

Innovative drinking technology



I-Flush	Article number	Description
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I-Control	13.00.60000	Flush computer
I-Flow	12.00.01000	Pressure regulator
Actuator	12.01.20000	Automatic flushing system 24 V
I-Flow end air outlet set	12.00.01500	End air outlet set
Drain	60.01.10602 *	16 mm. Spiral tubing, 2,5 mtr working length
Biofilm sensor	11.00.60500	Dirty water and biofilm detection sensor
Temperature sensor	13.00.59000	Water temperature sensor

^{*} Several drainage options available.

Advantages of the I-Flush total automatic flushing solution:

- Pre-programmed flushing programs for rearing, layers and broilers
- Ability to pre-set the desired flushing program
- No water or medicine wastage
- The solenoid valve is a normally closed type. With power failure, the valve closes preventing damage
- Automatic flushing saves time and expense compared to manual flushing
- The I-Flush system provides an optimal hygiene solution for poultry houses

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AGRÍ AND AUTOMATION



Innovative drinking technology

I-Flush

Total hygiene solution



The automatic flushing solution for all poultry drinking systems







The Impex I-Flush total hygiene solution is an automatic flushing system for drinking lines in poultry houses used in floor and cage drinking systems. The I-Flush total hygiene solution consists of the following:

- 1: I-Control flush computer
- 2: I-Flow pressure regulator
- 3: I-Flow end air outlet set
- 4: Drainage

1: I-Control flush computer:

The I-Control flush computer is the basis of the I-Flush total hygiene solution. This computer controls the entire flushing system by processing information received from the various sensors.

With the I-Control flush computer, settings can be customized to meet the following individual preferences:

- Duration of the flushing program: to preset specific flushing preferences in the I-Control.
- No water wastage: the computer can calculate and pre-set the exact amount of water to fill or flush the drinking lines. This option is available for a maximum of 1 drinking line
- The flushing program can be interrupted when medicating to prevent medication wastage.
- Option of single, total or automatic flush.

The I-Control requires a 110V or 240V connection and is used for up to 10 groups and if there is a sufficient water supply up to 3 drinking lines per group.

2: I-Flow pressure regulator:

The I-Flow pressure regulator has a manual flush option. To automatically flush the drinking lines, an optional actuator can be connected to the built-in solenoid valve on top of the pressure regulator. The solenoid valve is built in the pressure regulator, so there is no interference with other parts of the drinking system and optimal flushing system operation is guaranteed.

3: I-Flow end air outlet set:

The I-Flow end air outlet set is installed at the end of each drinking line. The end set has three exits: one for the air outlet tube, one to connect a drainage pipe for flushing and one for use when the drinking line is drained. To open or close the end set, the integrated two-way ball valve is used. The air outlet tube automatically closes during flushing. The I-Flow end set can be used for various drinking systems, using different types of clamps and connectors.

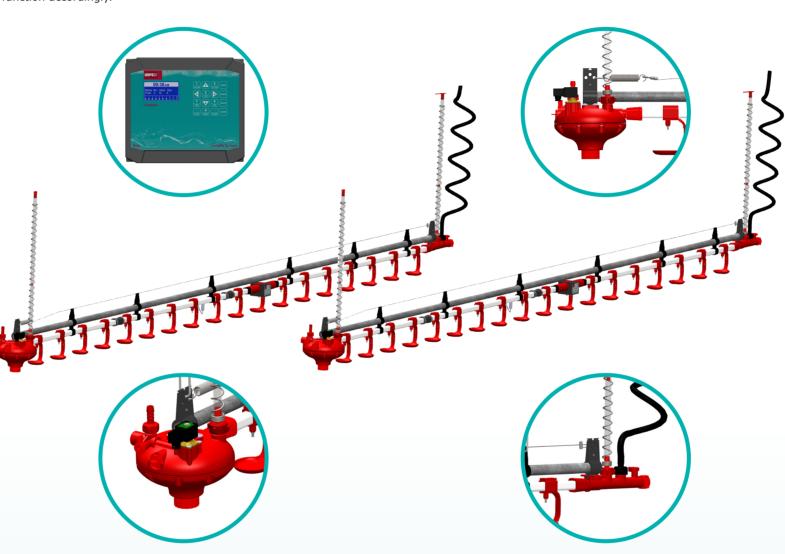
4: Drainage:

A connection can be made between the I-Flow end air outlet set and the main drainage pipe, by using a straight or spiral hose. This drainage pipe should be at least 50 mm in diameter.

I-Control

Flush computer

The I-Control flush computer controls flushing and therewith the total hygiene in the drinking system. With the I-Control flush computer, flushing can occur manually or automatically. The individual sensors in the drinking lines register the necessary information and relay it to the I-Control flush computer. Through preset programs the I-Control will function accordingly.



I-Flow actuator

Actuator and solenoid valve

The I-Flow pressure regulator has a built-in solenoid valve to connect an actuator on top of the regulator. With this specially built-in solenoid valve, an interference in the use of the actuator and the pressure regulator is prevented as all parts function optimally. The solenoid valve is a normally closed type so no damage will occur in the event of power

I-Flow regulator

Pressure regulator

The I-Flow pressure regulator is unique as it has a builtin solenoid valve to connect the actuator on top of the pressure regulator. The I-Flow pressure regulator has a three-way ball-valve to adjust the functioning of the pressure regulator to regulate, flush or close.

I-Flow end air outlet set

End air outlet set

With the I-Flow end air outlet set, the I-Flow pressure regulator functions optimally. The three separate exits make it simple to flush or drain the system. The air outlet tube pipe closes automatically during flushing.

Sensor options

To make optimal use of the I-Flush total hygiene solution, the system can be expanded with the following options:

Biofilm sensor Temperature sensor

Biofilm sensor:

The Biofilm sensor is a sensor which detects dirty water and biofilm. One sensor per house is mounted in the drinking water lines. The sensor detects the cloudiness of the water by means of light. The LED light on the control unit indicates the pollution of the water by displaying a color corresponding to the stage of pollution.

The maximum stage of pollution that is allowed is set in the Biofilm sensor. When the preset maximum stage is exceeded, the lines are automatically flushed.

To prevent excessive flushing, the maximal number of flushing rounds can be set in the I-Control flush computer. If cloudiness of the water does not dissolve during flushing and the maximal number of flushing rounds has been reached, the computer will emit an alarm indicating that additional action is required.

Temperature sensor:

The Temperature sensor measures the temperature of the water in the drinking line. The sensor is placed approximately 2/3 from the start of one of the drinking lines. It is also possible to place a second sensor in the water supply line. The sensor measures the temperature and sends this information to the I-Control flush computer. When the preset maximal temperature is reached or the temperature difference between the water supply line and the drinking line is too high, the drinking lines will be automatically flushed.

As with the Biofilm sensor, the maximal number of flushing rounds based on temperature can be set in the I-Control flush computer. When the sensor continues to measure a temperature beyond what is allowed and the maximum number of flushing rounds has been reached, the computer will emit an alarm indicating that additional action is required.



