SINK MATE HOSPITALITY INSTRUCTION MANUAL

INSTALLATION

(1) Choose a mounting location within easy reach of the sink. Make sure the Sink Mate Hospitality is at least 12 inches above the chemical supply containers and not more than 5' above the chemical container.

(2) Mount the unit by snapping off the front cover. Make sure the ball valve dials are vertical when snapping off the cover. Hold the dispenser against wall and mark key holes. Drill holes and use the mounting screws supplied or masonry screws (not supplied) to mount on the wall. See Figure 1

(3) Connect the water supply to the swivel garden hose connection. Optimum water pressure is 40 - 50 PSI (water pressure over 50 PSI may cause splash-out on Aire-Gap equipped units). It may be possible to use a saddle-clamp to plumb directly into the water line.

An optional connection is the Knight Faucet Plus Sink Adapter Kit (P/N 7114100). Contact your local Knight representative for details.

(4) A 12 feet long discharge hose with 3/4" OD is included to cut into needed lengths (many installations have one nearby sink tub, and the other is farther away). Flex-Gap equipped units have a "flow restrictor" inside both ends of the 3/4" tube. Cut the tube into the 2 lengths required for your installation, making sure that the end with the flow restrictor (if used) will be closest to the valve. Route the tubes up through the bottom of the unit and connect to the bottom of the mixing valve assemblies.

(5) Route the discharge end of the 3/4" vinyl tube(s) to the sink, securing the tube(s) to the wall with the provided zip ties (they have an "eyelet" for mounting hardware). Cut off any excess tube length not needed.

(6) 18' of 3/8" suction tube is included with the unit. so you can cut into needed lengths. Cut the tube into the 2 lengths required for your installation — the tubes must reach from metering tips to bottom of chemical containers.

(7) Insert the appropriate metering tip into the valve(s) — see the following page for tip selection.

(8) Route the suction tube(s) up through the bottom of the unit and slide the tube(s) over the metering tip. Secure in place with a zip tie.

(9) Slide a ceramic weight onto the pickup end of the suction tube, then insert a footvalve into the tube.

(10) Drop the suction tube(s) into the chemical container(s), ensuring that the ceramic weight pulls the foot valve(s) down to the bottom of the container(s).

IMPORTANT NOTE:
If proportioner is connected to a janitor's sink with an atmospheric vacuum breaker, a special connection kit is required by A.S.S.E. specification 1055. Failure to use this kit, or equivalent connection means, will invalidate the A.S.S.E. and I.A.P.M.O. (UPC) certification. Specify P/N 7600187 when ordering the kit.

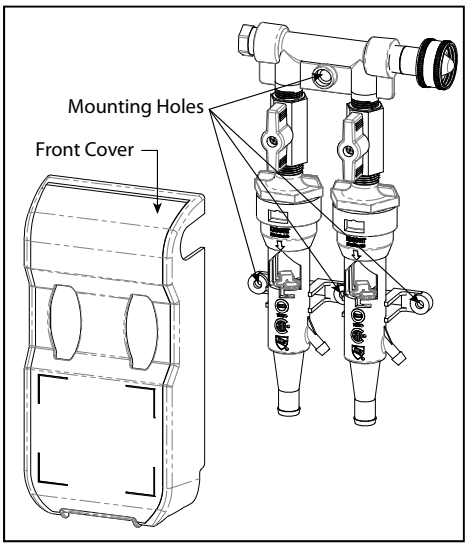


Figure 1

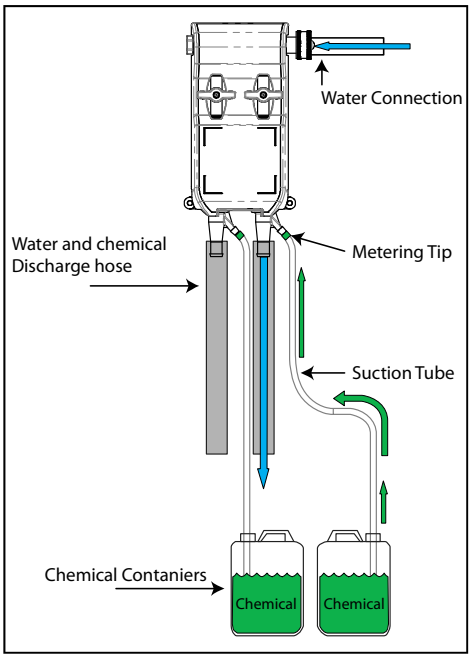


Figure 2

SPECIFICATION

Flex-Gap flow rate Aire-Gap flow rate	4 GPM (15.2 LPM) 4 GPM (15.2 LPM)
Back flow preventer	Flex-gap or Aire-gap
Temperature	Max: 140˚ F (60˚ C)
Ideal operating pressure	40-50 PSI (2.8 - 3.5 bar)
Minimum Pressure Maximum Pressure	20 PSI (1.4 bar) 100 PSI (6.9 bar)

MATERIAL SPECIFICATION

Cover	ABS
Flex-gap	Polypropylene
O-ring	EPDM
Water Valve	Acetal
Water Inlet	Brass

CAUTION: Wear protective clothing and eyewear when dispensing chemicals or other materials. Observe safety handling instructions (MSDS) of chemical mfrs.

CAUTION: When installing any equipment, ensure that all national and local safety and plumbing codes are met.

CHOOSING DILUTION RATES

METERING TIP SELECTION

The dilution chart for Flex-Gap and Aire-Gap venturi are the same. For each valve in the system, install appropriate metering tip from the chart below. Be sure the metering tip is threaded in hand-tight only.

CALIBRATING ACTUAL PRODUCT RATIOS

To easily calculate the ounces per gallon for a specific product:

(1) Fill a graduated cylinder or spray bottle (that has ounce markings) with product.

(2) Install metering tip closest to desired ounces per gallon — see dilution charts.

(3) Drop chemical pick-up tube into the container holding the product.

(4) Activate valve until chemical line is primed up to the metering tip.

(5) Note how many ounces (of product) are in the container.

(6) Activate valve again, and fill a one gallon container with water/product mix.

(7) Note how many ounces (of product) were used.

(8) You now have determined actual ounces per gallon for this product. Repeat this procedure as desired for other valves and products.

OPERATION

Turn the "T" handle (on the ball valve) counter-clockwise to open the valve, and clockwise to close it. Check all connections for leaks and verify that chemical is being pulled up suction line. Make any necessary adjustments and the unit is then ready to go!

TROUBLE SHOOTING

1. Proportioner will not draw chemical:
   - A. Check metering tip for obstruction.
   - B. Check water pressure for 30 – 60 PSI.
   - C. Check or change footvalve.
2. Proportioner leaks at joints:
   - A. Ensure that both ends of the valve body have sufficient PTFE tape.
3. Mixed chemical concentration is too weak:
   - A. Check water pressure for a minimum of 25 PSI of flow pressure.
   - B. Change metering tip to a higher dilution ratio.
4. Supply line loses chemical prime:
   - A. Check or change foot valve.
5. Aire-Gap" assembly is spraying a fan pattern or dripping water
   - A. Clean mineral deposits from Aire-Gap nozzle and screen.

TIP COLOR	FLEX-GAP / AIRE-GAP (4 GPM)	
	OZ/GAL	RATIO
NO INSERT	25	4.3:1
WHITE	20	5.4:1
YELLOW	18	6.1:1
PINK	16	7.0:1
GREEN	12	12:1
BLACK	10	15:1
BROWN	7	20:1
GRAY	5	31:1
BLUE	4	42:1
RED	3	63:1
PEACH	2	72:1
LT BLUE	1.5	101:1
PURPLE	1	127:1
LT GREEN	0.75	170:1
ORANGE	0.50	255:1
LT BROWN	0.25	511:1

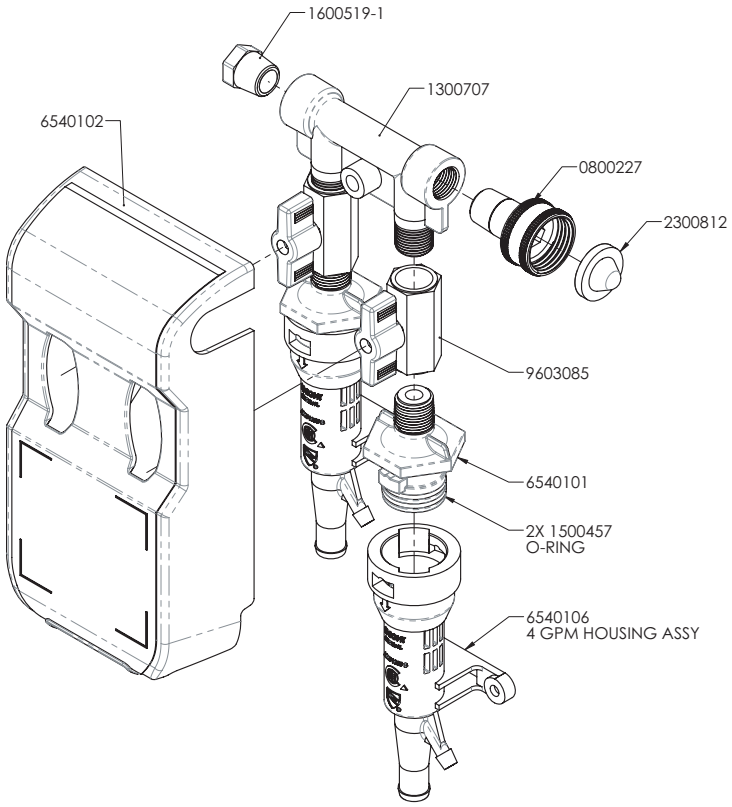
This chart is based upon the chemical viscosity of water (CPS = 1.0) and should only be used as a guide. Actual ratios and flow rates may vary due to product viscosity, flow pressure, and tubing distance.

ACCESSORY KIT PARTS (NOT SHOWN)

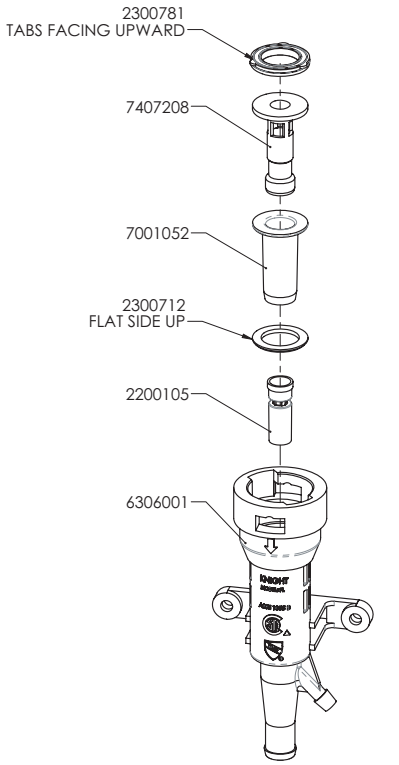
Note: Quantities and variations of the items will vary depending the system ordered.

Part Number	DESCRIPTION
0300519	Ceramic Tube Weight
0901175	Manual
0300121	3.5" zip ties
2201200	Metering tip kit with chart
2201225	Umbrella Foot Valve
7025869	Pick-up Tube, T-38V Vinyl 1/4" ID x 3/8" OD 16'
7025870	12' Chemical Discharge hose w/ restrictor at both ends, 1/2" ID x .725" OD (Flex-gap hose)
7025868	12' Chemical Discharge Tube, 1/2" ID x .725" OD (Aire-gap hose)
1201686	Sink Mate Hospitality Label
7600121	Mounting Kit w/ #10 Screws and anchors - 2 ea

FLEX-GAP PARTS DIAGRAM

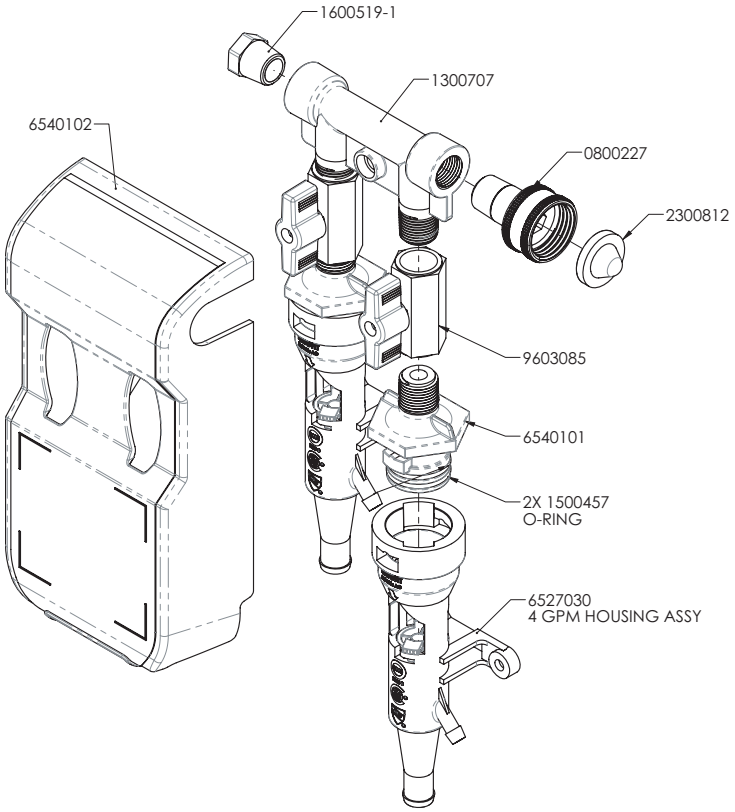


4 GPM FLEX-GAP

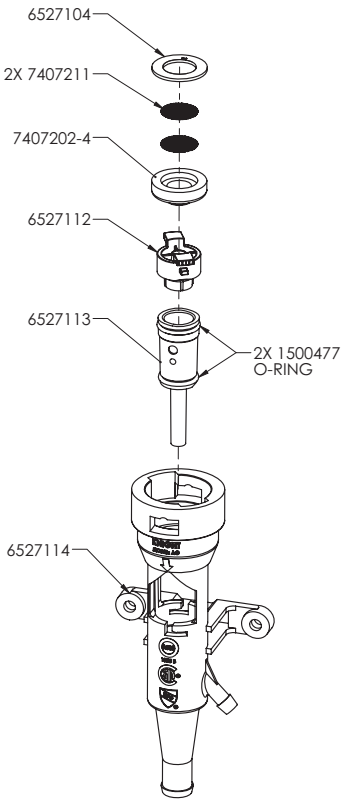


4 GPM FLEX-GAP HOUSING ASSY

AIRE-GAP PARTS DIAGRAM



4 GPM AIRE-GAP



4 GPM AIRE-GAP HOUSING ASSY

FLEX-GAP ANNUAL CLEANING AND TEST PROCEDURES FOR UNITS INSTALLED IN CANADA

Each year, your chemical dispenser must be cleaned and its backflow prevention performance verified. As this device is an end-of-line device (versus an in-line device) and evidence of effective backflow prevention is determined visually, a two-minute pressure test is not necessary.

If the Flex-Gap device cannot readily be seen during the test procedure, the housing of the chemical dispensing unit must be removed during testing. Apply the appropriate test procedure below as applicable for your chemical dispensing unit.

4 GPM VENTURIS

1. Fill discharge hose with water by opening the valve.
2. When water begins to exit the discharge hose turn off the water and raise the end of the hose above the Flex-Gap.
3. Observe that water is exiting the Flex-Gap.
4. If the water is exiting the Flex-Gap it has passed the test.
5. If the water is not exiting from the Flex-Gap, replace the Flex-Gap sleeve as per the instruction manual and re-test.
6. If the water is not exiting from the Flex-Gap after replacing the sleeve and re-testing, replace the complete Flex-Gap assembly and re-test.
7. If the water is not exiting from the Flex-Gap after replacing the Flex-Gap assembly, disconnect the water supply and replace the complete unit.

1 GPM VENTURIS

1. Remove the Fill Tube Spout and replace with a 4-foot length of 1/2” ID hose.
2. Fill the discharge hose with water by opening the valve.
3. When water begins to exit the discharge hose, turn off the water and raise the end of the hose above the Flex-Gap.
4. Observe that water is exiting the Flex-Gap.
5. If the water is exiting the Flex-Gap, it has passed the test.
6. If the water is not exiting from the Flex-Gap, replace the Flex-Gap sleeve and re-test.
7. If the water is not exiting from the Flex-Gap after replacing the sleeve and re-testing, replace the complete Flex-Gap assembly and re-test.
8. If the water is not exiting from the Flex-Gap after replacing the Flex-Gap assembly, disconnect the water supply and replace the complete unit.

DISCLAIMER

Knight LLC does not accept responsibility for the mishandling, misuse, or non-performance of the described items when used for purposes other than those specified in the instructions. For hazardous materials information consult label, MSDS, or Knight LLC. Knight products are not for use in potentially explosive environments. Any use of our equipment in such an environment is at the risk of the user, Knight does not accept any liability in such circumstances.

WARRANTY

All Knight controls and pump systems are warranted against defects in material and workmanship for a period of ONE year. All electronic control boards have a TWO year warranty. Warranty applies only to the replacement or repair of such parts when returned to factory with a Knight Return Authorization (KRA) number, freight prepaid, and found to be defective upon factory authorized inspection. Bearings and pump seals or rubber and synthetic rubber parts such as “O” rings, diaphragms, squeeze tubing, and gaskets are considered expendable and are not covered under warranty. Warranty does not cover liability resulting from performance of this equipment nor the labor to replace this equipment. Product abuse or misuse voids warranty.

FOOTNOTE

The information and specifications included in this publication were in effect at the time of approval for printing. Knight LLC reserves the right, however, to discontinue or change specifications or design at any time without notice and without incurring any obligation whatsoever.

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