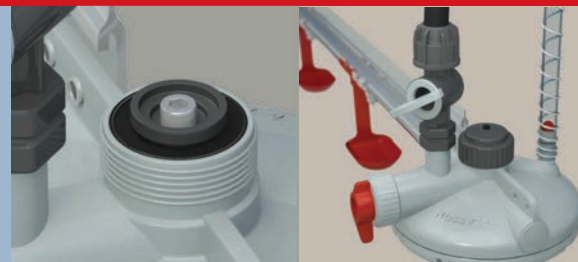


Water on Demand



24/7 Pressure Management

Patent Pending

Water On Demand, Installation instructions

General

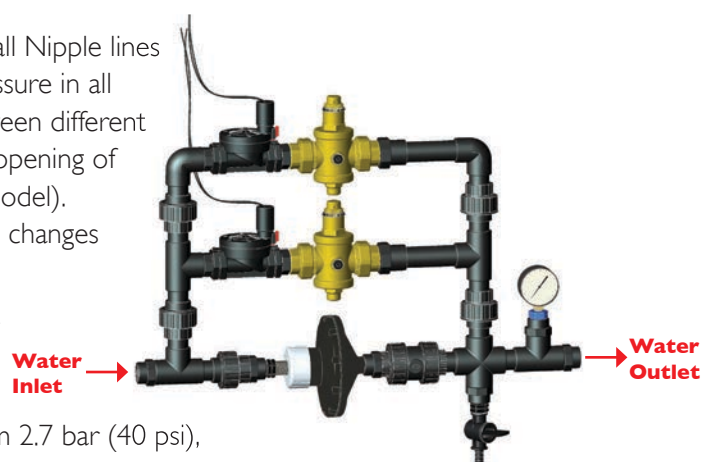
The Water On Demand system enables pressure regulating of all Nipple lines in the house from one central point and ensures a uniform pressure in all Nipple lines. The system also enables immediate transition between different preset pressures of all Nipple lines in the house by closing and opening of valves at this central point (manual or solenoid* according to model). Immediate transition between pressures enables a few pressure changes during the day according to drinking requirements of the birds.

* Solenoid operated valves require operation by a controller or electric timer.

Pressure requirement

Inlet pressure to the Water On Demand Control Unit, minimum 2.7 bar (40 psi), maximum 10 bar (145 psi).

Regulated outlet pressure from the Water On Demand Control Unit (to the Pressure Reducer on the Nipple Line) maximum 2.7 bar (40 psi).



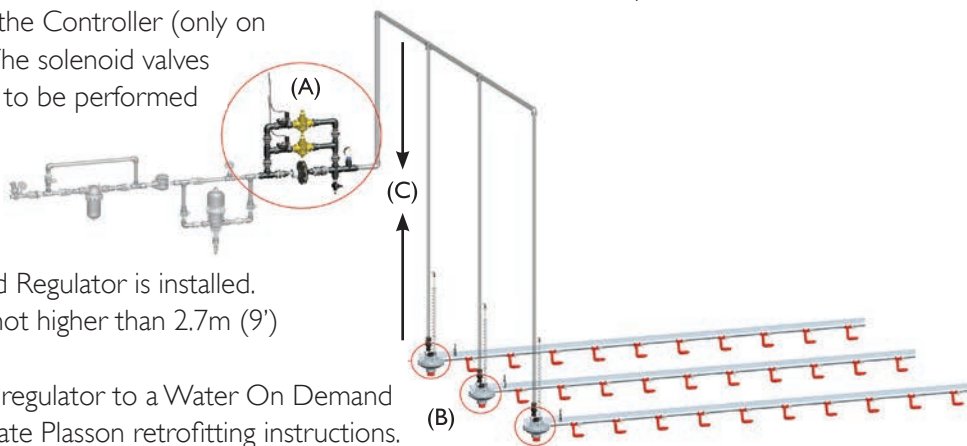
Installation

1. Wall unit (A)

- Mount the Water On Demand Wall Unit on the wall at a height enabling convenient operation of the Water On Demand by the grower.
- Install the Water On Demand downstream in relation to the Filter and medicator or any other device.
- Connect the solenoid valves to the Controller (only on systems with a solenoid valve). The solenoid valves are N.C (24V). This operation is to be performed by a certified electrician.

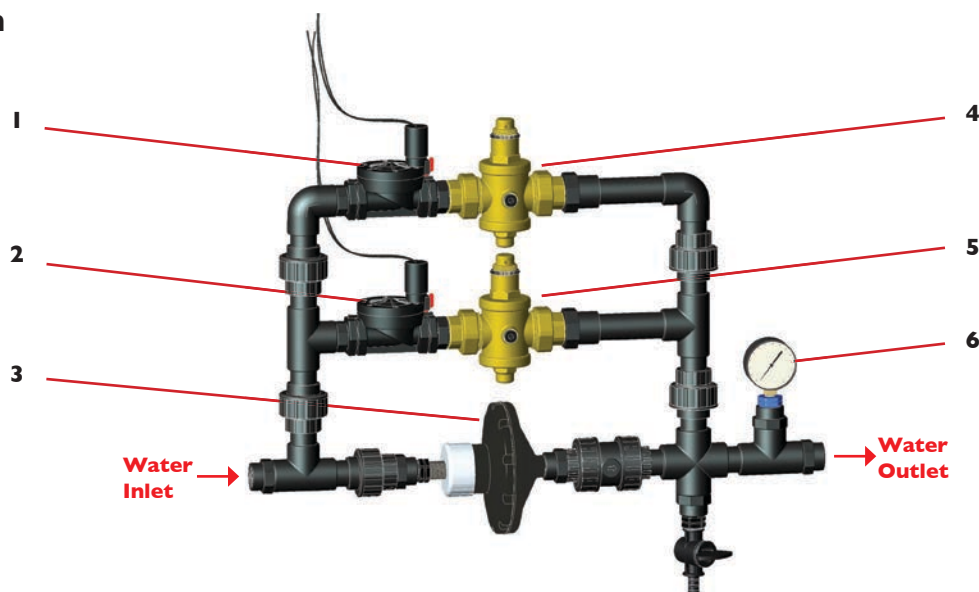
2. Nipple Lines (B)

- Install the Pressure Reducers on the Nipple line head in the same way the Plasson Line Head Regulator is installed.
- Make sure the piping system is not higher than 2.7m (9') above the Nipple lines (C).
- If retrofitting a Plasson pressure regulator to a Water On Demand pressure reducer – follow separate Plasson retrofitting instructions.





Calibration



1. Calibration of the Pressure Reducers Nipple line heads.

- Ensure the two valves (1 and 2) are closed.
- Fill the Nipple system with water via the regulator 3 (Low Pressure Range). Nipple Line Heads (Pressure Reducers) should be in Flush position until all trapped air is released.
- Turn all Pressure Reducers to 'Regulate' position.
- Adjust the outlet pressure of regulator 3 to 0.5 bar (7.0 psi). The pressure is shown on the pressure gauge (6)
- Verify all the adjustment knobs of the Pressure Reducers are set to minimum pressure.
- Drain some water through the Nipples on all lines to ensure there is no trapped pressure in the main line and in the Nipple lines.
- Calibrate the pressure in the Nipple lines by turning the adjustment knobs of the Pressure Reducers so that the pressures in the sight tube of all Nipple lines are equal to the Nipple line in which the pressure was the highest in the first place (verify the adjustment knobs of this pressure reducer is set to minimum pressure). The outlet pressure in that specific reducer should not be higher than 10 cm (4") +/- 20%.

2. Adjusting of the outlet pressure of the regulators 3, 4 & 5 according to requirement during grow out.

- Low Pressure Range, using the Low Pressure Range regulator (3).

- Verify the valves of the High & Medium Pressure Ranges (1 and 2) are closed.
 - Lower the Nipple lines to chick placement height.
 - Drain some water through the Nipples on all lines to ensure there is no trapped pressure.
 - Adjust the outlet pressure on the regulator 3 so that the pressure in the sight tubes (after the Pressure Reducers) is according to the desired pressure for chick placement [for example - 10 cm (4")].
- Medium Pressure Range, using the Medium Pressure Range regulator 5.
 - Verify the valve of the High Pressure Range (1) is closed.
 - Verify the valve of the Medium Pressure Range (2) is open.
 - Adjust the outlet pressure on the Medium Pressure Range regulator (5) so that the pressure in the sight tubes (after the Pressure Reducers) is according to the desired pressure [for example - 25 cm (10")].
 - High Pressure Range, using the High Pressure Range regulator (4).
 - Verify the valve of the High Pressure Range (1) is open.
 - Adjust the outlet pressure on the High Pressure Range regulator (4) so that the pressure in the sight tubes (after the Pressure Reducers) is according to the desired pressure [for example - 50 cm (20")].