



| Version Number | Date     |
|----------------|----------|
| 1.0            | 08/09/20 |
| 2.0            | 25/09/20 |

TELEPHONE: 0330 113 7181 EMAIL: info@osmiowater.co.uk

# **Table of Contents**

| Notes                                | 3  |
|--------------------------------------|----|
| Symbols used                         | 3  |
| Water Treatment                      | 4  |
| Patented hydrodynamic dispenser      | 4  |
| Planning your Installation           | 5  |
| Step 1 - Locate the rising main      | 5  |
| Step 2 - Check your water pressure   | 5  |
| Step 3 – Sourcing the plumbing parts | 6  |
| Installing the Mini SOFT             | 7  |
| Polyphosphate Media                  | 8  |
| Maintenance                          | 8  |
| Inserting the media                  | 9  |
| Declaration of Conformity            | 11 |

#### **Notes**

This user manual is your guide to installation, use and maintenance of the equipment and should be kept for future reference. The manual should follow the equipment in the case of sale, transfer, removal etc.

This manual should be considered an integral part of the equipment. The instructions described herein are intended for your safety and should be read carefully before installation and use of the equipment.

This document contains the instructions for the use, maintenance, assembly and installation. It has been designed in order to provide general information about use and operation of the product. This document contains instructions and requirements which are not supposed to replace any current legislation.

Assembly, installation and extraordinary maintenance must be performed by qualified personnel only. The term qualified personnel indicates a technician skilled in the art who has received adequate training, has sufficient experience, knowledge of rules, laws, standards, safety and use measures and is able to perform all necessary interventions, avoiding all possible risks and/or damages. When in doubt on the identification of qualified and authorised personnel please contact Osmio Water.

We recommend that you follow all instructions carefully as the proper operation and lifetime of the equipment depends on it. When in any doubt while reading this manual or for any other questions regarding use and maintenance of the equipment please contact Osmio Water on 0330 113 7181 or send an email to: info@osmiowater.co.uk.

# Symbols used

A symbol warning the user of any conditions requiring his/her attention has been employed and is placed on the side of the text.



Warning! This symbol refers to important statements concerning installation use and maintenance of the apparatus.

#### **Water Treatment**

This product is a hydrodynamic feeder of food grade polyphosphates (patented system) for descaling and anticorrosion treatment as per UNI CTI 8065 standards and complies with D.M.174/2004 and the Ministerial Decree 25/2012 for drinking water treatment. The system proportionally doses the water with the correct dosage of polyphosphate to maintain water potability.

The patented needle system guarantees precision and regularity of dose over time. Free of turbulence and vibrations, quiet mode of action with a very low pressure drops.

A totally automatic system, no user interaction or power are required. Integral mains water shut-off valve ensures easy maintenance. It is recommended to have a sediment filter before this protect to ensure no large particles get into the system.

## Patented hydrodynamic dispenser

| Technical Information               |                    |
|-------------------------------------|--------------------|
| Connection                          | ½" BSPP Female     |
| Height                              | 167 mm             |
| Width                               | 66 mm              |
| Dosing                              | 3 - 5 ppm          |
| Maximum pressure                    | 6 bar              |
| Maximum flow rate                   | 30 lpm             |
| Approximate pressure drop           | 0.2 bar            |
| Incoming water temperature          | 5 – 50 °C          |
| Maximum temperature (water storage) | 70 °C              |
| Body                                | OT58 stamped brass |
| Bowl                                | Grilamid           |
| Soffietto (Bellows)                 | Silicon            |
| Attach                              | Inline             |
| Weight (without media)              | 850 g              |
| Polyphosphate weight                | 80 g               |

The system is quick and easy to install and is suitable for installation within existing systems.

## **Planning your Installation**

### Step 1 - Locate the rising main

If you don't already know where this is it could be anywhere within the property. There will always be one outside, but we are looking for the one inside which is the point where the water enters the property before it branches off anywhere else.

This could be in the basement, garage, utility room, under stairs, under the kitchen sink or somewhere else. The mains incoming stopcock usually has a yellow and green earthing cable attached to it. If you are planning on installing this product yourself, please make sure you know where the mains stop tap is in the street and have the mains stop tap key if needed. In rare cases there can be more than one entry point and some apartments have communal hot water, providing a cold water and a hot water entry point. If this applies to you then please contact us.

Once you have located where your internal stopcock is and where the cold pipe goes before it branches off around the property then you can plan where you are going to install the Mini SOFT. Installation can occur at any suitable point before the pipe branches off.

It can be plumbed directly onto the cold-water supply to the property, protecting the whole hot water system, or to an individual appliance.

Once you have located the area where the Mini SOFT will be fitted, check to make sure you have enough room. Please allow at least two inches of clearance from the bottom of the system to the floor to allow enough space to drop the bowl down when taking it on and off to refill with media. If appropriate, consider bypassing the garden tap.



Do not install with an incoming water temperature exceeding 50 °C.

# **Step 2 - Check your water pressure**

Incoming water pressure must be tested prior to installation. You can do this using a mains water pressure gauge (available online or at a local plumber's merchants). Your standing water pressure can increase dramatically overnight by an additional 2- 4 bar when water usage is low.



The best way to control high pressure is to install a pressure reducing valve (PRV). These take a high pressure at the inlet, then the valve reduces it to a lower pressure at the outlet as required. Installing one protects all the appliances and plumbing in the property. Increases or spikes in water pressure can and do happen which can cause filter systems and other plumbing to leak, therefore we always recommend fitting a PRV in your property if you do not already have one.



PRV's are sized based on flow rate and application e.g., residential, commercial. Sizing a PRV incorrectly can cause several problems, so it is always best to consult your plumber prior to installation.



Osmio Mini SOFT maximum incoming water pressure: 6 Bar

## Step 3 - Sourcing the plumbing parts

Once you have located space to fit the product and tested the water pressure, the next step is to source the necessary plumbing parts that you will need.

If installing the product, yourself then you will need to source the necessary compression or other fittings required to connect the product to the existing pipework. For high quality plumbing parts and pressure reducing valves we recommend you shop at Screw fix. If you are having the system professionally installed by a plumber, please provide them with the product information prior to installation.



The Mini SOFT is designed to be fitted on 15 mm pipework.

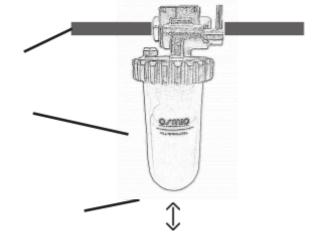
## **Installing the Mini SOFT**

Mount the Mini SOFT in a suitable location after the stopcock and connect to the incoming water main. Install the product on the existing pipework after the stopcock using the fittings required for installation on your pipework.

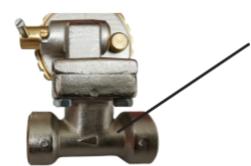
Ensure the Mini SOFT is mounted horizontally with 2" clearance at the bottom to allow the bowl to be dropped down when replacing the media.

The system has its own built-in bypass, so it does not require installation of a separate water bypass.

Install horizontal pipework ensuring that the media bowl remains vertical.



Keep 2" clear at the bottom to allow the bowl to drop down during media change.



The water must flow in the direction of the arrow as shown on the top of the system.

You can remove the 4 screws on the Mini SOFT and rotate 180 degrees to change the direction of the arrow to match the flow of water through your pipework.



If you have already installed or are installing whole house filters, then the Mini SOFT should be installed after the filters.



We recommend that you have your product installed professionally by a qualified plumber.

## **Polyphosphate Media**

Available in powder form or as a pre-compressed refill.

- Stabilizes minerals in hot and cold water
  Decomposes existing encrustations
- Prevents precipitation
- Masks heavy metal ions such as iron and manganese
  Prevents corrosion
- Forms a protective layer of phosphate-calcium-iron

Each Mini SOFT refill pack contains 6 refills, and each refill treats approximately 20,000 liters of water. Based on an average of 2 adults using 300 liters per day, the total pack of 6 would last around 400 days.

The system is designed to release 3-5 ppm of food grade polyphosphates in the water. Through its movement, the system guarantees a constant feed of polyphosphates. The water that is delivered into the media bowl, enables the correct dose of polyphosphate to be delivered. Inside the Mini SOFT there is a bellows that constantly sucks in the saturated solution.

#### **Maintenance**

# Media needs to be replaced when the media level is down to about 1cm.

The bowl should be removed whenever the media is being replaced. It should be carefully washed in hot water in order to eliminate any encrustations that may have formed. The media bowl must be in an upright position.

Once the unit has been installed on the pipework insert the polyphosphate media using the following instructions.



To prevent milky water after first use/media refill please wait 10 mins before you open any taps in order to let the powder settle.

# Inserting the media

Bypass valve lever (picture shows lever in vertical position)



# Step 2

Vent the system using the pressure release valve by turning it to release pressure.

# Step 1

Block the water flow to the dispenser using the by-pass valve. Turn the lever counterclockwise a 1/4 turn so the lever is horizontal.





# Step 3

Unscrew the ring nut on the dispenser using the housing spanner, remove the bowl from the system and discard the water from the bowl.

Clean the bowl with hot water to remove any encrustations.

# Inserting the media



# Step 4

Pour the polyphosphate media up to the level indicated or insert a pre-compressed polyphosphate refill.

# Step 5

Replace the bowl securely back on, screw the ring nut back up. Then move the bypass lever in a clockwise direction to open the flow of water. The bypass lever will now be in the vertical position.



# Step 6



When the dosing bowl is full of water, close the pressure relief valve. Wait 10 mins before you open any taps in order to let the powder settle.

# **Declaration of Conformity**

We hereby certify that Minis SOFT polyphosphate doser is made using the following parts:

- Brass OT 58
- Polyamide Trogamid
- Non-toxic rubber

We declare that the above listed product is manufactured in compliance with 98/83/CE directive concerning regulation of materials and objects that can be used in permanent plants for collection, treatment and distribution of water intended for human consumption.

We hereby declare that the Mini SOFT polyphosphate refills composition and the recommended dosage are in accordance with the requirements of the FAO/WHO Expert Committee on Food Additives and it is produced in accordance with UNI EN 1208:2005.

© 2020 Osmio Water. All rights reserved. Reproduction and copying of the accompanying user documentation in whole or in part is prohibited.

#### **Disclaimer**

Osmio Water reserves the right to change its products and services at any time to incorporate technological developments. This manual is subject to change without prior notice as part of continuous product development. Although this manual has been prepared with every precaution to ensure accuracy, Osmio Solutions Ltd assumes no liability for any errors or omissions, or for any damages resulting from the application or use of this information. This manual supersedes all previous versions.

### No liability for consequential damages

Osmio Water shall not be liable for any indirect or consequential damages whatsoever arising out of the use or inability to use this product.

# 2 Year Warranty

The Osmio Mini SOFT and Maxi SOFT are fully guaranteed against defective parts and materials, including defects caused by poor workmanship. Osmio Water will replace defective parts or materials during the term of warranty at no extra charge providing that the system has been used and maintained in accordance with the following instructions. The warranty is invalid if the product has been dosed with an alternative polyphosphate media or misused or abused in any way.

For the warranty to be effective, the product must have been purchased directly from Osmio Solutions Ltd. The guarantee is not transferable to a third party without prior written approval from Osmio Water. It is strictly prohibited to modify or upgrade the system in any way. Failure to comply with this precaution will void the warranty of the system.

If you are experiencing any problem WITH DAMAGED, MISSING OR FAULTY PARTS, please contact our technical support team. We will ask for pictures/video so please be prepared to take pictures/video which you can email to info@osmiowater.co.uk

# **OSMIO MINISOFT USER MANUAL**

Osmio Water email:

info@osmiowater.co.uk

tel: 0330 113 7181

www.osmiowater.co.uk