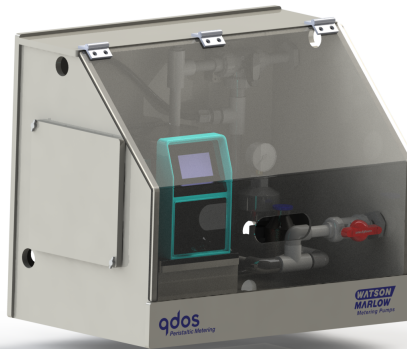


Watson-Marlow Qdos Pod metering pump box user manual

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Original instructions

The original instructions for this manual have been written in English. Other language versions of this manual are a translation of the original instructions

1 Introduction

The Watson-Marlow Qdos Pod is an all-in-one solution to your metering pump needs. The Qdos Pod compliments the Qdos pump line by providing an enclosure with a calibration column with powered fill, an outlet pressure gauge, and a pressure relief valve. This helps maximize the ease of use and setup of your Watson-Marlow Qdos metering pump. The Qdos Pod comes in two standard configurations with either a 125ml or 500 ml calibration column.

- 125ml calibration column for use with Qdos 20 and Qdos 30 pumps
- 500ml calibration column for use with Qdos 60 and Qdos 120 pumps

2 Installation environment

The Qdos Pod should be installed in a location where it will not be exposed to excessive heat or cold. Normal temperatures should be between 41°F and 104°F. Power can be provided by any 115VAC, 15 amp source. The enclosure should be located in a manner that allows easy access for the operator to access the pump face and view the display as well as providing access to the removable side panel for easy pumphead replacement.

The suction head that the pump must draw from should be minimized, although the Qdos Pod is capable of filling the calibration column from a suction inlet. Please consult the pump manual for more information.

3 System overview

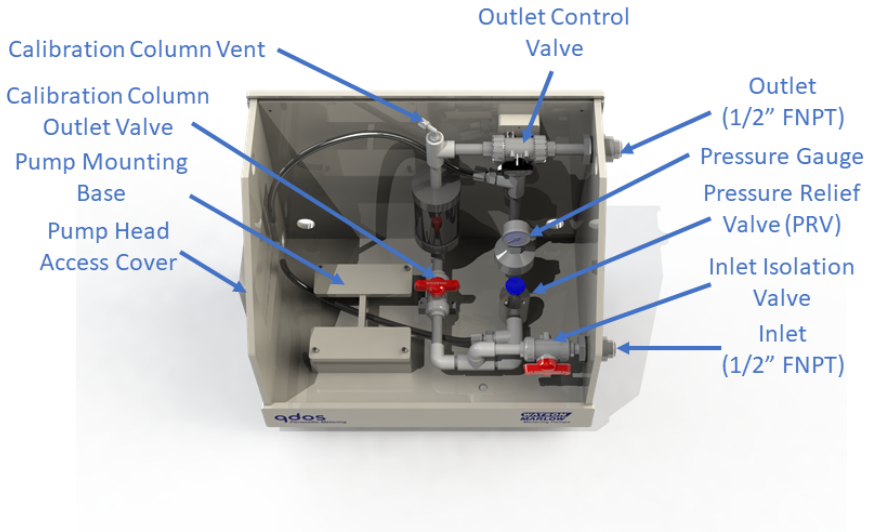


Figure 1: Overview

4 Assembly

1. Install the ReNu pumphead on the pump.
2. Connect the suction tube to the bottom of the ReNu pumphead.
3. Connect the discharge tube to the top of the ReNu pumphead.
4. Install the pump to the pump base in the Qdos Pod using a Philips screwdriver or a 7/16 socket and ratchet. The screws are shipped in the parts bag included with the Qdos Pod. Do not over tighten the screws to avoid stripping them.

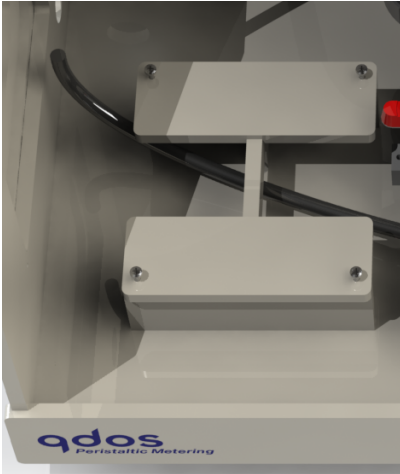


Figure 2: Pump mounting screws

5. Cut to length and attach the inlet and outlet tubing to the Qdos Pod 1/2" fittings on the outside of the Qdos Pod.

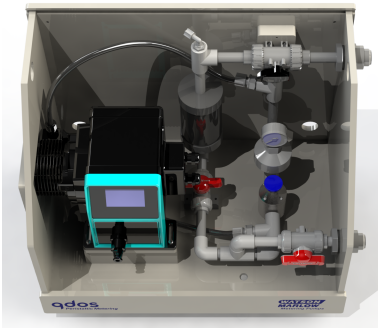


Figure 3: Tubing routing

6. Run the power cord through the back or side of enclosure depending on the installation.

7. If hanging from a tote, install the included tote hangers on the top two mounting holes with the supplied hardware.

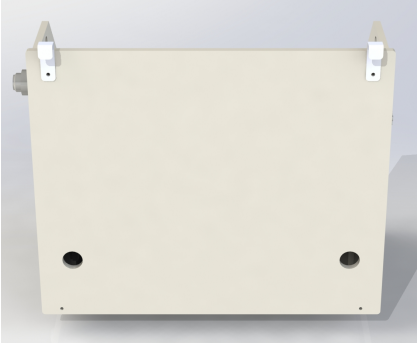


Figure 4: Tote bin hangers

8. If mounting to a wall, mount using the 4 screw holes without using the tote bin hangers. The customer is to supply suitable wall anchor points and hardware.
9. Pipe the inlet and outlet to the Qdos Pod. The box is $\frac{1}{2}$ " FNPT for both connections. (**Warning:** Do not overtighten to avoid cracking the bulkhead fitting)

Note: Watson- Marlow recommends using a check valve on the outlet of the system.

10. The system has a $\frac{1}{2}$ " NPT plug in the bottom. If desired, this can be plumbed into a chemical spill containment.

5 Setup operation

1. Test the tubing connections for leaks.
2. Fill the calibration column by placing the valves in the following configuration and running the pump in manual mode to fill the calibration tube. The outlet control valve should be facing left, the inlet valve open, and the calibration column outlet valve closed.

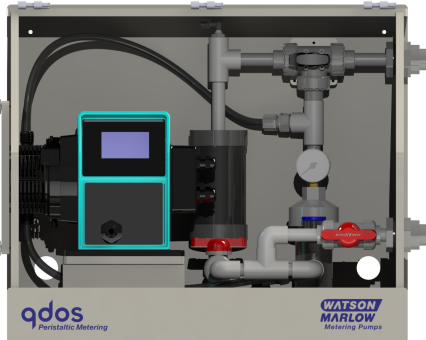


Figure 5: Calibration tube fill valve orientation

3. Turn the pump on to fill the calibration tube.
4. Stop the pump when the calibration tube reaches the 0 mark, do not overflow the calibration tube.
5. If the unit has not been run before, adjust the pressure relief valve as shown on page 6.
6. Perform a drawdown by placing the valves in the following configuration. The outlet control valve to the right, the inlet valve closed, and the calibration tube valve open. Start the pump and begin timing when the fluid level passes the 0 mark on the calibration tube. After 60 seconds, stop the pump to visually verify the fluid that was pumped. For additional information on pump calibration, please refer to the Qdos manual.

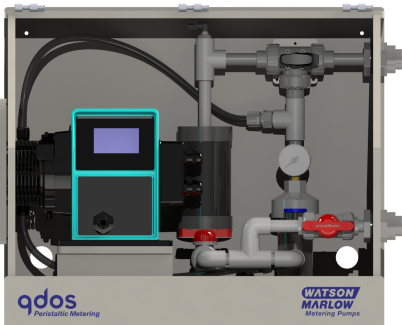


Figure 6: Normal Operation

7. The unit is now ready to run in normal operation. For pump input wiring, see the Qdos manual.

6 Pressure relief valve adjustment

1. Prime the Qdos pump by pumping into the calibration column.
2. Stop the pump.
3. To adjust the pressure relief valve, remove the blue cap on the top of the pressure relief valve.
4. Close the discharge valve by turning the valve to the arrows point to the left and up.
5. Back the pressure relief valve off by turning it four turns CCW.
6. Turn the Qdos pump on.
7. The relief pressure will be displayed on the pressure gauge.
8. Using a large flathead screwdriver, turn the screw clockwise for higher pressure and counterclockwise to lower the pressure. The desired pressure will depend on your system requirements and the pumphead in service. Please see the pump manual for more information.
9. The pressure must be adjusted higher than the system pressure but lower than the maximum rated pressure of the pump.
10. Stop the pump.
11. Place the valves in the desired configuration.

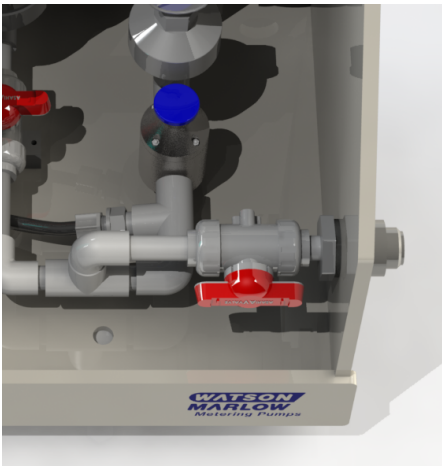


Figure 7: Pressure relief adjustment

7 ReNu pumphead replacement

1. To change the ReNu pumphead, loosen the thumb screws on the left side of the unit.
2. The cover is slotted so that the thumb screws do not need to be removed completely.
3. Remove the cover.
4. Replace the ReNu pumphead.
5. Install the cover (do not tighten the thumb screws more than 5 ft-lbs to avoid stripping them).



Figure 8: ReNu pumphead cover

8 Product codes and spares

Description	Part code
Qdos Pod Metering System, 125ml CC	WM.1235
Qdos Pod Metering System, 500ml CC	WM1212
Qdos Pod Ancillary Assembly, 125ml CC	WM.1236
Qdos Pod Ancillary Assembly, 500ml CC	WM.1213

Note: To order replacement parts, please contact your Watson-Marlow local representative or call our factory at 1-800-282-8823.