

# 4 PROPORTIONAL DOSING UNITS

## Anti-scale - anti-corrosion units for water systems, water heaters, wall boilers and heat exchangers.

The water used in water systems contains a certain dissolved amount of calcium and magnesium salts making up the hardness. When water is heated, the hardness gives origin to a chemical reaction with the formation of calcium and magnesium carbonate (scale), and carbon dioxide.

The calcium carbonate precipitates causing scale deposits on systems and heat exchangers, while the produced carbon dioxide has corrosive effects inside the system.

It is therefore necessary to treat hard water (to be measured with the special hardness kit) by installing anti-scale and anti-corrosion appliances, like the proportional dosing units.

The dosing of products based on polyphosphates, in compliance with the directive 2002/82/CE, proportionally to water passage (4 p.p.m.) does not alter the features of drinking water, keeping soluble the elements which otherwise would precipitate, causing scale formation. It also protects the pipeline from corrosion with a considerable save of energy consumption and reduction of maintenance costs.

The dosing units can be easily installed before the water system, before water heaters or boilers and before washing machines and dishwashers.





### ACQUASTOP

By-Pass device integrated into the dosing body of the DOSAPHOS 250 and DIMA units. It allows an easy product refilling without having to stop water delivery.



### DIMA

Thanks to their special shape, the Dima dosing units can be easily installed with Dima (template) connections in the small spaces between the wall and the boiler.



### GELPHOS RAPID

Ready-to-use anti-scale and anti-corrosion product for proportional dosing units (Dosaphos 200 - 250 - DIMA). The product is packed in convenient sealed refills to be easily introduced into the bowl of the dosing unit. The automatic prepackaging, combined with the purity of the product, allows to get refills with a mixing suitable for guaranteeing the optimal dosing of product. The product is in compliance with the EC regulations for food and drinking water.

fig. 1 - Operation

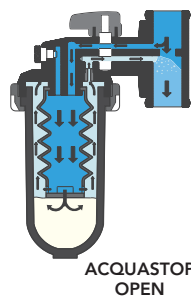
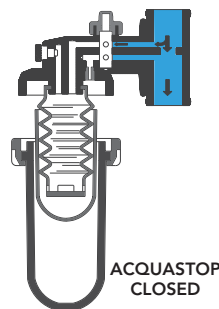


fig. 2 - Refilling



Refilling a GEL dosing unit is very easy. It is enough to close the Acquastop device, cut pressure through the air valve and replace the Gelphos Rapid refill.

# 4 DOSAPHOS 250 - 200

METERING

## Proportional dosing units with incorporated by-pass\*

**DOSAPHOS 250** and **DOSAPHOS 200** are used to reduce scale formation and to prevent corrosion in water heaters, boilers, washing machines and dishwashers. The Gelphos product with chelating and sequestering action, automatically and proportionally dosed, is able to:

- avoid calcium carbonate to settle, scale;
- build a film inside the pipeline protecting from corrosion.

A special flange adjustable between the venturi pipe and the dosing unit allows the installation even in presence of horizontal, vertical or oblique pipes. The DOSAPHOS 250 differs from the 200 since fitted with the **integrated by-pass device ACQUASTOP (Gel patent)**. The device allows an easy product refilling without having to stop water delivery.

The proportional dosing units DOSAPHOS 200 - 250 are made of chromium-plated brass and plastic materials in compliance with the specifications for potable use. They are available in the packing with 1 GELPHOS RAPID refill.

\* in the DOSAPHOS 250 only.



### TECHNICAL FEATURES

Connections	1/2" - 1/2" (f.f.)
Dimensions H x Z x Int	15 x 11x 6 (cm)
Max. dosing	4 p.p.m. (mg/l)
Refill autonomy	12÷15 m <sup>3</sup>
Max. pressure	10 bar
Max. flow rate	2 m <sup>3</sup> /h
Pressure loss	0,2 bar
Room temperature	5°C to 50°C (41°F to 122°F)
Water temperature at the entry	5°C to 50°C (41°F to 122°F)
Incorporated by-pass	YES (Dosaphos 250)



Horizontal installation



Vertical installation



### DOSAPHOS

Model	Dosaphos 200	Dosaphos 250
Code	105.010.50	105.030.70
Materials	Brass/San	Brass/San

## DOSAPHOS DIMA

METERING



### Proportional dosing units with DIMA shape and incorporated by-pass

DOSAPHOS DIMA dosing units are used to reduce scale formation and to prevent corrosion in water heaters, boilers, washing machines and dishwashers. Thanks to its special shape, the DOSAPHOS DIMA can be easily installed with DIMA connections in the small spaces between the wall and the boiler.

The Gelphos product with chelating and sequestering action, automatically and proportionally dosed, is able to:

- avoid calcium carbonate to settle, scale;
- build a film inside the pipeline protecting from corrosion.

A special flange allows the dosing unit to be mounted in horizontal, vertical or oblique pipeline. DOSAPHOS DIMA is also fitted with the **integrated by-pass device ACQUASTOP (Gel patent)**.

The device allows an easy product refilling without having to stop water delivery.

The proportional dosing units DOSAPHOS DIMA are made of chromium-plated brass and plastic materials in compliance the specifications for potable use. They are available in the packing with 1 GELPHOS RAPID refill.



Frontal installation



Side installation

TECHNICAL FEATURES	
Connections	1/2"-1/2" (f.f.) or 1/2"-3/4" (f.f.)
Dimensions H x Z x Int	20 x 7 x 4 (cm)
Max. dosing	4 p.p.m. (mg/l)
Refill autonomy	12÷15 m <sup>3</sup>
Max. pressure	10 bar
Max. flow rate	1,5 m <sup>3</sup> /h
Pressure loss	0,2 bar
Room temperature	5°C to 50°C (41°F to 122°F)
Water temperature at the entry	5°C to 50°C (41°F to 122°F)
Incorporated by-pass	YES



DOSAPHOS		
Model	Dosaphos Dima 1/2"-1/2"	Dosaphos Dima 1/2" - 3/4"
Code	105.050.70	105.060.70
Materials	Brass/San	Brass/San

# 4

## ANTI-SCALE KIT 200 - 250 - DIMA

METERING

Proportional dosing units plus eight refills

The **ANTI-SCALE KIT** is a practical box containing one proportional dosing unit (Dosaphos 200 or 250 or Dima), plus one carton of Gelphos Rapid with 8 refills for about one year of treatment.

### TECHNICAL FEATURES

Anti-scale kit 250 see Dosaphos Dima  
Anti-scale kit DIMA see Dosaphos 250 - 200  
Anti-scale kit 200 see Gelphos Rapid



## DOSAPHOS 500 - 600 - 700

Proportional dosing units

**DOSAPHOS 500 - 600 - 700** are anti-scale anti-corrosion dosing units for water systems, storage boilers and big-sized exchangers. DOSAPHOS 500 - 600 - 700 made of chromium-plated brass and plastic material for potable water. They are available in the packing with 0,5 kg GELPHOS P refill.

### TECHNICAL FEATURES

Connections	1" - 1" (f.f.)
Dimensions H x L (cm)	18x11(500) - 23x11(600) 23x13(700)
Max. dosing	4 p.p.m. (mg/l)
Autonomy	100 m <sup>3</sup> (500) 120 m <sup>3</sup> (600-700)
Max. pressure	10 bar
Max. flow rate	5,8 m <sup>3</sup> /h
Pressure loss	0,2 bar
Room temperature	5°C to 50°C (41°F to 122°F)
Water temperature at the entry	5°C to 50°C (41°F to 122°F)



### ANTI-SCALE KIT

Model	Anti-scale kit 200	Anti-scale kit 250	Anti-scale kit Dima 1/2"	Anti-scale kit Dima 1/2" - 3/4"
Code	104.510.00	104.520.00	104.560.00	104.570.00
Materials	Brass/San	Brass/San	Brass/San	Brass/San

### DOSAPHOS

Model	Dosaphos 500 1"	Dosaphos 600 1"	Dosaphos 700 1"
Code	105.070.30	105.070.20	105.070.00
Materials	Brass/San	Brass/San	Brass/San