

goSENSOR

Product Manual

Installation, use and maintenance



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1. INTRODUCTION

This document has been prepared in order to provide reliable and helpful information regarding the use of the appliance. The manufacturer waives all liability, whether express or implied, for any possible errors or omissions that the manual may contain.



Before operating or using this appliance, read this manual carefully and thoroughly.



The owner of the appliance is responsible for requiring all personnel in charge of use and maintenance to read this manual.

2. TECHNICAL CHARACTERISTICS

2.1. Functional equipment

- Removable sealing bar without connections.
- Polyethylene plate inside the chamber that increases the speed of the vacuum and regulates the working height.
- Progressive pressure restoration to prevent damage to the bag caused by bones, etc.
- Sensor-controlled vacuum.
- Self-calibrating system.
- All steps of the process are visually monitored.
- Liquid packing mode.
- Extra vacuum to force air out of porous products.
- STOP Possibility to block the vacuum packer for a certain amount of time or for as long as the user wishes.
- "OIL AUTO-CLEAN" process, oil self-cleaning system.
- Equipped with interior polyethylene plate.

2.2. Design features

- Made of stainless steel.
- Well with rounded edges for easy cleaning.
- Transparent methacrylate lid to visualize the element to be packed.
- Liquid packing accessory for the various vacuum packer models.
- Foam for the use of a core probe in vacuum packed foods.
- Side display for checking the oil level.



3. GENERAL STANDARDS FOR SAFETY AND ACCIDENT PREVENTION

3.1. Personnel in charge of the use of the appliance



The use of the appliance is reserved for trained personnel.

Personnel must be familiar with the safety standards and the instructions for use.

3.2. Electrical hazard



Work on the electrical power source and access to live parts is only permitted to skilled personnel and is under their responsibility. In any case, said access must be carried out with the appliance disconnected from the electricity grid.

3.3. Thermal hazard



Make sure the ventilation openings are not blocked.

Do not install the appliance near flammable products.

4. INSTALLATION

Once the appliance has been received, remove the packaging carefully and check the equipment against the label (located on the rear-left side) to be sure that this is the requested appliance. Once the appliance has been checked, read this "*Product Manual: Installation, use and maintenance*" bearing in mind the following precautions:

- a) The personnel in charge of the installation must be qualified in appliance installation.
- b) Verify that the voltage/current source corresponds to that required by the appliance.
- c) Grounding is mandatory.
- d) Check that the elements that make up the equipment are properly situated and free from damage from transport.

Place the appliance on a flat surface and ensure that it is level. The appliance should be placed so that it is protected from splashes of water and dirt.

Before starting up the equipment, check the rear display to see whether the oil level is between the MAX and MIN markings. If the level is below the minimum, it must be refilled (see section 6).



5. USE

5.1. Control panel

The goSensor vacuum packers from Mychef consist of a 4-digit screen with 7 segments, three push-buttons and four LEDs that indicate the status of the appliance during the packing cycle.



Do not clean the vacuum packer screen cover with alcohol-based liquids, solvents, acids or detergents as these may damage the screen cover and affect the display.

These elements are used for checking, viewing, and modifying the various packing parameters. See below for the location and function of these elements.



Figure 1. LCD screen with all segments illuminated

- Zone A (Figure 1): The LEDs tell you the status of the vacuum packer when you are carrying out a packing cycle.
- Zone B (Figure 1): Displays the values of the various packing parameters: vacuum %, seconds, minutes, air restoration mode and errors.
- Zone C (Figure 1): Corresponds to the buttons that allow you to configure the desired packing parameters and to cancel a cycle if you wish (centre button).

The goSensor vacuum packer is designed to be very simple and easy to use. It has a start menu and a packing parameter settings menu, an explain of which is set out below.

Start menu

The vacuum packer will be turned on and you will be able to change the operating mode that you want it to perform with the direction buttons. More specifically, you will have the option of three modes:

Mode: "Set" Vacuum pack or change vacuum packing parameters.



Figure 2. "SET" mode

When the vacuum packer is in "Set" mode, you have two options: The first is to lower the lid and the vacuum packer will perform a packing cycle with the parameters saved in the memory. The second option is to press the centre button and to set the packing parameters according to the client's wishes (explained in section 5.4).

Mode: "Clean" Carry out a pump oil cleaning cycle.



Figure 3. "CLEAN" mode

In this mode you just have to lower the lid and the vacuum packer will perform an oil cleaning cycle.

Mode: "Off" Turn off the vacuum packer.



Figure 4. "OFF" mode

In this mode the vacuum packer will turn off automatically after a few seconds. If you wish to turn it off immediately, you will need to press the centre button.

Vacuum packing settings menu

To access this menu, you will need to press the centre button when the vacuum packer is in the "SET" mode in the start menu. In this menu you can configure the following packing parameters:

- Vacuum percentage (Vacuum).
- Extra Vacuum time (Extra Vacuum). You will only be able to configure this option by selecting a vacuum percentage of 100%.
- Sealing time in seconds (Seal).
- Atmospheric pressure restoration mode (Air), where you can select three modes:
 - FAST: fast restoration.
 - SOFT: slow restoration for delicate foods/objects.
 - STOP: block the vacuum chamber with the selected vacuum percentage. A time (minutes) can be set, or until the user presses the centre button. For this option, the user must not set any STOP time.

5.2. Automatic SCS Calibration

The goSensor vacuum packers have a fully automatic calibration system, Self Calibration System (SCS), patented by Mychef. This automatic vacuum percentage recalibration algorithm has the following advantages:

- Calibration without user intervention

The appliance automatically detects optimal calibration conditions and, completely autonomously, can recalibrate itself according to the following physical changes:

- Automatic adaptation to temperature variations.
- Automatic adaptation to climate variations.
- Automatic adaptation to altitude variations.
- Automatic adaptation to variation in oil properties.

The appliance is able to detect increases and decreases in differential atmospheric pressure, recalibrating itself as needed.

- Increased precision in measuring the vacuum

By constantly calibrating itself automatically, the values used to calculate the vacuum percentage are dynamically updated. Therefore, the vacuum percentage that the user selects has a smaller error margin than if it were to not dynamically calibrated.

The SCS calibration system determines when it is necessary to perform a calibration and does so automatically without the user intervention. However, the user can force a calibration at any time simply by making a packaging with 100% vacuum.

5.3. Connecting and turning on the appliance

When the appliance is connected to the electricity grid, a start-up process takes place where all internal values are initialized, and safety and control checks are carried out to ensure optimum control of the vacuum packing. This process will be indicated on the screen by the simultaneous flashing of all segments for a number of seconds.

While the segments are flashing, you can check the technical control parameters by pressing the centre button. These parameters may be relevant for the maintenance of the appliance. Two parameters will be displayed:

- Vacuum pump operating hours.
- Number of vacuum cycles performed.

The first value displayed will be the vacuum pump operating hours. The number digits will be displayed on the 7-segment screen in a cyclical manner, with the end of the cycle being indicated by "Hour". For example, if the pump motor has been operational for 20991 hours, the screen will display "2 - 0 - 9 - 9 - 1 - Hour" on a loop.



Figure 5. Vacuum pump operating hours view

Pressing the centre button while the number of pump operating hours is being displayed will show the number of vacuum cycles completed by the vacuum packer. The value will be displayed in the same way as above, but instead of "Hour" indicating the end of the number of operating hours, the screen will show "Cycl" to represent the vacuum packing cycles.



Figure 6. Vacuum cycles completed view

To stop showing this value and to finalize the appliance start-up process, press the centre button again.

Once the vacuum packer is connected to the electricity grid and the start-up process is finalized (whether the pump status values are checked or not), the appliance will turn itself off. The user is required to turn the appliance on in order to begin operating.

The appliance can be turned on by pressing any of the three buttons (Figure 1, zona C). Any interaction with any of these three buttons will start up the appliance.



DANGER! The Manufacturer waives any liability for injuries to people or animals and damages to the elements resulting from improper, non-compliant use of the appliance.

5.4. Operating modes

goSensor vacuum packers have three different operating modes: the "SET" mode; the self-cleaning "CLN" mode; and the "OFF" mode. The operating mode is selected by pressing the direction buttons (right and left) until the desired text is displayed on the 7-segment screen.

5.4.1. Manual mode

The manual mode ("Set" on the vacuum packer screen) gives the user exhaustive control over the packing parameters and allows the user to access some special features, such as extra sealing time, extra vacuum time and atmospheric pressure restoration type.



Figure 7. Manual mode

Selecting the “SET” icon allows you to set the packing parameters for a specific purpose, such as making marinades or vacuum packing products with bones that may damage the bag.

The parameters entered do not need to be modified or entered every time because the vacuum packer stores them. You only need to modify them when you want to perform a cycle with different parameters.

To modify the parameter values, press the centre button. The LED corresponding to the icon for the parameter that is to be changed will light up. For example, if the sealing time is to be changed, the LED corresponding to the “SEAL” icon will be illuminated. The direction buttons (right and left) can then be used to modify the parameter value. The parameter is saved by pressing it again and you jump to the next value to configure. This process is repeated until all the parameters are modified and saved and you return to the start point of the “SET” manual mode.



Figure 8. Modifying the packing parameters in manual mode

All parameters are described below in the order of configuration:

- **Vacuum percentage:**

This parameter sets a vacuum value expressed as a percentage. Once the pump reaches this value, it will disconnect, and it will proceed to the next step. The goSensor vacuum packer also has a liquid packing program that will appear after 100% vacuum, and it will be indicated on the display by “H2O”. This parameter is represented by the “VACUUM” icon.

- **Extra vacuum packing time:**

Extra vacuum packing time sets a time in seconds during which the vacuum pump remains turned on. This extra time is used to ensure the proper vacuum packing of very porous foods. To operate correctly, this time can only be set when 100% vacuum is selected. This parameter is represented by the “EXTRA VACUUM” icon.

- **Sealing time:**

This value specifies the bag sealing time. It sets the duration of electrical contact with the sealing bars, and it must be adjusted for each bag type. In order to know the right amount of time, it is advisable to consult the bag supplier. This parameter is represented by the "SEALING" icon.

- **Atmospheric pressure restoration mode:**

This parameter allows for the selection of 3 types of air entry:

1. **FAST:** The restoration of atmospheric pressure in FAST mode allows air to enter suddenly through the opening of an entry valve until atmospheric pressure is restored inside the chamber. It is the fastest and most appropriate mode in most cases.
2. **SOFT:** Pressure restoration in SOFT mode allows for the entry of air in an intermittent manner, thus controlling any deformations that may occur to the bag. This mode is useful for the slow restoration of atmospheric pressure, so that the packed food moulds correctly to the bag and prevents sharp or pointy elements from breaking it.
3. **STOP:** This mode makes it possible to stop the pump at a certain vacuum value by pressing the centre button or until the value determined by the vacuum percentage is reached. The vacuum packer will maintain this vacuum until the set time limit has passed or, if no time limit has been set, until the user presses the centre button. This process may be useful for marinating meats or fish or to extract air from sauces.

This parameter is identified by the "AIR" icon and each type of restoration is selected using the icons located below: "FAST", "SOFT" and "STOP".

5.4.2. Autoclean

When the vacuum pump's oil has taken on a whitish shade, due to water condensation, it can be removed using this mode. Due to the temperature, this process means any water that may be in the oil will end up evaporating and exiting the pump.

These water particles may cause rust particles to develop on internal components of the pump.

- ➔ The vacuum packer will notify the user of the need to perform a self-cleaning process after every 200 cycles. This will happen when the appliance is connected to the electricity grid, or it is turned on from the "OFF" rest mode. If the lid is lowered during this time, the "AUTOCLEAN OIL" process will begin automatically.
- ➔ If you do not wish to perform the AUTOCLEAN process when the notification appears, you can press the direction buttons (right and left) to go through the menu as normal and perform the cycle you prefer.



You can run an AUTOCLEAN cycle whenever you wish by manually entering AUTOCLEAN mode from the operating mode selection menu. The maximum duration of AUTO-CLEAN mode is 10 minutes, although you can stop it by pressing the centre button.

5.5. Packing

To pack a product, the bag (appropriate for vacuum packing) must be placed correctly on the polyethylene bar with the entire width of the bag above the sealing area. Make sure that there is no product on the sealing bar. Then lower the lid of the vacuum packer.

NOTA: We recommend using the safety latch during each vacuum packing cycle.

At this time, the stored program begins, and the indicators of the processes to be carried out will light up continuously (vacuum, extra vacuum, sealing, progressive air entry):

- The vacuum process (**VACUUM**) extracts the air from the chamber and the central display shows the vacuum percentage up to that moment.
- The extra vacuum procedure (**EXTRA VACUUM**) keeps the vacuum pump working for the number of seconds programmed. This extracts the air from very porous foods. The central display shows the number of seconds passed.
- Sealing consists of three phases. The first is the lifting of the cylinders. During this phase, the centre screen displays the set sealing time in seconds. The second is the heating of the heating element. At this stage the **SEAL** display will progressively decrease from the previous value. The third stage, with a duration of five seconds, is the cooling of the bag, and the **SEAL** display increases progressively to 5.0 s at this stage.
- The last stage is the restoration of atmospheric pressure (**AIR**). The display will show the vacuum percentage in the chamber decreasing. The atmospheric pressure restoration type (**SOFT**, **FAST** or **STOP**) will also be illuminated during this stage.

The associated indicator will turn on to signal which process is active. Once the process has finished, the indicator will turn off.

All processes, with the exception of vacuum chamber pressure restoration, can be cancelled by pressing the centre button while they are running. By doing so, the appliance will progress to the next step in the cycle until the air entry stage, at which point the cycle will end.

If the vacuum is not correctly completed, an error will be displayed (see 6).
A rest period of 3 minutes between cycles is recommended.

5.6. Errors

The device uses algorithms that detect abnormal situations which could lead to malfunctioning. The user is notified of these situations with an error screen such as the one shown below:



Figure 9. Error screen

The table below shows the errors and possible solutions:

Error	Description	Solution
E01	Lowered lid	Open the lid. If the error persists, call the technical service, indicating the error code.
E02	Error in the vacuum system	The system has detected that the vacuum pump has operated too long to reach a certain vacuum level. Calibrate the system. If the calibration is carried out successfully, conduct the test again. Otherwise, call the technical service. The maximum operating time is 2 minutes.
E03	Error in the vacuum sensor (minimum)	Check the vacuum sensor connection tube for leaks or a poor connection. If everything seems correct, call the technical service indicating the error code and the central display value right before the error.
E04	Error in the vacuum sensor (maximum)	Check the vacuum sensor connection tube for leaks or a poor connection. If everything seems correct, call the technical service indicating the error code and the central display indicator value right before the error.
E05	Internal error	The control board has detected an internal error. Call the technical service, indicating the error code.

Table 1. Errors and possible solutions

The appliance runs automatic checks and, as a result, it may turn itself off to prevent a serious error. Turn it on as usual.



In the event of an error with the vacuum packer, please contact the technical service.

6. MAINTENANCE



Before the appliance is handled for cleaning, maintenance, or repair, it should be disconnected from the electricity grid.



If the power cable is damaged, it should be replaced by the manufacturer, its aftersales service or by personnel with similar qualifications in order to avoid danger.

6.1. Cleaning

Clean the vacuum packer regularly and carefully.



Cleaning the vacuum packer with pressure cleaning equipment is HARMFUL to the appliance and may cause the appliance to break, and it will void the WARRANTY.

To clean the stainless-steel outer casing, use a damp cloth with water and detergent.



The lid must be cleaned with a damp cloth soaked in water; chemical products must not be used. DO NOT USE ANY TYPE OF LIQUID WHICH CONTAINS ALCOHOL, ACID, DETERGENTS, SOLVENTS OR EQUIVALENT TO CLEAN THE LID.

Failure to comply with these instructions may break the lid and void its warranty.

6.2. Vacuum pump oil

Periodically check the oil level, topping up where necessary, according to the maximum and minimum levels.

Use the type of oil recommended by the vacuum pump manufacturer (depending on the model).

Oil in a good condition will be transparent. If it turns white, this means that it has taken on water from the condensation of the damp vacuumed air which would entail that it has lost its characteristics and must be replaced.

The oil may also take on a dark colour due to vacuumed dirt, which would entail that it has lost its properties and must be replaced.

The vacuum pump used by this appliance is not prepared for working in extremely hot/cold environments. Operating temperature range is 12/35°C.

6.3. Sealing bar

Periodically check the condition of the Teflon adhesive tape and the sealing tape. They must be in perfect condition and not have any defects.

6.4. Water-tight seal on the lid

Periodically check the condition of the water-tight seal on the lid. It must be in perfect condition.

6.5. Maintenance schedule

Period	Action
First 100 operating hours	Change the oil
Weekly or when the "CLN" message appears on the vacuum packer	<u>Carry out an auto-clean program</u> Check the oil level Check the condition of the sealing bar Check the condition of the water-tight seal
Weekly or every 500 hours of operation	Change the oil
Every 1000 hours of operation	Change the oil filter
Annually	Check for possible leaks in the vacuum circuit

Table 2. Maintenance schedule



It is recommended that maintenance be carried out by a qualified professional, your distributor, or the technical service.

6.5.1. Check the oil level

To check the pump's oil level, it is not necessary to open the vacuum packer; there is a viewing hole on one of the two sides for this purpose.



Illustration 1. Rear display for checking the oil level

6.5.2. Change the pump oil

Material needed for the oil change:

- Material: Synthetic oil SAE 10 VSL32

Model	TGS 8m ³ /h	TGM 10m ³ /h	TGM 16m ³ /h	TGM 20m ³ /h	TGL 20m ³ /h
Oil quantity (l)	0,25	0,3	0,3	0,3	0,3



Illustration 2. Oil replacement kit

- Tools:
 - Number 3 Allen wrench.
 - Adjustable wrench



Warning: Before removing any components, verify that the appliance is disconnected from the electricity grid.

Step 1 → Remove the two rear screws

Using the number 3 Allen wrench, remove the two rear screws on the sides (do not remove the front screws because the well pivots on them). After removing these two screws, use the same Allen wrench to loosen the centre screw on the rear (it is not necessary to remove it completely).

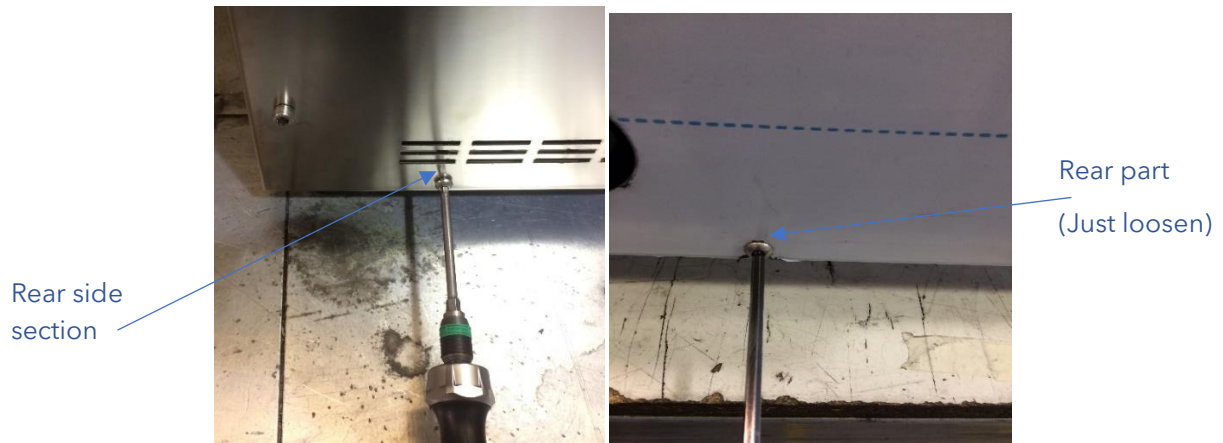


Illustration 3. Rear screws

Step 2 → Open the outer casing of the vacuum packer

As with the hood of a car, lift the back of the vacuum packer until its limit.



Illustration 4. Open the outer casing

Step 3 → Open the plug to empty the pump

Using an adjustable wrench, remove the plug to drain the oil from the pump.



Illustration 5. Remove the oil drainage plug

Place a container below the hole for the oil to drain into, in order to keep the vacuum packer shelf clean.

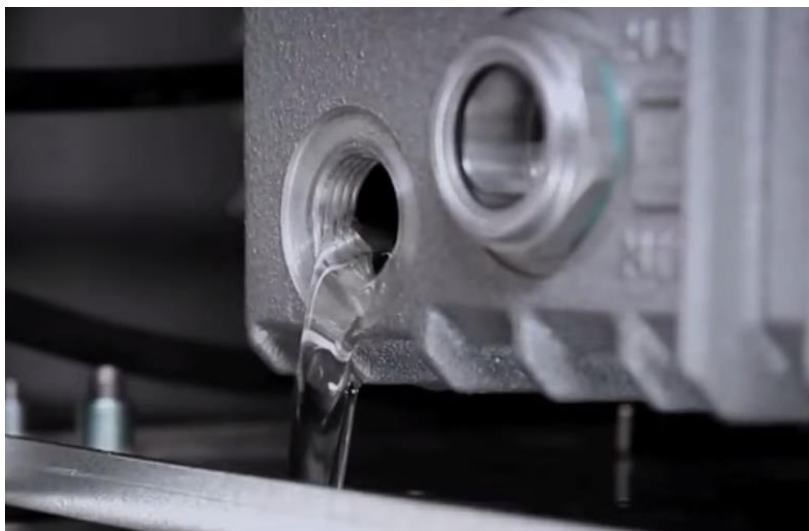


Illustration 6. Oil drainage

When all of the oil has drained out, replace the plug.

Step 4 → Open the oil filling plug

Using the adjustable wrench, open the oil filling plug and use a funnel to pour the oil up to the vacuum packer maximum level.



Illustration 7. Remove the oil filling plug and refill with new oil

The oil level must be between the MIN and MAX levels indicated by the pump's display window.

Step 5 → Close the oil plug

Using the adjustable wrench, close the oil filling plug and perform these steps in reverse to make the appliance operational again.

6.5.3. Other maintenance operations

Other maintenance operations, such as changing the oil filter, must be conducted by specialized technicians, your distributor, or the technical service.

6.6. Owner liability



THE OWNER IS RESPONSIBLE FOR REGULAR MAINTENANCE. TO KEEP THE WARRANTY VALID, THE OWNER MUST PROVE THAT MAINTENANCE HAS BEEN CARRIED OUT.

Should the vacuum packer be submitted to harsh conditions such as low temperatures (lower than 12-15°C), or short operating periods, the checks must take place more regularly.