

ONE DROP

MECHANICAL VOLUMETRIC DOSING PUMP. FOR ANTI-SCALING ADDITIVE FOR TECHNOLOGICAL USE MAGIC DROP



The proportional dosage of anti-scaling products is an efficient and well-established alternative for water softening to counteract effect of the limestone, offering warranties of success with minimal space and running costs.

One Drop doses Magic Drop, a combineate solution of the latest generation of phosphorus-free organic dispersants that protects home appliances and heat exchange equipment from limestone and dirtiness.

One Drop ensures accurate and proportional dosage and, mainly without unnecessary wasteful of product. In fact, One Drop treats the water even before it enters in equipment thus maximizing the effectiveness of Magic Drop and protecting all the wet parts of the equipment.

Purpose and Use

Limestone forms scale in home appliances and equipment that produce and distribute hot water for technological use. Hard water significantly reduces both the efficiency of the equipment (up to +10%* of energy consumption) and its lifetime (up to -50%* less).

In addition, the presence of limestone in water is recognized as one of the main causes of excessive consumption of detergents. Just read the label of a common laundry detergent to realize how dosages must be significantly increased in case of hard water (up to +50%).

DOSI PER 4-5 KG DI BIANCHERIA ASCIUTTA DRY LAUNDRY: DOSES FOR ABOUT 4-5 KG

DUREZZA DELL' ACQUA WATER HARDNESS	SPORCO/DIRT		
	POCO LOW	NORMALE NORMAL	MOLTO HIGH
DOLCE / LOW	30 ML	38 ML	45 ML
MEDIA / MEDIUM	38 ML	45 ML	56 ML
DURA / HARD	45 ML	56 ML	67 ML

Operating principle

One Drop is a self-priming pump and the passage of the water inside the counter box is enough to trigger it. One Drop is a mechanical pump that does not need power supply: operation is activated by the simple passage of water. The dosing, precise and proportional in any operating condition, is started hydraulically by a mechanical system that, exploiting the movement of the water, enters controlled quantities of Magic Drop. The dosage of Magic Drop is therefore proportional to the water flow for sampling between the minimal flow rate and the peak flow rate (see technical data table). For flow rates below the minimum flow rate there is no pump activation; for higher flow rates than the peak flow rate, the dosage of One Drop is reduced. In no case therefore Magic Drop is wasted.

Magic Drop is inside flexible refills in fully recyclable disposable multi-layer material. This eliminates any handling operation of chemical products making the charging process faster and safer.

ONE DROP

MECHANICAL VOLUMETRIC DOSING PUMP. FOR ANTI-SCALING ADDITIVE FOR TECHNOLOGICAL USE MAGIC DROP

Advantages of Magic Drop



Magic Drop is a combine solution of the latest generation of phosphorus-free organic dispersants specific for the treatment of water for technological use that offers the following benefits:

- inhibits the formation of limestone (threshold effect);
- disperses dirt and limestone (healing effect);
- keeps exchangers and resistors free of limestone and efficient.

The balanced composition of Magic Drop stabilizes calcium and magnesium salts (responsible for scale) effectively controlling the calcareous deposits in waters with hardness up to 100 °f.

Magic Drop is thermally stable and does not undergo any degradation even when used with hot and superheated water (up to 150 °C).

Magic Drop efficiently restores encrusted circuits without using acid and highly corrosive descalers.

Magic Drop helps to reduce chemical detergents.

Magic Drop is phosphorus-free and therefore does not affect the value of this parameter in water.

Advantages of vacuum packaging

One of the absolute advantages of One Drop is his flexible refill Magic Drop that does not need any handling: just replace the refill when it is empty!

The vacuum packaging completely eliminates the contact of the product with the operator and air reducing drastically the risk of contamination from the outside.

The flexible refill easily adapts to limited spaces that would not allow installation of rigid tanks.

Main characteristics

One Drop is completely self-priming; it is sufficient to periodically replace the refill Magic Drop. The pump is protected from the counter-pressure of the hydraulic system by the non-return valve. The non-return system allows you to recharge One Drop without by-passing the equipment or closing the hydraulic power supply.

The high injection rate ensures homogeneity in the dosage.

One Drop is made with body and plate connections in plastic polymer to high resistance with threaded upper connections $\frac{3}{4}$ " in plastic provided by ring and nut in brass and threaded inferior connections $\frac{3}{4}$ " M.

Intended use, conditions of use

One Drop has been designed specifically for dosing Magic Drop in water for technical use. **Do not use for the treatment of drinking water.**

The installation of One Drop must be done upstream (before) of the equipment to be protected, for example on the load line of the washing machine.

ONE DROP

MECHANICAL VOLUMETRIC DOSING PUMP. FOR ANTI-SCALING
ADDITIVE FOR TECHNOLOGICAL USE MAGIC DROP

ONE DROP

MECHANICAL VOLUMETRIC DOSING PUMP. FOR ANTI-SCALING ADDITIVE FOR TECHNOLOGICAL USE MAGIC DROP

Maintenance and lifetime

One Drop requires periodic replacement of the flexible Magic Drop refill. The absence of product in the refill is not indicated by automatic devices but is visible from the emptying/crushing of the refill itself. Periodically check the filling degree of the bag. When the refill is exhausted you need to replace it. Dry running does not cause any damage to the pump; however, the lack of One Drop dosing does not guarantee any anti-scaling protection. For a correct running of One Drop is recommended to make at least one annual control.

For further information, see the Operating and Installation Manual.

Installation

The installation must be performed to perfection, in compliance with all the laws and with the license plate data of the appliance itself and in accordance with local regulations. The pump installation introduces a change to the water distribution system and must therefore be done exclusively by a qualified professional and in accordance with the Regulation D.M. no 37/2008. The installation diagrams are intended to give the necessary indications for the correct operating of the equipment. The implementation of a perfect system is outside of the purposes of this document.

In any case, before making the implementation, check the Operating and Installation Manual supplied with the equipment.

Warnings

Protect from frost and elements avoiding contact with solvents and chemical products in general. See Performance and Technical Data for operating limit values. Follow instructions from the Operating and Installation Manual.

One Drop doses exclusively Magic Drop. Guarantees concerning One Drop and its performance, decline when One Drop is used for the dosage of a product different from Magic Drop.

Characteristics of the water to be treated

One Drop and Magic Drop must be used for the treatment of water for technological use only. Do not use for the treatment of drinking water. Magic Drop is phosphorus-free and therefore does not affect the value of this parameter in water.

Conformity and relevant regulations

Acqua Brevetti SRL has adopted an Integrated Management System QSA (Quality, Health and Safety of Workers, Environment) certified in accordance with the standards:

UNI EN ISO 9001:2015

UNI ISO 45001:2018

UNI EN ISO 14001:2015

Acqua Brevetti SRL also has a Social Responsibility management system in accordance with the SA 8000:2014 regulation.

Equipment

One Drop Pump, Magic Drop refill 250 g, instructions manual for use and maintenance.

ONE DROP

MECHANICAL VOLUMETRIC DOSING PUMP. FOR ANTI-SCALING ADDITIVE FOR TECHNOLOGICAL USE MAGIC DROP

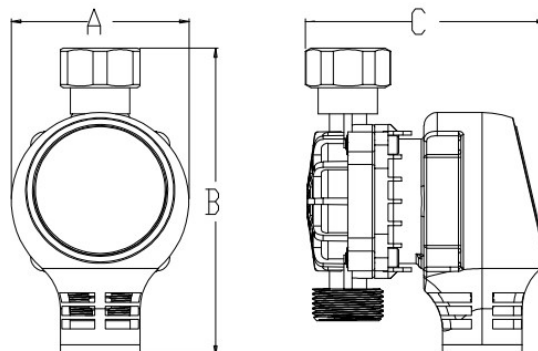
Performance and Technical Data

VOICE	Unit	PM800
Connections	inch	¾" F IN – ¾" M OUT
Minimum starting water flow rate	m ³ /h	0,13
Nominal flow rate of water (ΔP=0,5 bar)	m ³ /h	0,6
Min-max water hardness	°f	0 ÷ 100
Maximum Temperature of treated water	°C	150
Refill 250 g bag autonomy	liters	~4000
Average shelf life 250 g bag	months	1 – 1,5*
Min-max water working pressure	bar	1,5 ÷ 10
Min ÷ max water working temperature	°C	5 ÷ 30

*assuming water consumption per wash of 50 litres and 2 washes per day

Overall dimensions

Item Code	Width - A	Height - B	Depth - C
PM800	70	116	91



ONE DROP

MECHANICAL VOLUMETRIC DOSING PUMP. FOR ANTI-SCALING
ADDITIVE FOR TECHNOLOGICAL USE MAGIC DROP

Installation diagram example



ACQUA BREVETTI SRL

Via Molveno, 8 - 35035 MESTRINO (PD) - ITALY

Tel. +39 049.8974006 - Fax +39 049.8978649

www.acquabrevetti.it - www.acquasil.it

info@acquabrevetti.it



Azienda certificata
ISO 9001:2015



La presente Scheda Tecnica si basa sulle esperienze di ACQUA BREVETTI SRL e si applica ad un uso normale del prodotto secondo quanto descritto nella presente Scheda e nel Manuale di Uso e Manutenzione; qualsiasi utilizzo diverso da quanto descritto deve essere autorizzato per iscritto. Per una regolare gestione e manutenzione degli impianti si consiglia di stipulare un accordo con i nostri Centri di Assistenza Tecnica. ACQUA BREVETTI SRL si riserva il diritto di qualsiasi modifica ai propri prodotti anche senza preavviso. A termini di legge è vietata la riproduzione anche parziale del presente elaborato che resta proprietà esclusiva di ACQUA BREVETTI SRL.