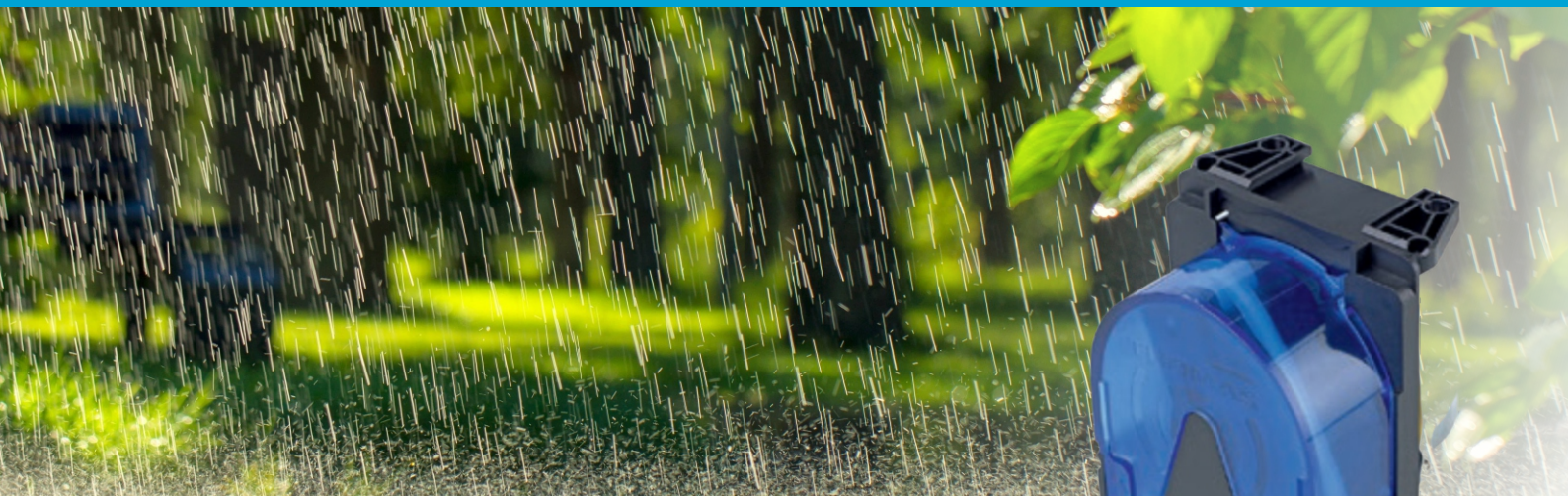


# CHEMICAL DOSING



## DESCRIPTION OF ADDITIONAL EQUIPMENT

Chemical dosing is a device necessary for phosphorus removal or pH adjustment. It works depending on the measured amount of wastewater and dispenses chemicals according to the set value of the chemical concentration per 1 m<sup>3</sup> of treated water. This prevents the treatment plant from being overdosed by chemicals. It is an additional device which is located directly in the treatment plant and is used for chemical treatment of biologically treated wastewater. Chemical dosing consists of a chemical tank and a dosing pump by which the chemical is dosed into the treated water automatically according to the set value of the chemical concentration per 1 m<sup>3</sup> of treated water. The device can also be used to regulate the pH in the treatment plant.



## TECHNICAL PARAMETERS

WWTP size [PE]	5 - 150
Dosing pump type	Thomas SR 18
Objem zásobníku chemikálie	5 l
Weight [dos. pump / chem. tank]	0,23 kg / 5 kg
Type of P removal chemical	see WWTP manual
Power consumption	5,5 W
Voltage	230V /50Hz
Achieved removal efficiency P	99% (0,05 - 0,2 mg/l)



## REGULATION OF PHOSPHORUS IN TREATED WATER

The equipment for dosing chemicals is installed in the WWTP especially in the case of a request from the relevant water authority for the regulation of phosphorus in treated water. These chemicals are used to remove phosphorus from treated water which is not sufficiently removed from the water in a biological way. When phosphorus compounds enter surface waters they cause their eutrophication. The result is a disproportionate growth of algae and cyanobacteria. However, when water is used for watering, phosphorus compounds have a significant fertilizing effect. Removing it would be rather counterproductive.