Instructions Manual
Honey Bottling Line

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SAFETY INSTRUCTIONS

„PREMIUM" dispenser with table and transport belt

Before first use read the manual carefully and follow the instructions contained therein. The manufacturer is not liable for damage caused by equipment used inappropriately or by incorrect handling.

Intended use

A device intended for confectioning honey into glass containers (jars).

BEZPIECZEŃSTWO ELEKTRYCZNE

Make sure that the nominal voltage of the device and power source are compatible and the socket is grounded.

The electrical supply system must be fitted with a residual-current circuit breaker with rated tripping current not higher than 30mA. Performance of the circuit breaker should be checked periodically.

Periodically check the condition of the power cord. Replace the power cord if damaged. Replacing the power cord can only be performed by the manufacturer or by qualified personnel.

Do not use the device if the power cord is damaged!

A short circuit at the controller outputs may lead to damage of the device.

OPERATION SAFETY

a) The device is not intended for use by persons (including children) with limited physical, sensory or mental abilities, or by inexperienced users, unless under supervision or with instructions given by an accountable party.

   This device is not a toy, and shouldn't be used as one. Children should not to play with it.

b) In the event of damage to the device, to avoid any health and safety risks, repairs should be carried out only by qualified personnel.

c) Do not use the device near any flammable materials.

d) Never carry out any maintenance or repairs during operation or if the device is plugged in!

e) In case of any danger, use the safety switch immediately.

   The device can be restarted after the hazard has been eliminated.

f) For indoor use only. The device is not suitable for outdoor use.

g) Protect the motor and the control unit from moisture (also during storage).

h) Do not pull the power cord.

i) Keep the power cord away from heat sources and sharp edges to ensure its good condition.

Waste disposal and environmental protection

The used product must be disposed in accordance with the local regulations. Return the device to a collection point from where it can be submitted for environmentally compatible recycling.

The consumer has the right to return used equipment directly to the manufacturer's distribution network, free of charge, while replacing it with a new unit as long as the used device is of the same kind and same application as the newly purchased device.

1. Technical description

The device is designed for one person operation, so that they can quickly and efficiently handle the process of filling jars with honey.

Line components:

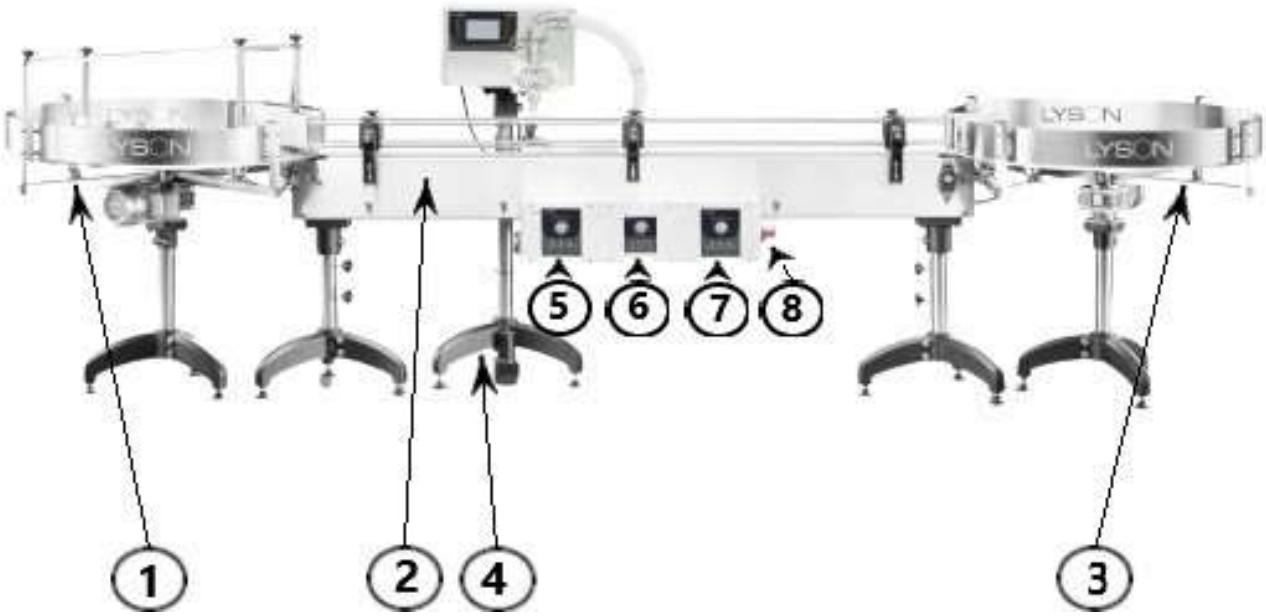
1.1 Two rotary tables ø900. The tables have the possibility to manually adjust the guides according to the size of the jars. Both tables have the possibility to change directions of rotation and rotational speed.

1.2 Pump dispenser "Premium" with electric height adjustment of the dispenser lift up to 150 mm - see instruction manual.

1.3 Transport belt, length 2000 mm. Transport belt equipped with the possibility of adjusting the height of the conveyor and the width of the guides to the required jar size.
Tables and dispenser made of acid-proof stainless steel.

2. Technical data

Overall length	3800 mm
Width	1200 mm
Height	1300 mm
Weight	approx. 130 kg
Filling range	Jars from 250g to 1250g
Filling capacity	approx. 400 jars 500g / H. (honey type dependant)
Filling accuracy	up to 1200g jars +/- 1%, above 1200g jars +/- 1,5%
Power supply	230 V / 850W



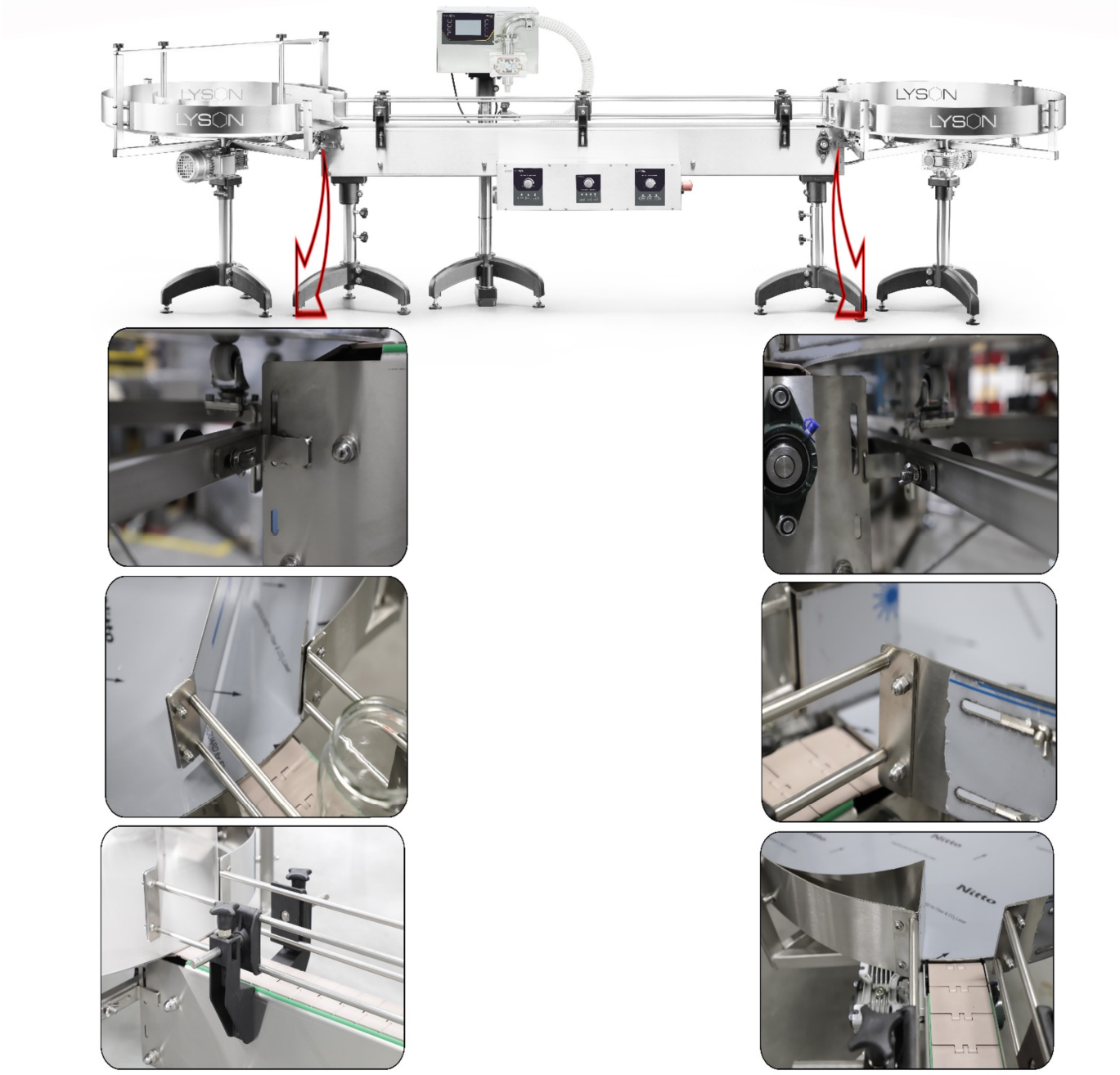
Fot.1

Line elements:

1. feeding table
2. conveyor belt
3. receiving table
4. Dosing pump with toothed pumping module and dosing machine height adjustment actuator
5. Feeding table controller 6.
6. Conveyor belt controller unit
7. Receiving table controller
8. Safety switch
9. Fuse socket 10A.
10. Main switch

3. Assembly

3.1 The assembly of the line should be started by placing the line in a line and adjusting the height of the conveyor in relation to the tables and screwing them together - photo 2 .



Fot.2

3.2 Adjust the guides according to the preset jar capacity – pt.4. Connect the line elements to the power supply sockets.

3.3 Connect the line elements to the power sockets.

3.4 Set the limit switch for positioning the jar in relation to the honey feeding nozzle in the dispenser - point 4.

3.5 Set the dispenser height and program the controller for the preset amount of honey - in accordance with the instructions "Premium dispenser".

3.6 Switch on the devices in the following order:
- table no.3,
- conveyor belt no.2. IMPORTANT ! - make the settings on the conveyor while pressing the "SERVICE" service button (photo A)
- table nr1.

After placing the required jar on table nr. 1, adjust the speed of the tables and the conveyor.

3.7 After having adjusted the speed, switch the "START" button on the conveyor controller.

3.8 Perform test filling of the jar with honey in order to check the accuracy of filling.

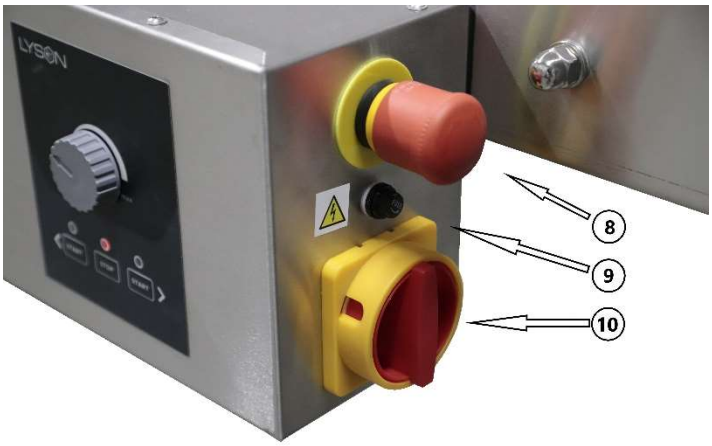
Fot.A

Service button

4. Tables and conveyor adjustment

4.1. Before adjusting the table and the conveyor belt:

- Connect the line to the mains, make sure that the safety switch "8" photo.3 is not engaged - by turning it slightly according to the indications on the red button,
- turn the main switch "10" photo 3 to position ("1").
- set knobs on controllers 5, 6, 7 (photo 1) to minimum
- place jars, into which we are going to dose honey, on the table "1" photo 1, photo 4



Fot.3

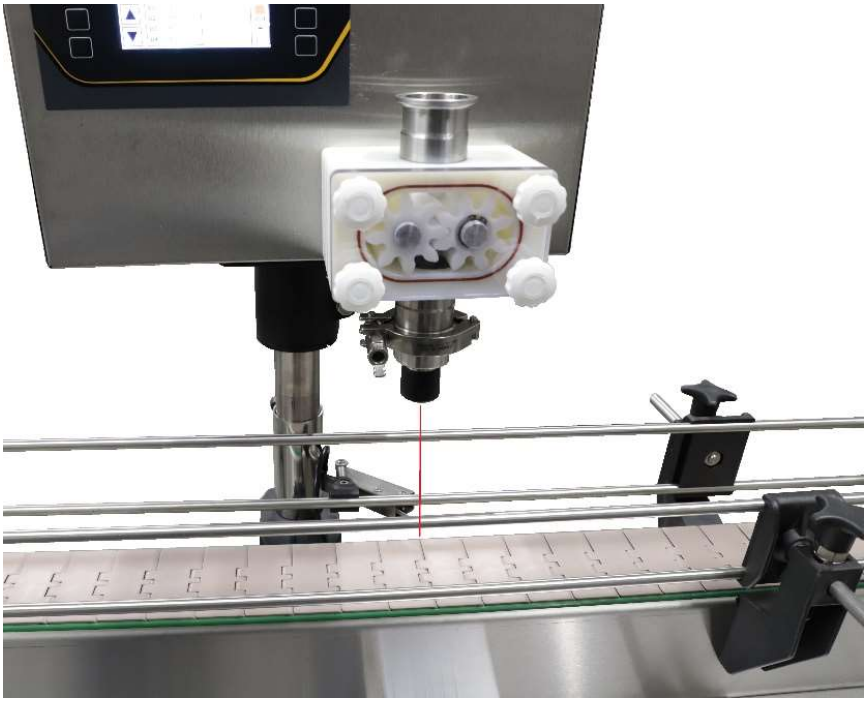
Fot.4

Fot.5

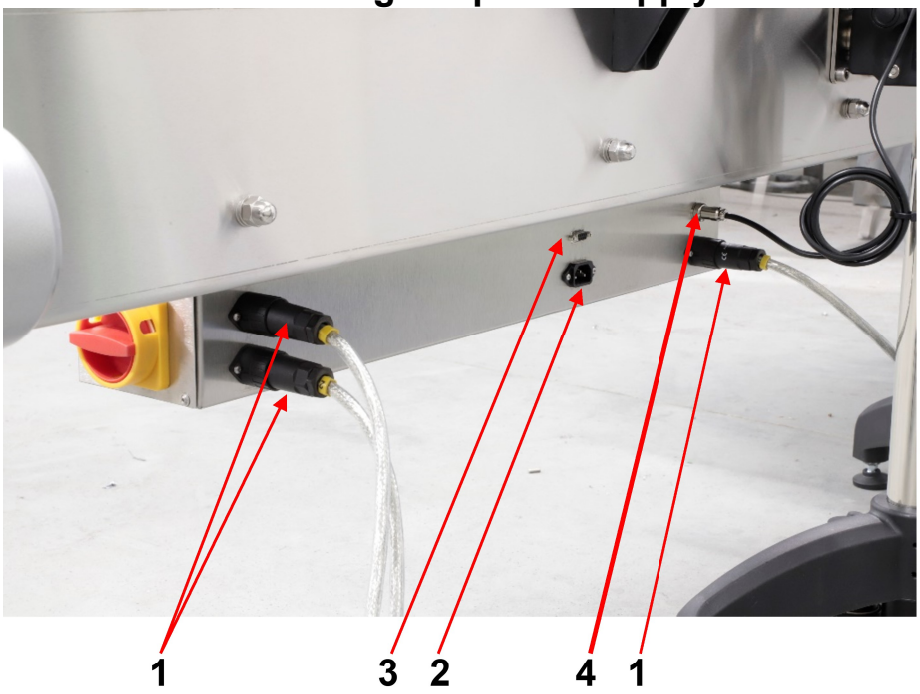
Positioning of guiding slides:

- *Place the jars, to which we are going to dose honey, on the rotary table "1" in photo 1*
- *Move on to positioning all the guides at the rotary table and at the transport line, so that the jars move with slight slack along the conveyor*
- *We set the position of the guides by releasing the clamping screws*
- *Set the guides according to the size of the jars trying out a given type of jar*
- *Set the guides on the rotary table in such a way that one jar fits loosely*
- *On the transport line the runners should be positioned in such a way as to keep a small clearance.*
  Too tightly positioned slides will block the smooth movement of the filled jars.

After setting the guides check the operation of the table and the belt. If the jars move smoothly, set the limit switch stopping the jars under the dosing nozzle. Check the limit switch setting with the table and conveyor belt switched on using the "SERVICE" button (photo A) of the "6" controller (photo 1). Each jar which is being fed should stop for a moment on the belt under the dosing nozzle.



4.2. Connecting the power supply cords:



DB9 communication cable

1 - Plug in the black plugs as indicated.
2 - Power supply socket
3 - Socket DB9 for dispenser - transporter belt communication (plug in communication cable DB9)
4 - Limit switch connection socket

5. Electrical installation

The line is powered by 230 V. Each component has a separate controller unit. Power consumption for the following units :

1. conveyor belt - 370 W
2. 2 rotary tables - 120 W + 120 W
3. dispenser - 240 W

All components of the line are equipped with speed control. In rotary tables no. 1 and no. 3 the possibility of changing the rotation directions has been enabled. Detailed operating instructions of the dispenser can be found in the additional attached manual - "Premium dispenser".

Warranty

The product purchased from the Lyson Company is covered by a manufacturer's warranty. The warranty period is 24 months from the date of purchase.

All purchased products come with receipts or VAT invoices.

Warranty details at: **www.lyson.com.pl**

* Product photos are illustrations and may sometimes differ from the actual appearance of the item. However, this does not change their basic properties.

Instructions Manual

„PREMIUM” pumping and bottling device
with height adjustment

LYSON

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The manual covers following devices (codes):

W204020

Before first use read the manual carefully and follow the instructions contained therein. The manufacturer is not liable for damage caused by equipment used inappropriately or by incorrect handling.

Intended use

The device is designed to automatically fill honey into the jars, and pump or cream honey

Compatible with **W204004** bottling automatic line

Electrical safety

a) Make sure that the nominal voltage of the device and power source are compatible and the socket is grounded.
b) The electrical supply system must be fitted with a residual-current circuit breaker with rated tripping current not higher than 30mA. Performance of the circuit breaker should be checked periodically.
c) Periodically check the condition of the power cord. Replace the power cord if damaged. Replacing the power cord can only be performed by the manufacturer or by qualified personnel.
d) Do not use the device if the power cord is damaged!

Operation safety

a) The device is not intended for use by persons (including children) with limited physical, sensory or mental abilities, or by inexperienced users, unless under supervision or with instructions given by an accountable party.
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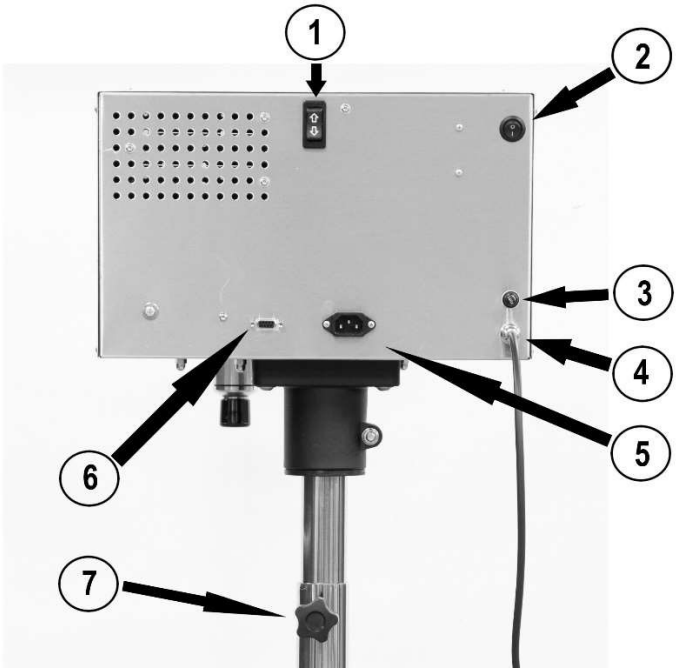
c) Do not use the device near any flammable materials.
d) Never carry out any maintenance or repairs during operation or if the device is plugged in!
e) In case of any danger, use the safety switch immediately.
The device can be restarted after the hazard has been eliminated.
f) For indoor use only. The device is not suitable for outdoor use.
g) Protect the motor and the control unit from moisture (also during storage).
h) Do not pull the power cord.
i) Keep the power cord away from heat sources and sharp edges to ensure its good condition.

Waste disposal and environmental protection

The used product must be disposed in accordance with the local regulations. Return the device to a collection point from where it can be submitted for environmentally compatible recycling.
The consumer has the right to return used equipment directly to the manufacturer's distribution network, free of charge, while replacing it with a new unit as long as the used device is of the same kind and same application as the newly purchased device.

Technical specifications:

- power supply 230 V
- power rating 240 W
- bottling capacity 400 jars 500 g/h (honey type dependant).
- accuracy up to 1200g +/- 1%, above 1200g +/- 1,5%
- can be used as a pump
- elf priming, low speed pump with toothed pumping module
- all parts that come into contact with honey are made of stainless steel or food-approved synthetic materials.
- height adjusted column



Description:

1) height adjustment switch
2) mains switch
3) fuse 10A
4) height adjuster power supply
5) power cord socket 230V
6) DB9 comm socket
(to connect a limit switch, a foot-switch or a cable for communication with the W204004 line transporter)

7) height adjustment locking knob

FUNCTIONS

Dosing / extra dose mode

Presented FM-02 controller is a device that controls the operation of the dosing pump and controls the execution of the creaming cycle. The device is fully programmable and gives the possibility to precisely set the dosing sequence. The operation of the device is facilitated by an interactive, intuitive screen menu.

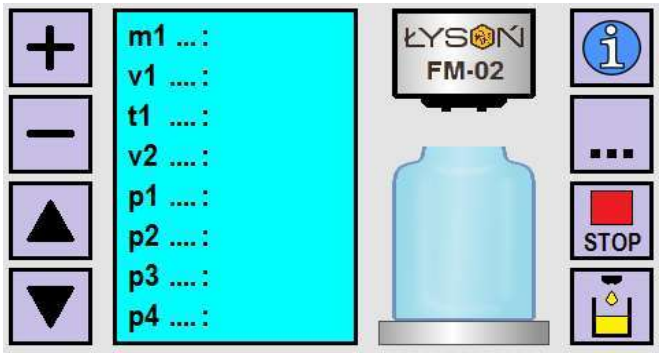


Fig 1. Controller operation screen – selected dosing / extra dose mode

Button	Function
„plus” button	Increase the value of the selected parameter.
„minus” button	Decrease of the value of the selected parameter.
„up” button	Navigating through the parameters – place the cursor on the parameter to modify it
„down” button	
„i” button	Display of the currently selected parameter description. Button active in stop state.
„…” button	Operation mode selection button: dosing <-> creaming / pumping. Button active in stop mode.
„STOP” button	Stop button
„extra dose” – 1g button	Single application of the minimum dose. Pressing and holding the button dispenses 1g and then activates continuous weighting mode which continues until the button is released.

Basic mode parameters

Programming the dispensing mode of the controller is done by modifying a set of parameters that configure the dispensing process. Modified parameters directly influence the shape of the dosing curve - presented on figures 2 and 3. All modifiable parameters have been gathered in groups - having a common letter index.

PARAMETER	FUNCTION
m1	Parameter regulates the amount of pumped honey in one dosing cycle. The range of adjustment is 4-45000[g]. Setting raster is 1[g]. The displayed value corresponds to the weight of the dosed honey - scaled for the specific density and temperature of the pumped honey. The parameter setting does not reset after switching off the power supply.
v1	The parameter regulates the speed of dosing. The adjustment range is 50[%] - 100[%]. The setting raster is 10[%]. The parameter setting does not reset after switching off the power supply.
t1	Parameter regulates the time of reverse movement of the pump rotor - blocking the dripping of the honey. The range of adjustment is 10-900[ms]. The setting raster is 10[ms]. The parameter setting does not reset after switching off the power supply.
V2	Parameter regulates the speed of the pump during extra dose filling (one dose of 1[g]). If the operation time in the pumping direction remains constant, the change of speed results in the change of the dosed amount. Increasing the speed increases the dosed amount. The range of adjustment is 40[%] - 100[%]. Setting raster is 5[%]. The parameter setting does not reset after switching off the power supply.

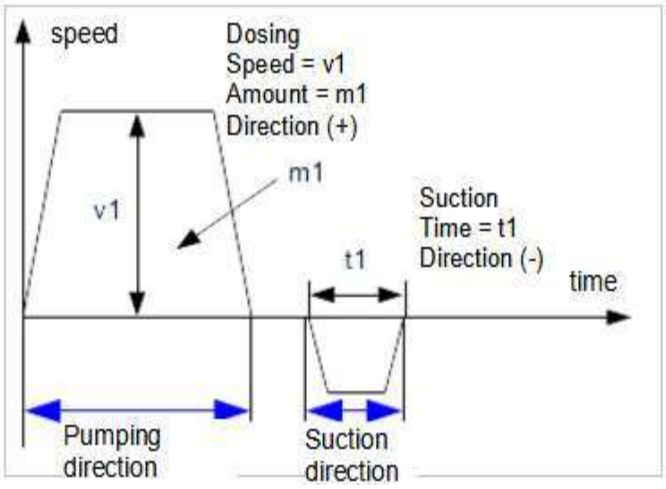


Fig 2. m1 dosing cycle.

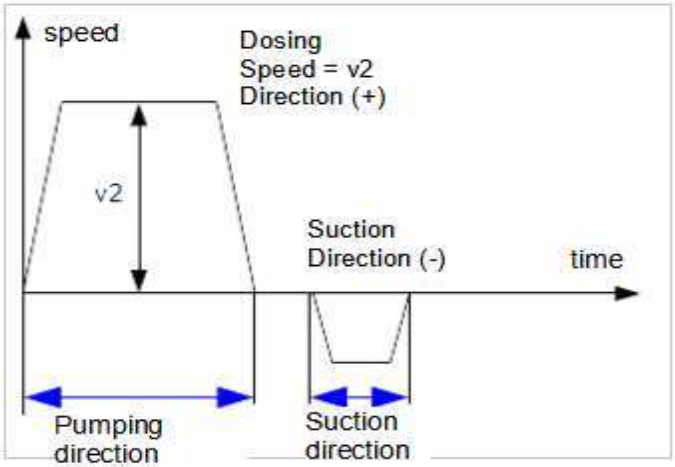


Fig 3. extra dose cycle 1[g]

Additional mode parameters

PARAMETER	FUNCTION
p1	Counter of dosing cycles. It is possible to enter any value as the starting value. The counter range is 0-999.
p2	Filling progress indicator. The displayed value represents the percentage of filling completion in relation to the value set by parameter m1. The indication varies from 0[%] to 100[%]. The indication raster is 1[%].
p3	Positive correction factor. The factor enabling precise increase of dosed mass m1 - in case when the dosed mass is smaller than the set value and the 10g jump is too big to precisely set the required dose. Increasing of the factor value increases the dosed amount. Range of settings is 0-50. The coefficient is not related to the current mass setting, i.e. it adds the same value (mass) to the setting of 50[g] as to 1500[g]. The parameter setting does not reset after switching off the power supply.
p4	Negative correction factor. The factor enabling precise decrease of dosed mass m1 - in case when the dosed mass is bigger than the set value and the 10g jump is too big to precisely set the required dose. Increase of the factor value decreases the dosed amount. Range of settings is 0-20. The factor is not related to the current mass setting, i.e. it subtracts the same value (mass) to the setting of 50[g] and 1500[g]. The parameter setting does not reset after switching off the power supply.

CREAMING / PUMPING MODE

The process of creaming using a dispenser is based on the principle of pumping honey from one container to another. The process consists in cyclical pumping of the honey over several days until the appropriate consistency is achieved.

FIELD	FUNCTION
1	Pump status (START / STOP).
2	Pumping speed (50% … 100%).
3	Elapsed time counter. Changing the timer resets the counter
4	Time left to the program finish

Fig 4. CREAMING / PUMPING MODE screen

BUTTON	FUNCTION
Upper „plus” button	Increase of the creaming / pumping speed. Setting range 50% ... 100%.
Upper „minus” button	Reduction of the creaming / pumping speed. Setting range 50% ... 100%.
Lower „plus” button	Increases the timer time after which the pump will stop automatically. The display 00:00:00 deactivates the automatic pump stop function. Change of setting possible in start mode.
Lower „minus” button	Reduces the timer time after which the pump will stop automatically. The display 00:00:00 deactivates the automatic pump stop function. Change of setting possible in start mode
„I” button	Help screen
„…” button	Operation mode selection button: dosing <-> creaming / pumping. Button active in stop mode.
„STOP” button	Pumping stop button
„START” button	Pumping start button

CONTROLLER DIAGNOSTICS

The FM-02 controller is equipped with a set of advanced diagnostic procedures – allowing to perform tests. In order to enter the diagnostics mode, press the button no. 5 in the appropriate phase of the controller start-up (see figure below).

Fig 5. Controller screen view during start-up

Button's numbers

The diagnostics screen is divided into 14 sections with the functions described below. The diagnostics screen disappears automatically after approximately 25 seconds.

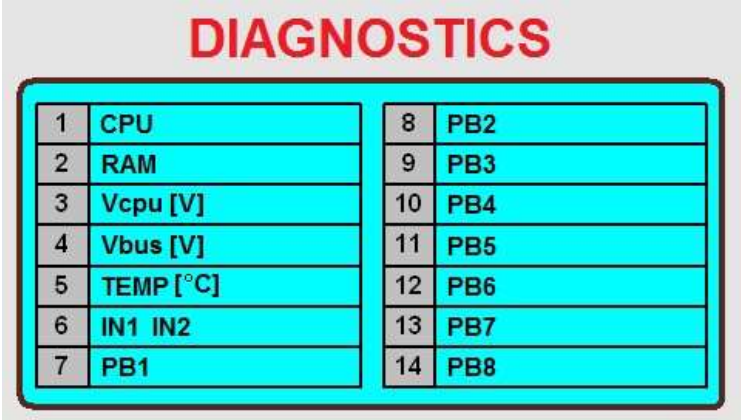


Fig 6. View of the controller diagnostics screen.

Section	Description	Indication	Function
1	CPU	1E9705	Displaying a value other than 1E9705 indicates damage to the main processor.
2	EEPROM	OK / ERROR	If repeated (despite restarts of the controller) ERROR indication means damage of the controller EEprom memory cell/s.
3	Vcpu [V]	4,60 – 5,40	Measurement of the voltage supply to the controller's CPU module. Indication out of range means damage / overload of the power supply or damage to the CPU module.
4	Vbus [V]	4,30 – 5,70	Measurement of the voltage at the data communication interface to the inverter. Out of range value indicates inverter failure or interruption of the controller <> inverter connection.

5	TEMP [°C]	5 - 65	Measurement of the temperature inside the controller box. The values read should not exceed the specified range.
6	IN1 IN2	0 / 1 0 / 1	Testing the operation of the dosing start input (IN1) and the emergency button (IN2).
7	PB1	0 / 1	Button test 1.
8	PB2	0 / 1	Button test 2.
9	PB3	0 / 1	Button test 3.
10	PB4	0 / 1	Button test 4.
11	PB5	0 / 1	Button test 5.
12	PB6	0 / 1	Button test 6.
13	PB7	0 / 1	Button test 7.
14	PB8	0 / 1	Button test 8.

Error Codes

The FM-02 controller is equipped with advanced error detection mechanisms. The detection of any error initiates an emergency stop action and calls up the error report screen. The error report screen is displayed continuously. It is therefore necessary to switch off the power supply, remove the error source and restart the controller.

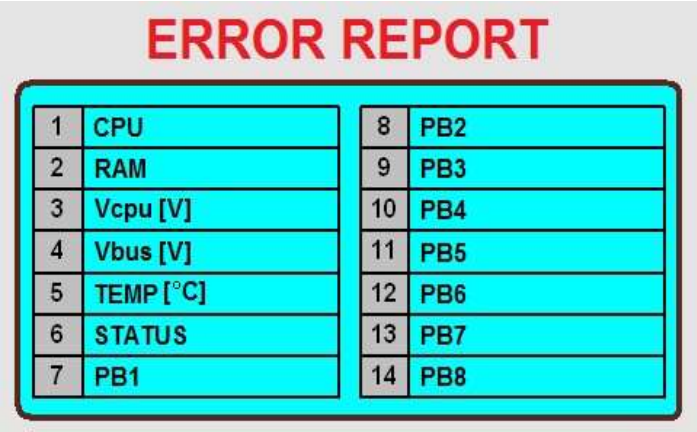


Fig 7. Controller error report screen view.

Section	Description	Indication	Error description
1	CPU	OK / ERROR	The ERROR indication means an error of the data memory of the main processor of the controller. The most frequent reason of such failure is a damage caused by electrostatic discharge.
2	RAM	OK / ERROR	The ERROR indication signals the detection of a controller RAM data consistency error. This situation is possible when the controller operates in an

			environment with too much interference. The reasons for this may be: damaged cable connections, damaged inverter, damaged inverter housing. Another reason for such an error may be damage to the main processor module caused mainly by electrostatic discharges
3	Vcpu [V]	OK / ERROR	The ERROR indication means that the measured supply voltage of the controller module has gone out of the acceptable range. Such a situation means a failure or overload of the 5V power supply, failure of the controller or damage of the cable connection power supply <> controller.
4	Vbus [V]	OK / ERROR	The display ERROR means that the voltage measured at the data communication interface to the inverter is out of the acceptable range. This indicates a fault in the inverter, a controller fault or connection between inverter <> controller.
5	TEMP [^{o}C]	OK / ERROR	The ERROR indication means that the temperature measured inside the controller housing has gone beyond the acceptable range of 5 oC to 65 oC. The reason for this can be an overload of the inverter or using the device in temperature conditions outside the allowed range.
6	STATUS	OK / ----	
7	PB1	OK / ERROR	The ERROR indication means that the button was pressed immediately after the power was switched on. If such a situation was not intentional action of the user, a damage of the button should be suspected - e.g. pressing and blocking caused by using too much force.
8	PB1	OK / ERROR	As above
9	PB1	OK / ERROR	As above

10	PB1	OK / ERROR	As above
11	PB1	OK / ERROR	As above
12	PB1	OK / ERROR	As above
13	PB1	OK / ERROR	As above
14	PB1	OK / ERROR	As above

NOTE!
HONEY INTENDED FOR DOSING SHOULD BE WARMED TO 30 °C.
POUR A LITTLE HONEY OVER THE TOOTHED MODULE BEFORE STARTING TO WORK WITH THE DISPENSER.

There are two ways of filling the module with honey:

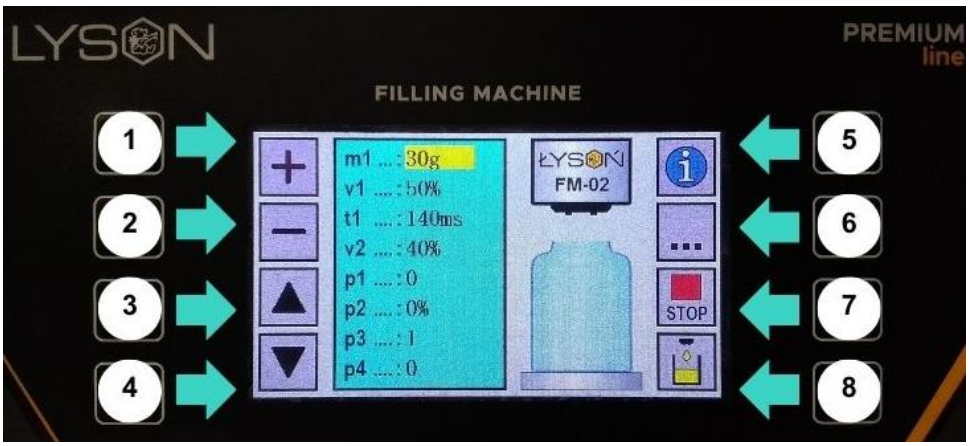
One:

1. Connect the hose to the dispenser module using a clamp, taking care to seat the gasket correctly.
2. Then pour approximately 1 kg of honey into the other end of the tube.
3. hold the hose up until the honey flows into the toothed module.
4. the tube is transparent so you can see when the honey flows into the module.
5. when the honey flows into the module place the hose in the honey container press and hold the "No8" button until the honey is sucked in.
6. when the hose is completely filled with honey release the No8 button - the dispenser will stop.

Two:

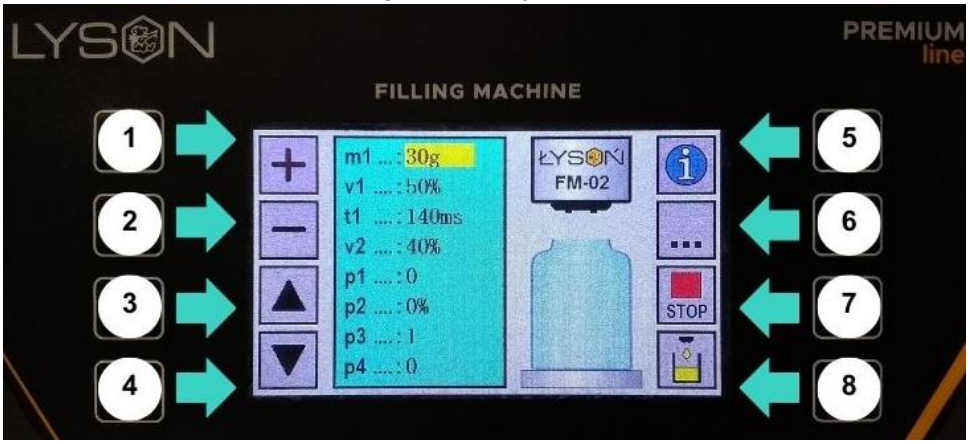
1. Pour honey generously over the rotor using a large syringe.
2. Put the hose on, taking care that the gasket is seated correctly. Place the other end of the hose into the container with honey and press and hold the "No8" button until the honey is sucked in and fills the suction hose. 3.
3. Pass a small amount of honey through to remove the air that has remained in the hose, thus avoiding uneven filling of jars.
4. remember to place a honey container or jar under the dispenser nozzle.
5. When the hose is completely filled with honey release the button no8 - the dispenser will stop.
6. after completing the above steps proceed to setting the dispenser.

SETTING THE CONTROLLER FOR HONEY DOSING



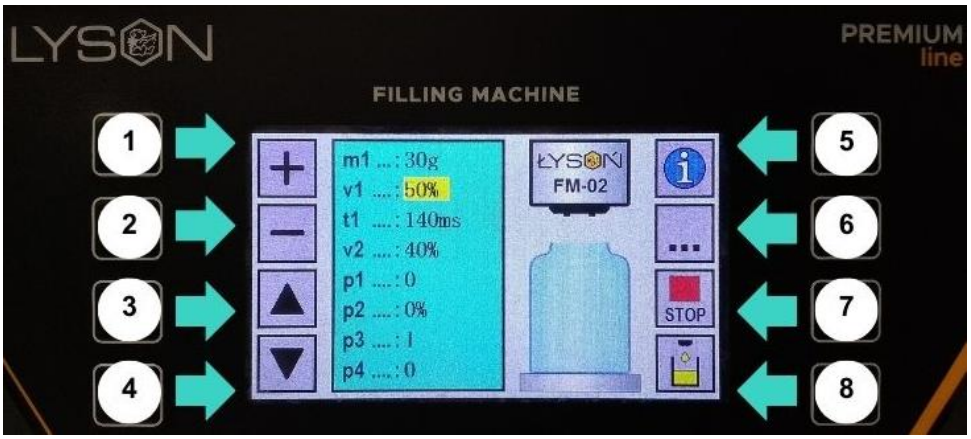
***Fot. 1** Increasing the value of a parameter* (button 1)

After starting the controller we can set the individual parameters needed for programming the controller. The dispenser after switching on displays the parameters which are set using the

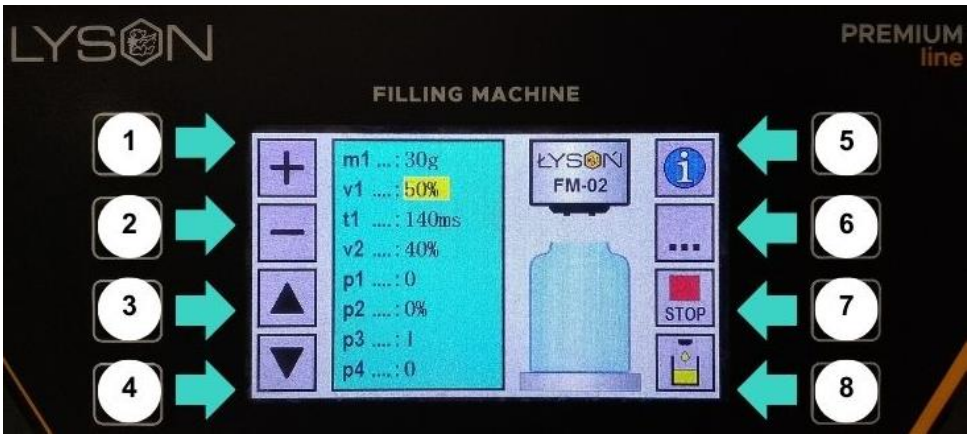


buttons **„plus” (*No1*)**, **„minus” (*No2*)**
Fot. 2 *Decreasing the value of a parameter* (button 2)

To move between parameters, press the **"up" arrow button (No3)** or the **"down" arrow button (No4).**



Fot. 3. *Parameter selection by "up" or "down" arrow (moving between parameters* - buttons 3 and 4*)*



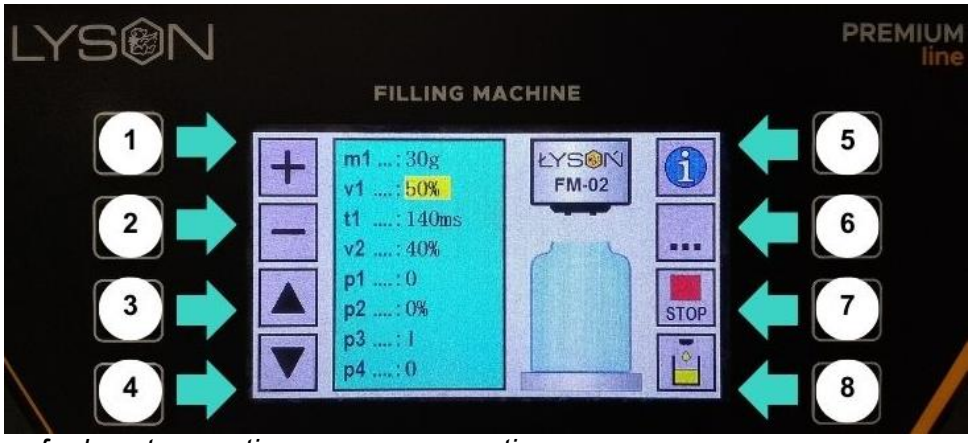
Fot. 4. *Parameter selection (moving between parameters* - buttons 3 and 4*)*

> The controller is ready to make changes to the parameters as soon as it is switched on.
> After setting, the dispenser automatically remembers the changed parameters.

DESCRIPTION OF THE PARAMETERS

– ***m1*** *parameter is used for setting the mass (number of grams of honey to be dosed by the device).*
The range of adjustment is 4-45000[g].
The parameter setting does not reset after switching off the power supply.
– ***v1*** *honey pouring speed - e.g. 100%. If the honey is pumped too quickly and aerates too much, then we decrease the filling speed, e.g. to 70%.*
The range of adjustment is 50[%] - 100[%].
The parameter setting does not reset after switching off the power supply.
– ***t1*** *is the reversal time in ms. It is best to set this parameter only after the first attempt to pour honey into jars. Then it is easy to determine whether the dispenser withdraws honey fast enough to prevent dripping. The range of adjustment is 10-900[ms].*
The parameter setting does not reset after switching off the power supply.
– ***v2*** *This parameter is used to adjust the dispenser to dispense 1g of honey. The adjustment consists in setting the rotor rotational speed with respect to the density, viscosity, and temperature of the honey.*
The parameter setting does not reset after switching off the power.

Place the jar on the scale, tare the scale, press button ***No8*** *(i.e. reweighing) and check the result on the scale if it indicates 1g.*
(manual option used when filling jars using button ***No8*** *or footswitch)*

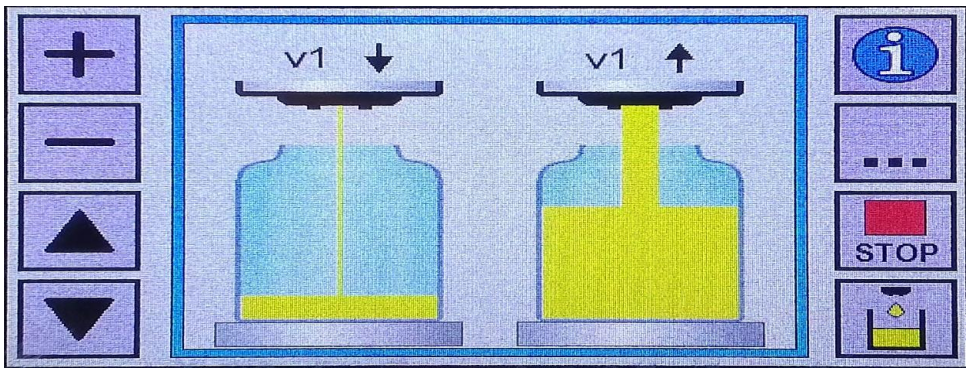


Fot. 5 *Button for boost or continuous pump operation*
*(*button 8 - *press and hold to run the pump continuously)*

- **p1** does not need to be set.
- he counter range is 0-999.
- **p2** not to be set, parameter displays jar fill level in %.
- **p3** Positive weight calibration (1g)
  It is used to calibrate (increase) the parameter **m1.**
  If set **mass m1=e.g. 500g** is not sufficient and after filling the jar the scale indicates **495g**, and there is no possibility to set parameter **m1** more precisely, then it is possible to make correction using parameter **p3.**
  Set parameter **p3=5** (i.e. missing 5g), which increases the weight of **m1** by 5. After starting work, the dispenser sums up the weight settings from parameter **m1+p3** and measures **500g** of honey into the jar.
  Adjustment range 0-50
  The parameter setting does not disappear after switching off the power supply.

- **p4** - Negative weight calibration (1g)
  It is used to calibrate (increase) the parameter **m1**.
  If the set weight **m1=e.g. 500g** is too large and after filling the jar the scale indicates **505g,** and there is no possibility to set parameter **m1** more precisely, then it is possible to make a correction using parameter **p3.**
  Set the parameter **p3=5 (i.e. 5g over)**, which increases the weight of **m1 by 5**. After starting work, the dispenser sums up the weight settings from the parameter **m1+p3**
  parameter and measures **500g** of honey into the jar.
  Adjustment range 0-20
  The parameter setting does not disappear after turning off the power.

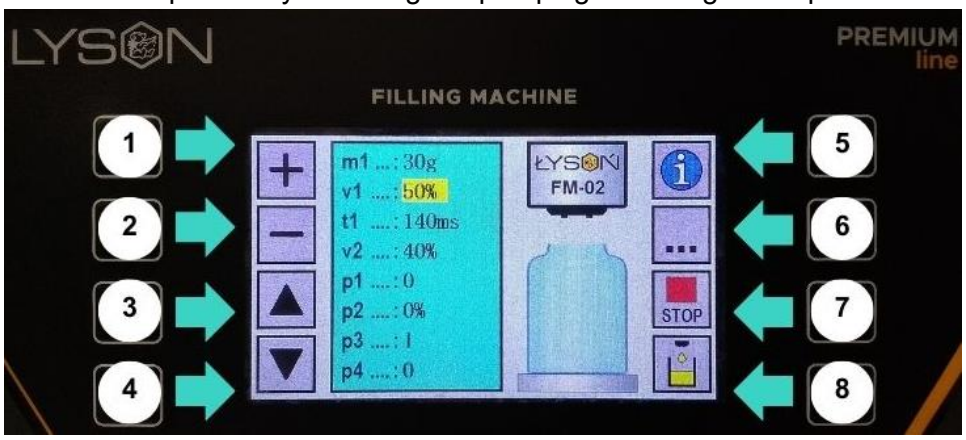
INFO BUTTON
It gives the possibility to display graphic information about the given parameter. Pressing the button activates the graphic display and pressing the "i" button (No5) deactivates the graphic display.This parameter is a form of hinting what the parameter is responsible for.



***Fot. 6** Info button* (button 5 - "i")

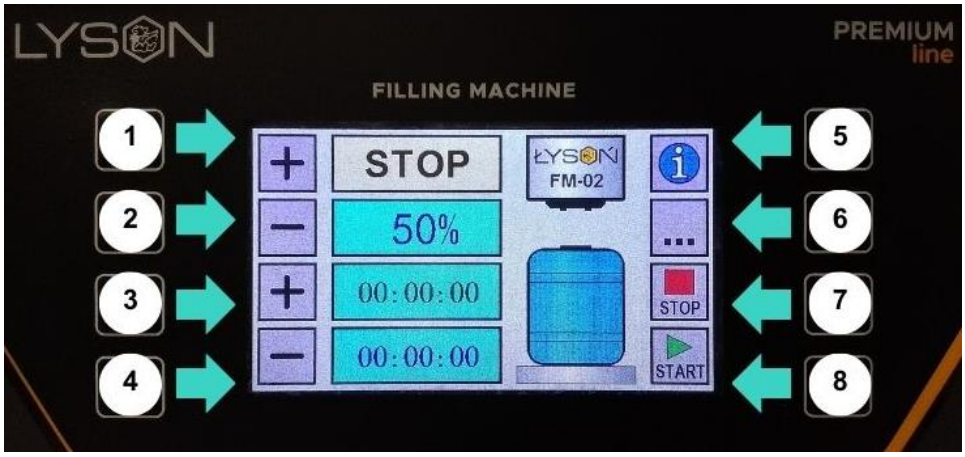
PUMPING/CREAMING MODE CONFIGURATION

The honey creaming mode involves pumping the honey, i.e. running the pump in continuous mode. The controller offers the possibility of setting the pumping/creaming for a specific time.

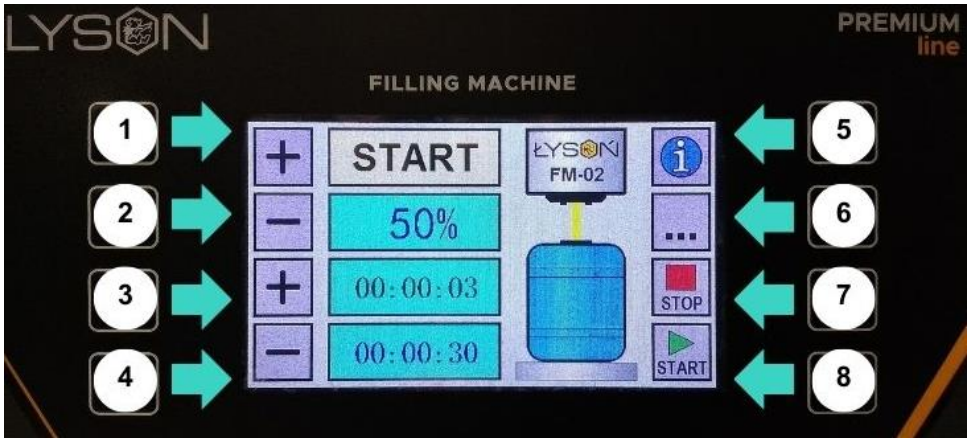


***Fot. 7** Entering the PUMPING/CREAMING MODE* (BUTTON 6)

After pressing button (...)No6 a panel will be displayed giving the possibility of pumping - creaming continuously or pumping for a set time min 15 s max 90h.

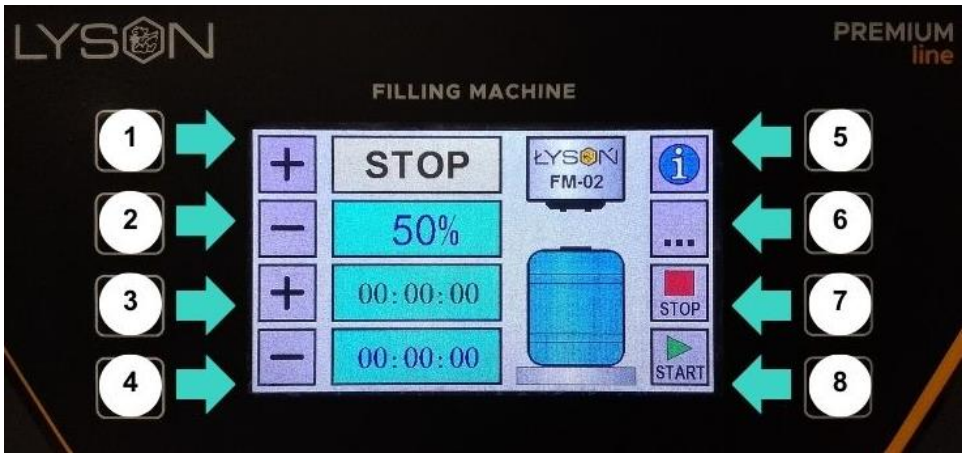


***Fot. 8** Control panel after activating the pumping/creaming mode* (button 6)



***Fot. 9** Switching on the pumping mode push-button No8 "START"*

The pump starts continuous operation until the "START" button is pressed.



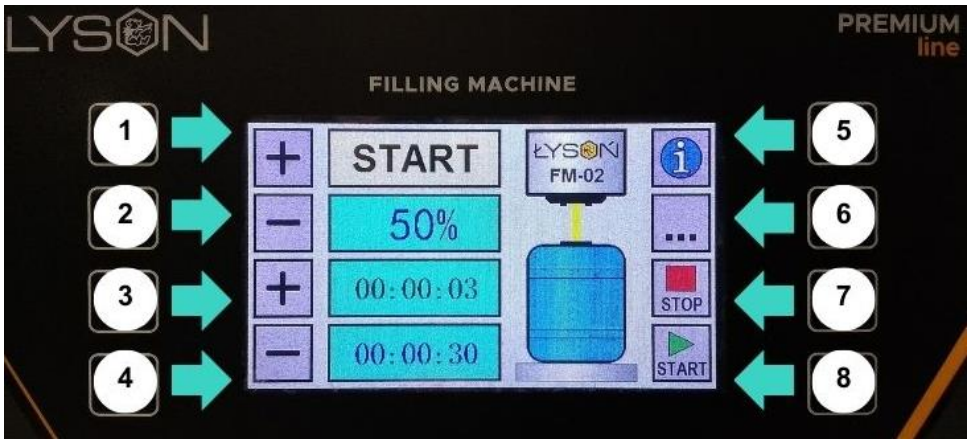
Fot. 10 *Switch off pumping mode push-button No7* ***(STOP)***

SETTING THE PUMP FOR A SPECIFIC TIME AND SPEED

- To set the pumping for a specific time, e.g.: for 20min. turn on the pumping/creaming mode (button **No6**)

Press the "**START" button (No8)**

- After activating pumping by means of the lower **"plus" (No3)** or **"minus" (No4)** we set the time for which the pump is to operate. After programming the time, the timer will start counting from the beginning and after the end of the programmed time it will turn off automatically..

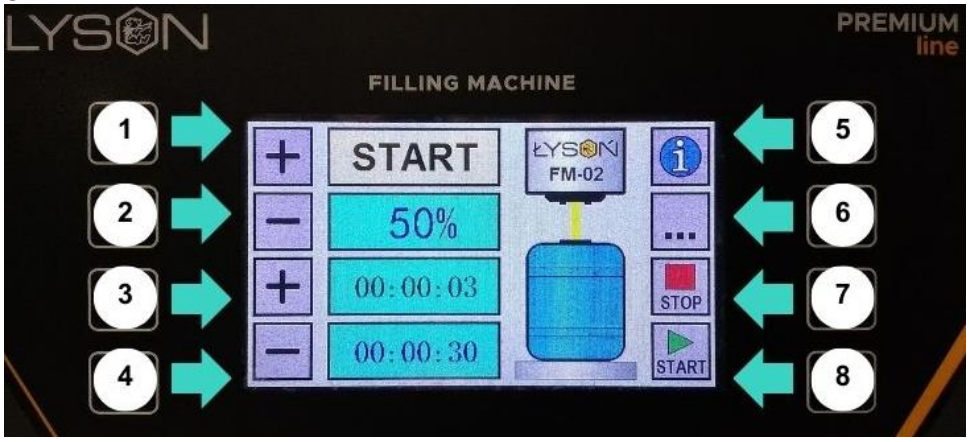


Fot. 11 *Lower* ***"plus" button (No3) or "minus" (No4)*** *set the pump running time.*

Sett the pumping/creaming speed with ***"plus" (No3)*** *or* ***"minus" (No4)****.*

With this parameter we change the speed of pumping/creaming honey. Changing the settings is possible during pump operation as well as in "STOP" mode.

Setting range 50% ... 100%.



Fot. 11 *The upper* ***"plus" button (No1)*** *or* ***"minus" (No2)*** *is used to increase or decrease the pumping/creaming speed*

Maintenance and cleaning

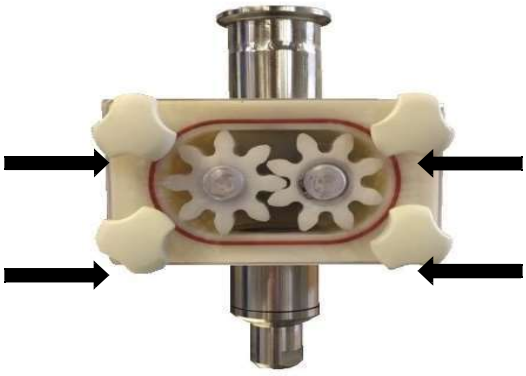
Pull the mains plug before starting maintenance.

IMPORTANT !

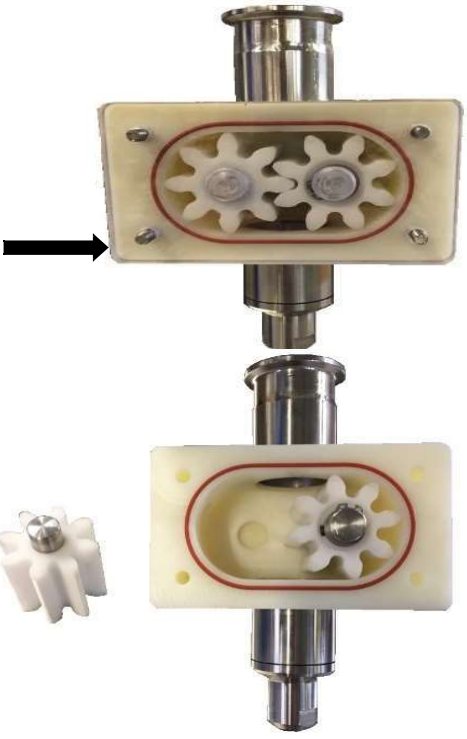
Clean and dry the unit thoroughly after use.

Clean the device in two phases: preliminary and final (disinfecting).
Preliminary phase – rinsing out the honey from the nozzle and dosing module Do not dismantle the dispenser after bottling. Immediately after working with the dispenser, place the suction hose into a container with warm water and pump 40 l of warm water to rinse out the dispenser module.
For this operation, prepare approx. 40 l of water heated to 50°C to 60°C. This process protects the dispenser from damage that may be caused by crystallised honey (i.e.: breaking the seal and leaking honey). In the event of improper rinsing of the device, the seal on the shaft of the pumping module will break. Damage resulting from improper cleaning of the module is not subject to warranty.
Final disinfecting phase - take the nozzle and rotor apart according to the following photographs. Wash thoroughly, dry and reassemble together again.
For cleaning you can use disinfectants approved for disinfection of equipment intended for contact with food, then rinse abundantly, dry and reassemble again.

Step 1-unscrew the 4 knobs from the dosing module (from the front of the machine).



Step 2-Remove the cover



Step 3- remove the left gear

Step 4-Remove the module

Warranty

The product purchased from the Lyson Company is covered by a manufacturer's warranty.
The warranty period is 24 months from the date of purchase.
All purchased products come with receipts or VAT invoices.
Warranty details at:

www.lyson.com.pl

* Product photos are illustrations and may sometimes differ from the actual appearance of the item. However, this does not change their basic properties.