

RBA2731-SURFACE MOUNTED SERIES MODEL

RBA2731-506 H₂O-to-Go!™ Surface Mounted Push Button Bottle Filler

H₂O-to-Go!™ Surface Mounted Sensor Bottle Filler with Bottle Counter Display [shown] RBA2731-507

H₂O-to-Go!™ Surface Mounted Sensor Bottle Filler RBA2731-508















As improvements in the design and performance of RBA products are continuous, specifications may be subject to change without notice. The illustrations and descriptions herein are applicable to production as of the date of this Installation Instructions Sheet. Revised 10/24 © 2024 by RBA Group II/Model RBA2731-5XX-Surface-Mounted/1024



This product is to be installed in accordance with the Plumbing Code of Australia (NCC Vol. 3), AS/NZS3500.1 and AS/NZS3500.2 as well as any other applicable requirements subject to the jurisdiction under which the product may be installed. Please read the entirety of this booklet before commencing installation. Please leave this booklet with the owner of the fixture when finished.

Technical Data

Inlet Connection: G½B Polyethylene [PE] Tube

Outlet Connection: 40mm BSP Waste Compact Watercooler Drain

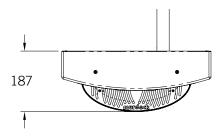
Water Pressure: 200-500kPa Water Temperature: 4-30°C

Flow rate: 3.8 LPM Laminar flow

Components Supplied

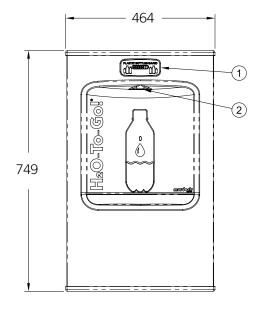
- Bottle filler assembly
- 9V transformer [sensor op. units only]
- 1/4" Tee pushfit
- Plastic collar
- 40mm BSP Trap extension
- 40mm P-Trap

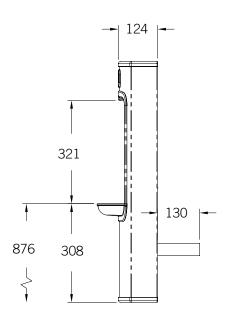
Dimensions



GENERAL NOTES:

- OPTIONAL -BCD BOTTLE COUNTER AND FILTER REPLACEMENT DISPLAY
- 2. LED LIGHTING WITH -BCD OPTION ONLY







Pre-Installation

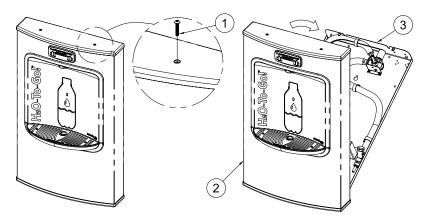
- 1. Some options may slightly alter installation. To ensure proper installation, review the manual thoroughly and verify rough-ins before beginning any work. File this manual with the owner or maintenance personnel upon completion of installation.
- 2. Carefully remove all fixture components from packaging, preventing scratching or damage. Inspect fixture and all parts or damage.
- 3. Provide rough-ins as shown on the roughing-in and dimensional drawing.
- 4. Water supply service stop valve, water connections and electrical connections to be supplied and installed by others in accordance with local codes.
- 5. Fixture mounting requirements: Industry standard wall construction, adequate to support the fixture and wall anchors [installer provided] sufficient to secure the fixture.
- 6. Fixture operates within water pressure range of 200kPa to 500kPa [AS/NZS3500 max inlet pressure 500 kPa]. RBA will not warranty fixtures damaged when connected to supply lines with flow pressure lower than 200kPa or higher than 500kPa.
- 7. Water supply inlet is 1/2" BSP Polyethylene [PE] Tube.
- 8. All building water supply systems in which quick-closing valves are installed shall be provided with devices to absorb the hammer caused by high pressure resulting from the quick-closing of the valve. These pressure-absorbing devices shall be approved mechanical devices. Water pressure-absorbing devices shall be installed as close as possible to the quick-closing valve.
- 9. Completely flush supply of all foreign debris before connecting to fixture. Bottle filler is designed to provide trouble free drinking water unaffected by fixture connection tubing and fittings and will not cause problems with taste, odor, color or sediment.





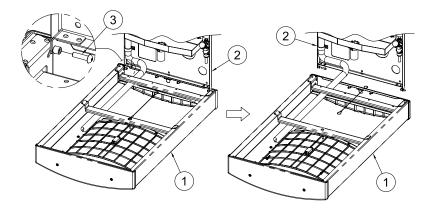
Installation [All Units]

1. Place unit onto horizontal surface. Check supplied product against rough-ins provided in the instructions. Unscrew top screws.



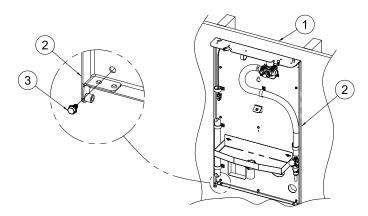
- 1. Allen Button Head Screw
- 2. Bottle Filler Housing
- 3. Mounting Channel

2. Remove bottle filler housing from unit by removing one screw from the hinge and sliding the bottle filler housing out. Set aside for later use in the installation.



- 1. Bottle Filler Housing
- 2. Mounting Channel
- 3. Phillips Round Head Screw

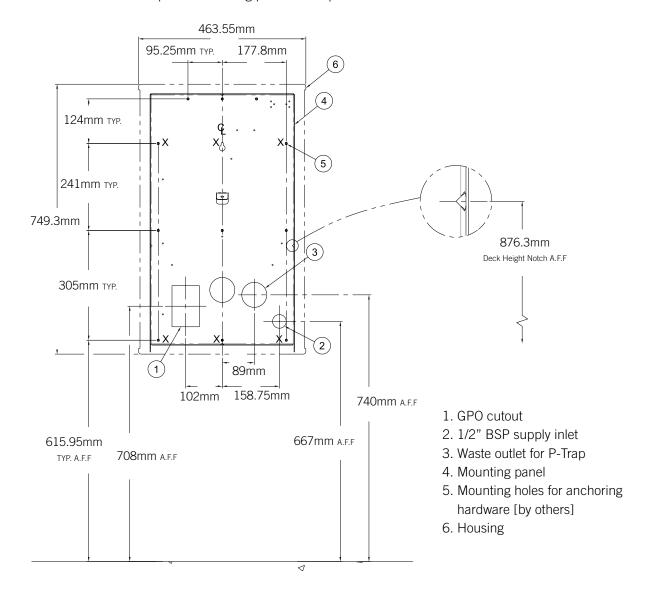
3. Locate and attach mounting channel to finished wall. Secure mounting channel with anchoring hardware, provided by installer. See step four for rough-in layout.



- 1. Finished Wall
- 2. Mounting Channel
- 3. Anchoring Hardware, by others



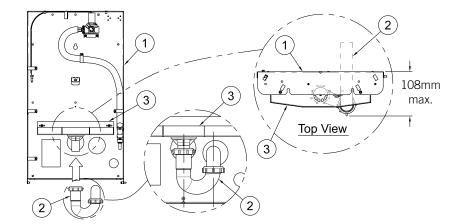
4. Provide wall openings as indicated in rough-in detail provided, ensuring to block out the electrical service rough and waste outlet for 1-1/2" P-Trap. Use mounting panel as template.





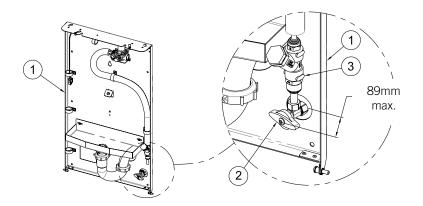


5. With the mounting panel secured to finished wall, install P-Trap waste outlet. P-Trap must not extend more than 108mm from finished wall



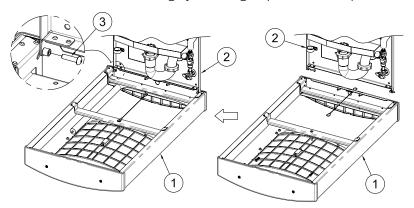
- 1. Mounting Panel
- 2. P-trap
- 3. Drain Tray

6. Connect 1/2" BSP Y-Strainer to main water supply. RBA recommends installing an angle stop for easy maintenance. Angle stop must not extend more than 89mm from finished wall.



- 1. Mounting panel
- 2. Recommended angle stop [by others]
- 3. Y-Strainer

7. Re-mount bottle filler housing by reversing steps taken in Step 2.

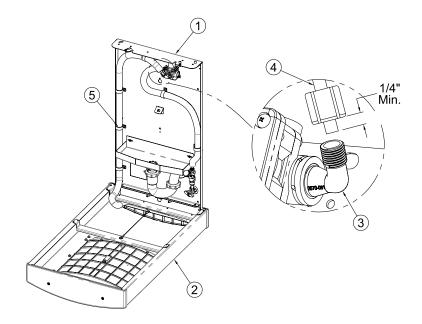


- 1. Bottle filler housing
- 2. Mounting panel
- 3. #10-32 x 3/4" Phillips round head screw
- 8. For RBA2731-506, continue onto Step 9, over the page. For RBA2731-508 and RBA2731-507, skip to Step 12, Page 8.



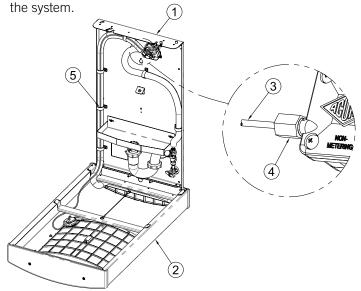
Installation [RBA2731-506 only]

9. With bottle filler housing secured to unit, connect water supply line. Keep supply line within plastic cable holders to prevent supply line from getting pinched or damaged.



- 1. Mounting panel
- 2. Bottle filler housing
- 3. Valve water supply outlet elbow
- 4. Bottle filler water supply inlet tubing
- 5. Plastic cable holder

10. With water supply line properly secured, connect 3mm polyethylene air line to valve. Keep air line within the plastic cable holders to prevent supply line from getting pinched or damaged. Turn on water and check for leaks throughout



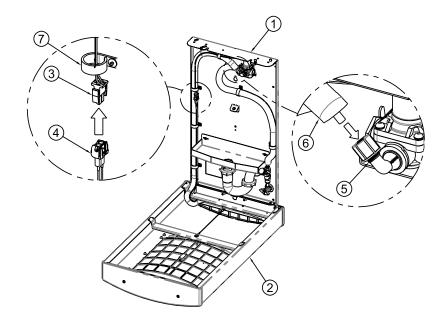
- 1. Mounting panel
- 2. Bottle filler housing
- 3. 3mm polyethylene air line
- 4. Valve air line inlet
- 5. Plastic cable holder

11. To continue, skip to Step 15. Page 9.



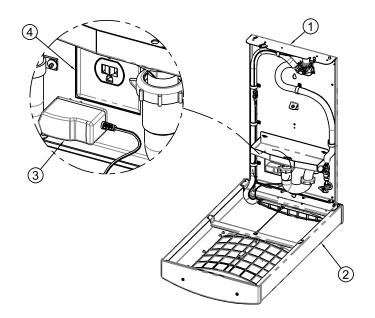
Installation [RBA2731-507 and RBA2731-508 only]

12. With bottle filler housing secured to unit, connect water supply line and electrical wiring as shown below. Keep supply line and wiring within plastic cable holders to prevent supply line and wiring from getting pinched or damaged.



- 1. Mounting panel
- 2. Bottle filler housing
- 3. Solenoid valve electrical wiring
- 4. Bottle counter display/Sensor wiring
- 5. Solenoid valve water supply outlet elbow
- 6. Bottle filler water supply inlet tubing
- 7. Plastic cable holder

13. Plug-in power supply, turn on water and check for leaks throughout the system.

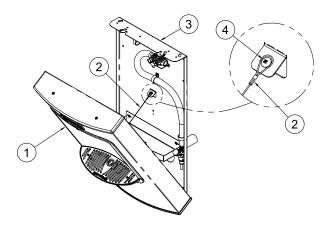


- 1. Mounting panel
- 2. Bottle filler housing
- 3. Power supply
- 4. GPO cutout

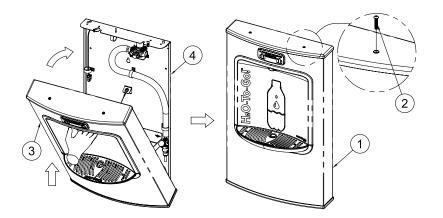
14. Continue onto the next page, Step 15.



15. With fixture tested, hook lanyard from bottle filler housing to mounting panel and tighten screw.

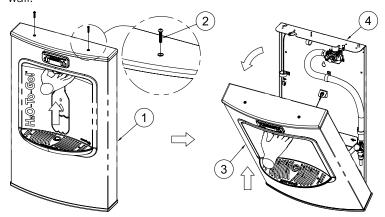


- 1. Bottle filler housing
- 2. Lanyard
- 3. Mounting channel
- 4. Lanyard mounting screw
- 16. Lift up from fill spout area to close the unit by swinging bottle filler housing up and secure with screws from Step 1. Do not force closed. Address any interference if necessary. Do not over-tighten.



- 1. Bottle filler assembly
- 2. #10-32 x 1" Allen button head screw
- 3. Bottle filler housing
- 4. Mounting channel

17. To open unit for maintenance, remove top screws. Lift bottle filler housing up from fill spout area then pull away from wall



- 1. Bottle filler assembly
- 2. $\#10-32 \times 1"$ Allen button head screw
- 3. Bottle filler housing
- 4. Mounting channel



Electrical Installation

Note: Plug-in Power is a standard feature.

- 1. Plug in operation: Plug transformer provided into ELCB [RCD] protected electrical service, used by the bottle filler.
- 2. Connect the power supply wires to either the solenoid valve or bottle counter display [if equipped].

Start Up

Air within the bottle filler system or the structure supply piping will cause an irregular spout outlet stream until purged out by incoming water. RBA recommends holding a cup [or similar object] directly below filler spout when first activating Bottle Filler to prevent excessive splashing. Activate sensor until steady water stream is achieved.

Operating Instructions

Position container to be filled directly in front of the sensor and centered under the filler spout. Water flow starts automatically. When the container is almost filled, remove container. The water will stop flowing.

Bottle Counting Adjusting & Resetting Instructions

Note: Bottle counter has multiple functions

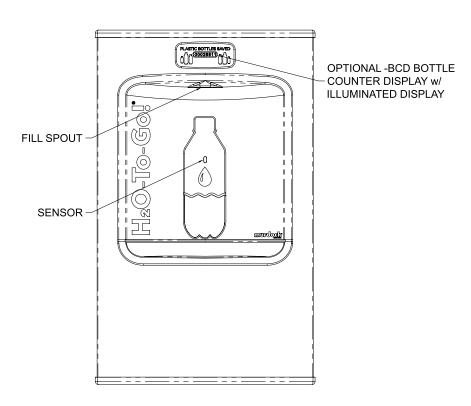
- Reset/Mode button
- Counts refilled bottles
- Adjustable for units with and without filters
- "Replacement Filter" alert function
- Alert reset when filter is replaced

Description

Illuminated LCD Display counts bottle and has a Filter replacement alert function.

Bottle Counting Function

The Software applies a flow volume of approximately 500mL to each bottle counted. If the flow volume is less then 500mL, there will be no count but the volume will accumulate, so that part way through the next cycle the total bottle count will change.





Filter Replacement Functions

Note: When the volume accumulates to Filter capacity, the "REPLACE FILTER SOON" alert will appear on the display every time the Bottle Filler is activated.

Counter Modes

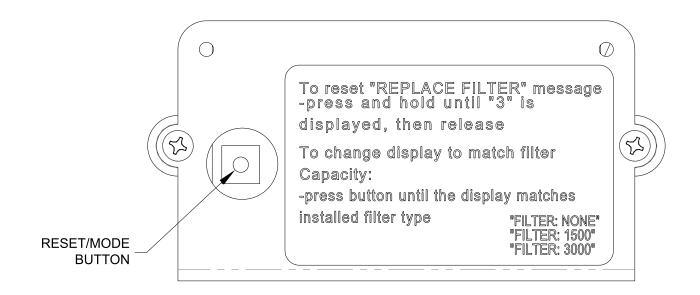
Located on the back of the display you will find the Reset/Mode button for the mode settings. The Reset/Mode Selection Button is accessible by removing the Housing, then locate the large hole in the back of the Display Mounting Bracket. Use your finger or nonconductive object to depress the Reset/Mode Selection Button. CAUTION: do not use sharp or metal objects. With this Reset/Mode Button, you are able to indicate whether or not the unit has a Filter or does not have a Filter. The Reset/Mode Button is used to remove the "REPLACE FILTER" alert after the Filter has been replaced.

Systems With or Without Filter:

- To reset "REPLACE FILTER" message:

 Press and hold Button until "3" is displayed, then release.
- To change display to match Filter capacity:
 Press and hold Button until the display matches installed Filter type, then release.

"FILTER NONE" "FILTER 1500" "FILTER 3000"





Troubleshooting

Problem	Solution
If light within sensor does not flash once when user is within range	 a. Verify 240V AC input & 9VDC output of Transformer. b. Replace defective Transformer. c. Sensor in "Security Mode" after 20 seconds of constant detection. Remove source of detection and wait 30 seconds before checking. d. Sensor is picking up a highly reflective surface. Eliminate cause of reflection and wait 30 seconds before checking. e. Replace defective sensor.
If light within sensor lens flashes once when the user is within range	 a. Repair bad connection from Sensor to Solenoid. b. There is debris or scale in the Solenoid assembly. Remove Solenoid, pull out Plunger and Spring. Clean with scale remover solution. c. There is debris or scale in center or two holes in convolution of the water diaphragm. Remove and clean.
Restricted or no water flow	 a. Ensure Water Supply service stop valve is fully open. b. Verify minimum 200kPa supply line flow pressure. c. Check for twist or kinks in Spout Tubing. d. Check the water inlet "Y" Strainer. Sediment from the main supply can get trapped in the Screen along with installation materials such as pipe dope and flux. The Screen should be cleaned and checked on a regular basis and replace if needed. e. Flow Control in spout clogged, remove & clean. f. No power to Transformer connections loose or wires cut.

Cleaning & Maintenance Guide

- 1. To remove water spots or rust spots, stainless steel cleaner/polish on a cloth is recommended.
- 2. If there are stubborn spots or if you wish to treat a scratch, synthetic abrasive general purpose pads such as Scotch-Brite® is recommended.
- 3. Apply stainless steel cleaner/polish to the synthetic abrasive pads and carefully rub the panel with the grain.
- 4. Do NOT use harsh chemicals, abrasive or petroleum based cleaners. Use of these will void the Murdock warranty. DO NOT use abrasives on powder coated units.
- 5. Stainless steel should be kept clean at all times. If a coating of stainless steel cleaner/polish is maintained, stainless steel surfaces will retain their new, clean, polished appearance indefinitely. Use clean mild soapy water for powder coated units.
- 6. Periodically remove panels and clean out inline "Y" Strainer.





Pushfit Installation

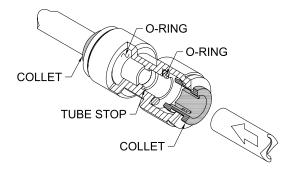
Note: fittings and tube should be kept clean, bagged and undamaged prior to installation.

Figure 2

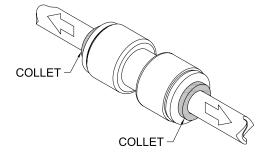
1. Cut to fit length of 1/4" PE tubing and remove any burrs or sharp edges. Ensure that the outside diameter is free from score marks. Tube ends should be square.



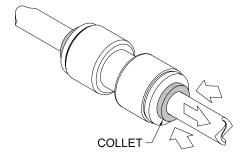
2. Firmly and fully insert the tubing end into the push-in fitting up to the tube stop located approximately 1/2" [13mm] deep.



3. Pull on the fitted tubing to ensure it is secure. Tube should not come free from the fitting. Water test the connection assembly prior to leaving the site to ensure there are no leaks.



4. Prior to disconnecting the tube from the fitting, ensure that the water line is depressurised. Push Collet square towards the push-in fitting body and hold. While holding the Collet in, pull on the PE tubing to remove from the push-in fitting.







Note: This product should be installed, by suitably qualified persons, in a fit for purpose application, to suitable materials, using suitable fixings and comply with any relevant codes. It should be inspected periodically for signs of wear and tear that may affect performance or safety.

Dimensions are subject to manufacturer's tolerance of +/-10mm. Rough-in should be completed with each fixture. Important: Installation Instructions are subject to change without notice.

Please visit our websites for latest revision.