# H20 LAB water treatment

### DP1

# Polyphosphate Doser

The **DP1** polyphosphate doser provides the water with a suitable antiscale and **anti-corrosive treatment**, **leaving its potability characteristics unchanged**.

It is mainly applied upstream of domestic hot water supply systems, directly at the cold domestic water inlet to the boiler.

The DP1 polyphosphate doser has a small footprint, **simple and quick installation**, **low product consumption** and low maintenance costs. Equipped with a ½" swivel brass shank, it **adapts to all types of boilers**; the built-in shut-off system allows maintenance without the need for other shut-off devices. A polyphosphate charge is included in the package.

The use of polyphosphate silicates guarantees:

- Scaling inhibition. Helps reduce the formation of adherent deposits of insoluble carbonates on heat exchange surfaces.
- Attenuation of previous scaling (restorative effect). Progressive reduction of the layer of deposits formed in the installations in the absence of suitable chemical conditioning.
- Corrosion inhibition. Hinders corrosive phenomena by facilitating the formation of a protective film on parts in contact with water.



- 1 Input flow
- Passage through the filter cartridge
- Passage through the polyphosphate doser
- Treated water passage and subsequent entry into the system
- 5 Flow entry into the system

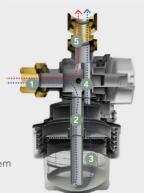
**CLOSED BYPASS MODE** 

Closed filtering chamber

Flow entry into the system

Input flow

Open by-pass





## THE FILTRATION PRINCIPLE

Scaling is the result of calcium and magnesium deposits on pipe walls, exchange surfaces and control and regulating parts.

- The amount of deposit depends on:

  the temperature of the water;
- water hardness:
- the volume of water used.

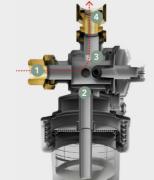
The sodium and potassium **polyphosphates** inside the container **combine with calcium and magnesium** ions to form a chemical compound similar to limescale but which cannot adhere to pipe surfaces. The precipitation of calcium and magnesium and **the consequent formation of lime deposits is prevented**.

In addition, polyphosphates are deposited on the surface of the pipes, forming a **protective film to protect them from fouling** and remove already deposited limescale.

#### INSTALLATION

The polyphosphate doser is to be installed on the domestic cold water line at the boiler inlet. It can be installed vertically or horizontally.

Do not install the DP1 in conditions of direct exposure to the weather, and installation in environments where the temperature may fall below  $5^{\circ}$ C (frost danger) is not recommended.







VERTICAL INSTALLATION

HORIZONTAL INSTALLATION

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Supercompact	Increases the lifespan of the boiler	<b>C</b>
High efficiency	Maintains optimum system efficiency	
Eliminates impurities	Quick and easy to install	
Fights corrosion	Limited overall dimensions	

