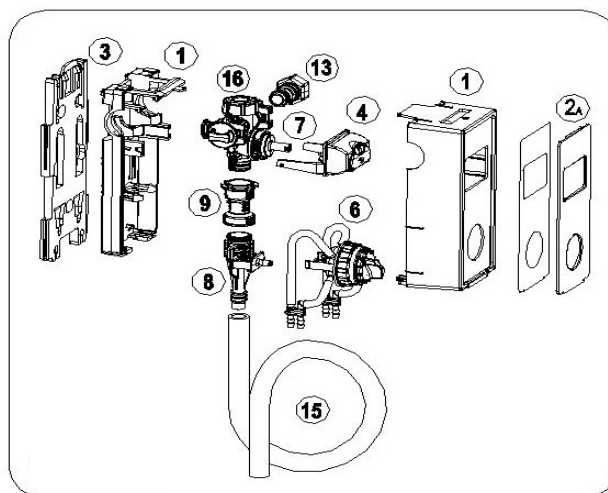
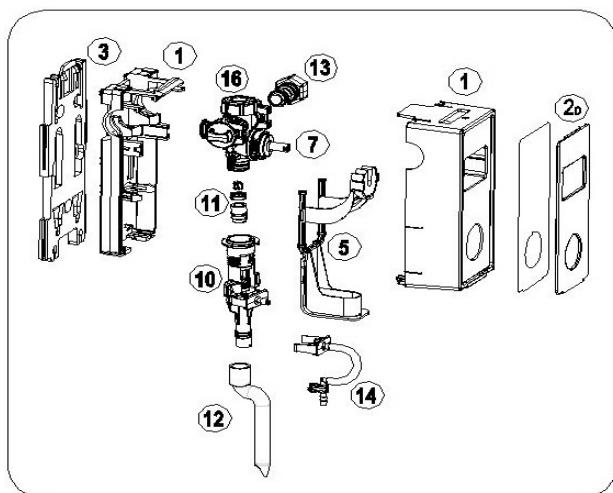


Flow volume needed from the pipe line to reach the optimal flow rate of the venturi:
 - Gray venturi 4l/m nominal flow rate – Needs at least 14/16l/m from the pipe line
 - Yellow venturi 14/16l/m nominal flow rate – Needs at least 27l/m from the pipe line
 - Blue venturi 30l/m nominal flow rate – Needs at least 45l/m from the pipe line

TROUBLE SHOOTING

Problem	Cause	Solution
System does not dispense solution	1. Water inlet strainer is clogged	1. Clean it or replace if necessary
	2. Too much water pressure	2. Use a water pressure regulator in case of more than 9Bar water pressure
	3. Insufficient water pressure	3. 1Bar is the minimum required pressure. If not available consult a plumber
	4. The venturi is clogged	4. Soak venturi in hot water and inspect visually, gently removing debris. Replace assembly if needed.
	5. Activation valve is clogged by mineral	5. Soak the valve assembly in a solution of hot water and limescale remover. Replace assembly if needed.
Water flow won't stop	1. Activation valve is clogged by minerals or other water borne debris	1. Soak the valve parts and valve seat in limescale remover to clean. Replace them if necessary
Activation valve is leaking	1. Valve cap not tight enough to seat	1. Firmly hand tighten the valve cap until leak stops.
	2. Not properly positioned	2. Reposition the valve or change it if necessary
Connections and end cap are leaking	1. Missing o-ring in the connection fitting and / or end cap	1. Apply the o-ring or replace the entire part
	2. O-ring in the connections or end cap are damaged	2. Replace the o-rings or replace the entire end cap
F-gap backflow preventer is leaking	1. Flexible membrane is damaged	1. Replace the backflow preventer
A-gap is spraying out and or leaking	1. Limescale film or dirt on the A-gap's upper nozzle	1. Soak in hot water and limescale remover to remove buildup. Replace if necessary
	2. Venturi coated with limescale or dirt	2. Soak in hot water and limescale remover to clean. Replace it if necessary
	3. There is a buildup or clog in the discharge hose	3. Clean the hose to eliminate restriction
	4. Discharge hose is above the dispenser	4. Make sure the discharge hose dispenses below the dispenser insuring no back pressure
Improper concentration of chemical or no suction	1. Insufficient water pressure	1. 1Bar is the minimum working pressure. Check plumbing options
	2. Metering tip clogged	2. Replace tip
	3. Foot valve clogged	3. Soak in hot water, hand clean or change it
	4. Venturi or backflow preventer clogged	4. Soak in hot water or limescale remover to clean. Replace it if necessary
	5. Air leak in chemical pick up tubing line	5. Check the entire line. Replace the tubing check the connections and cable tie
	6. Product is too thick	6. Change the pick up hose. Switch to a bigger diameter. (need ¼ x 5/16 coupler)
	7. Product container is too far from the system	7. The standard installation is positioning the tank under the system, 5ft (1.5m) max
	8. Excess concentration	8. Tip is not the correct one or not seated fully. (Pressure variations can require adjustment from chart recommendation)
System continues to draw chemical after the valve is closed	1. Chemical tank is positioned higher than the dispenser causing siphoning	1. Move chemical container below the dispenser discharge point

Spare parts



N	Description
1	Housing (rear + front)
2	Clear Faceplate 1P Button
2	Clear Faceplate 1P Slide
2	Clear Faceplate 4P Button
2	Clear Faceplate 4P Slide
3	Mounting bracket spare
4	Complete button spare kit
5	Complete slide spare kit
6	Complete selector spare kit
7	Complete activation valve spare kit
8	Complete venturi gray spare kit 4lt/min
8	Complete venturi yellow spare kit 14/16lt/min
8	Complete venturi blue spare kit 30lt/min
9	Complete backflow F-gap spare kit
10	Complete A-gap & venturi 1 GPM (4lt/min) spare kit
10	Complete A-gap & venturi 4 GPM (16lt/min) spare kit
11	A-Gap Nozzles 4lt/min kit (10pcs)
11	A-Gap Nozzles 16lt/min kit (10pcs)
12	Bottle ("S") filling hose
13	Water inlet fitting kit
14	Inlet fitting kit 1product
15	Bucket filling hose
16	Top filter kit

i Note: contact the supplier to order spare parts.