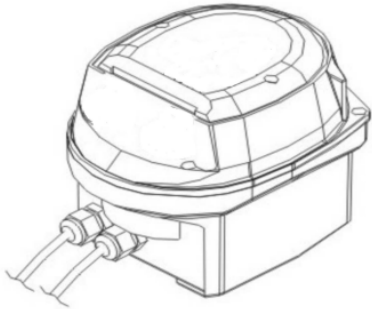
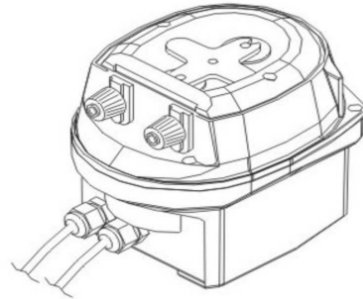


Picture 1



Picture 2



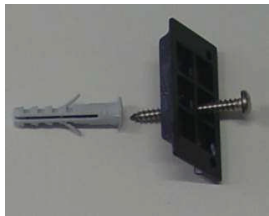
PA-D and PA-9

WARE BASIC CONDUCTIVITY CONTROLLED DOSING SYSTEMS

PA-D (for dry detergent, see picture 1)

PA-9 (for liquid detergent, see picture 2)

Picture 3



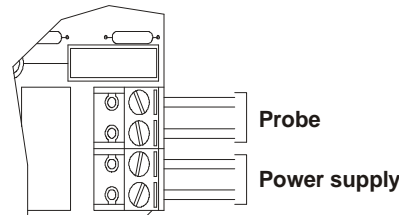
Picture 4



Picture 5



Picture 6



MAINTENANCE AND INSTRUCTION MANUAL

Automatically accepts AC voltage range as follows:

Power supply: 100 – 240VAC

The PA-D controls dosing with a solenoid valve and conductivity sensor.

The PA-9 controls dosing with a peristaltic pump and a conductivity sensor.

Suction height 5 Ft.

Flow rate: 5 Oz/Min.

NOTICE

When installing the pump read the label and verify the following:

- tubing material is compatible with the chemical being dispensed;
- the power supply is within the pump's voltage rating
- pressure at the injection point is lower or equal to the pump nominal pressure;
- pick-up tubing is inserted in the liquid container, secured to the pick-up connection of the pump (represented on the lid with \triangle) and tightened with the proper nut (see picture 2);
- delivery tubing is secured to the delivery connection of the pump (represented on the lid with ∇), tightened with the proper nut and fitted to the tank injection connection;

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN PERSONAL INJURY OR DAMAGE TO THE EQUIPMENT LEADING TO IMPROPER OPERATION OR PRODUCT FAILURE.



Before carrying out any operation on the pump, disconnect the power supply !!

INSTALLATION INSTRUCTIONS

Installation with the provided bracket

- Mount the plastic bracket with the provided screw (see picture 3);
- in case of tiled or low friction walls use the supplied adhesive tape as follows:
peel off one of the two protective foils from the tape, stick the tape to the bracket, peel off the second protective foil and proceed to mount the bracket with the provided screw;
- slide the grooves on the back of the pump over the bracket.

Installation through the back cover

- Open the housing by removing the front screws.
- detach the power supply connection from the circuit board;
- holes for mounting are on the back cover of the system: break the plastic protections from the holes with an awl or screwdriver (to trace the drilling template the back cover can be used);
- mount the back cover with the provided screw or suitable substitute.
- reattach the power supply connection to the circuit board and mount the front part of the system by replacing the screws.

Suction filter installation

- Insert the end of the tubing in the metal weight so that it exits from the flared end of the weight; insert the filter's barbed fitting in the same end of the tubing;
- Tighten the tubing by sliding the weight over the barb until it is flush with the filter;

(Picture 4 shows the steps for installing the suction filter) It is strongly recommended to use the suction filter in all situations, assuring that it reach the bottom of the product container. It should be cleaned periodically to remove product residual or accumulation of debris.

Probe installation

- Make a 7/8" hole in the wall of the wash tank at least 6" below the water level near the pump intake and as directly below the detergent injection point as possible.

Connect the conductivity probe to the cable with the provided connectors.

Concentration regulation

Connect the PA-D/PA-9 system's power supply to the dishwashing machine wash pump.

To achieve the desired product concentration follow these steps:

1. Start with the trimmer in the fully counter clockwise position.
2. Fill the tank with water and allow it to reach the recommended wash temperature;
3. Turn on the machine and product will automatically dispense into the tank until the set point is reached.
4. Adjust trimmer as needed.

OFA (ALARM)

The OFA time is fixed at 30 seconds. The alarm will sound when detergent concentration has not reached set point within 30 seconds.

Once the solenoid valve has started the system waits for the set OFA time. Once this time has elapsed, and the solenoid valve is still open, the alarm led on the screen will flash and the buzzer will sound at an intermittent. In this first OFA alarm phase the detergent pump will continue to run.

This alarm status will end if the set point is reached and the detergent pump stops. If an additional OFA time elapses without the reaching the set point, the device will enter into the second phase of OFA alarm. In this phase the buzzer will sound continuously, the alarm led will be red fixed and the pump will be stopped

IMPORTANT: Detergent feed will remain disabled until the machine or the pump is turned off and restarted

Tank injection connection installation

- Drill a 7/16" hole in the tank wall and refer to picture 2 for proper mounting.

Tubing replacement for PA-9

- Disconnect the unit from the power supply and remove the transparent front cover
- turn the roller assembly so that the rollers are situated vertically, slide the connection on the left toward you pulling the tube out of its seat and manually rotate the roller assembly clockwise until it is possible to extract the right hand side connection from its seat;
- **to install the tube** turn the roller assembly so that the rollers are lined up horizontally;
- insert the connection in its seat on the left of the pump with the curved side towards the rear of the pump and pushing the tube into its seat while manually rotating the roller housing clockwise until it is possible to insert the right hand side connection into its seat;
- insert the cover starting from the top, with the textured side facing the pump and pushing slightly on the sides until it clicks in place.