



EXPERTS IN LUBRICANTS



AUTOLUB

MORE EFFICIENT LUBRICATION WITH **NILS** AUTOLUB

NILS automatic lubrication systems allow a constant and controlled supply of the lubricant, without manual intervention. The ideal solution to avoid any risk of interruptions in the lubrication and any machine downtime which could represent higher costs for the Company.



Automatic lubrication systems are compact and easy-to-use tools that can be installed and set with an autonomy up to 24 months. They can be used for greasing places that are difficult to reach or in dangerous positions, or in machinery where the accurate dosing of the lubricant is essential (such as electric engines and/or fans where minimal but constant lubrication is required). There are several solutions, simple and more advanced for both grease and oil dispensing, up to the connection via PLC to the machine itself.

Automatic lubricators are ideal for installation on:



Electric engines



Fans



Conveyors



Pumps

Useful for the lubrication and greasing of:



Rolling bearings



Plain bearings



Chains

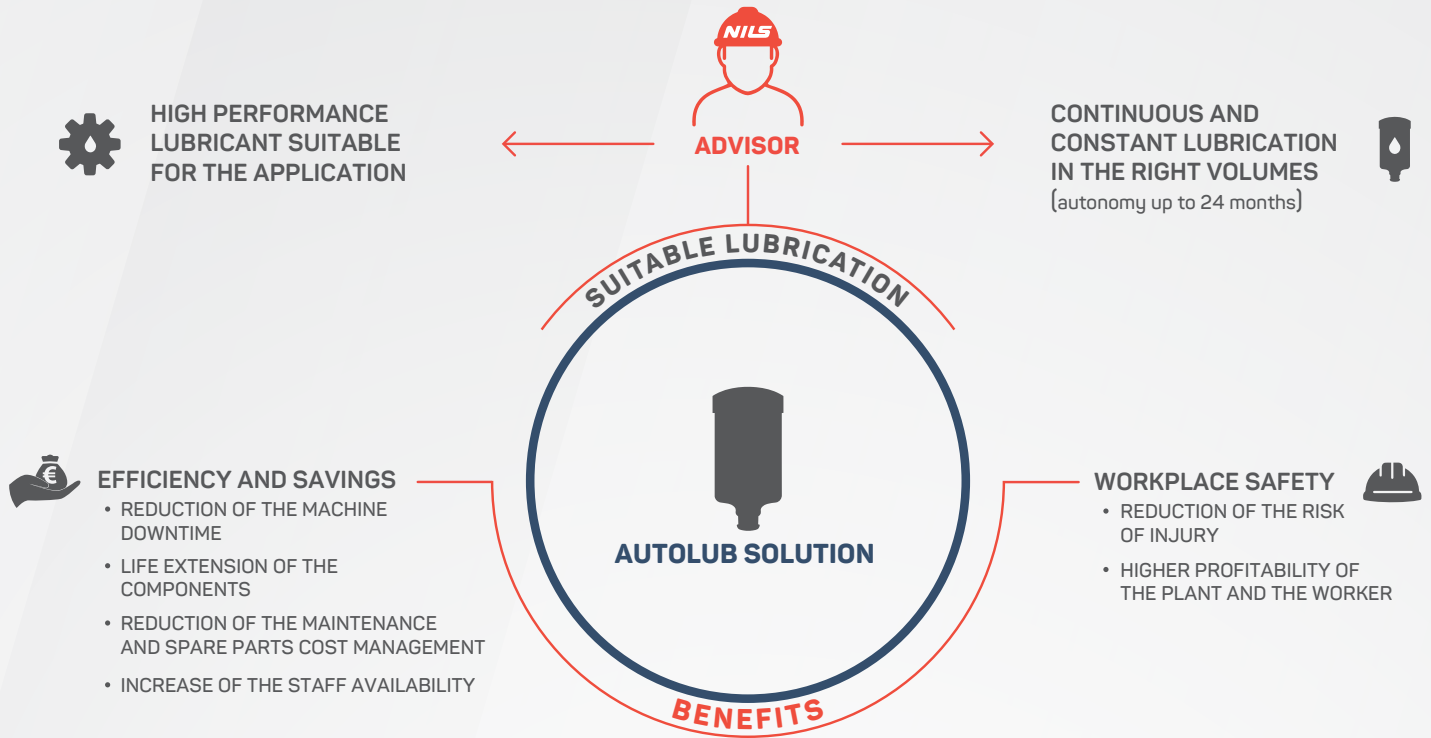


Gears / Racks

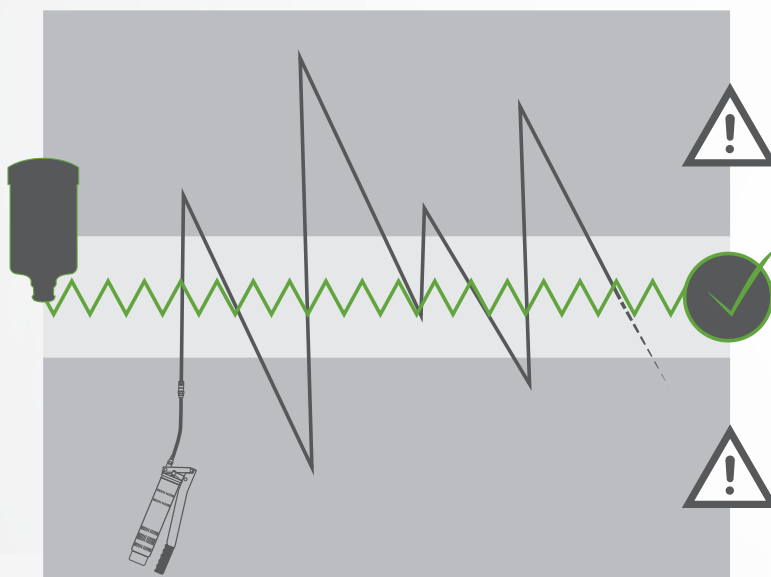


Ropes

NILS AUTOLUB FOR THE HIGHEST PERFORMANCE OF YOUR PLANT



NILS AUTOLUB, supported by our advisory service, will allow to choose the most suitable lubricant and identify the correct volume of the lubricant which will be dispensed constantly over time.



EXCESSIVE LUBRICATION

- Increase of the operational temperature
- Potential damages to gaskets and seals
- Excessive lubricant consumption

INSUFFICIENT LUBRICATION

- Increase of the operational temperature
- Increase of the friction and the wear
- Potential contamination of the lubricant by external pollutants



AUTOLUB BASIC

max. 4 bar / min. 0 °C max. +40 °C

AUTOLUB BASIC thanks to reliable operation system, based on an electrochemical reaction, can be used for several applications, even underwater, with a temperatures between 0 °C and +40 °C. By an activation screw of different colors, a volume of lubricant (equal to 120 cm³) is dispensed in 1, 3, 6 or 12 months. The chemical reaction, generating a max. pressure of 4 bar, moves the piston forward and brings the lubricant to the lubrication point.

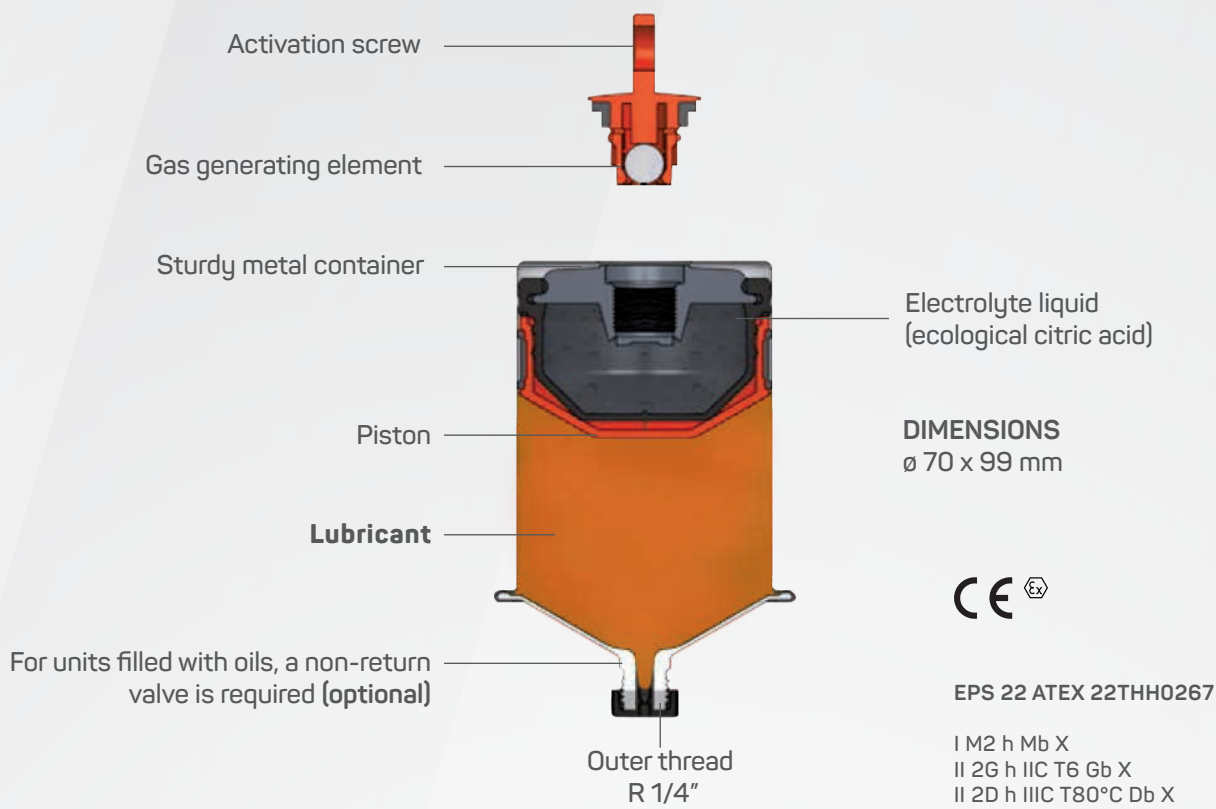
Lubricants available:

GREASES

120 cm ³	min. -30°C max. +120°C	DN Factor 300.000								<i>Thickner special calcium</i>
120 cm ³	min. -35°C max. +120°C	DN Factor 300.000								<i>Thickner hydroxystearate lithium</i>
120 cm ³	min. -20°C max. +140°C	DN Factor 300.000								<i>Thickner aluminium complex</i>
120 cm ³	min. -30°C max. +150°C	DN Factor 400.000								<i>Thickner lithium complex</i>
120 cm ³	min. -40°C max. +190°C	DN Factor 250.000								<i>Thickner polyurea</i>

OILS

120 cm ³		CHAIN SYNT FOOD 220 <i>Synthetic food-grade chain oil / ISO VG 220</i> <small>*Usable only with non-return valve</small>	<i>Base oil PAO</i>
120 cm ³		VFE 2000 <i>High temperature synthetic chain oil</i> <small>*Usable only with non-return valve</small>	<i>Base oil saturated synthetic ester</i>



4 types of activation screws

Months →				
				
Operating temperature	Dispensing time (in months)			
min. 0°C	4	8	15	>18
+10°C	2	5	8	18
+20°C	1 4,0cm ³ /day	3 1,3cm ³ /day	6 0,7cm ³ /day	12 0,3cm ³ /day
+30°C	24gg	2	3	6
max. +40°C	18gg	1	2	3

The activation screw must be screwed until the ring breaks completely. Starting from that moment the chemical process and the supply of the lubricant begins as per the table reported above.



AUTOLUB EASY

max. 5 bar / min. -20 °C max. +60 °C

AUTOLUB EASY is a compact and ready-to-use lubrication system. It can be used in several fields of application with an operating temperature between **-20 °C** and **+60 °C**. AUTOLUB EASY can be filled with a wide range of greases and oils in order to satisfy every need. The monthly dispensing period is easily selectable from **1 to 12 months**. The required pressure is generated by an electronically controlled chemical reaction.

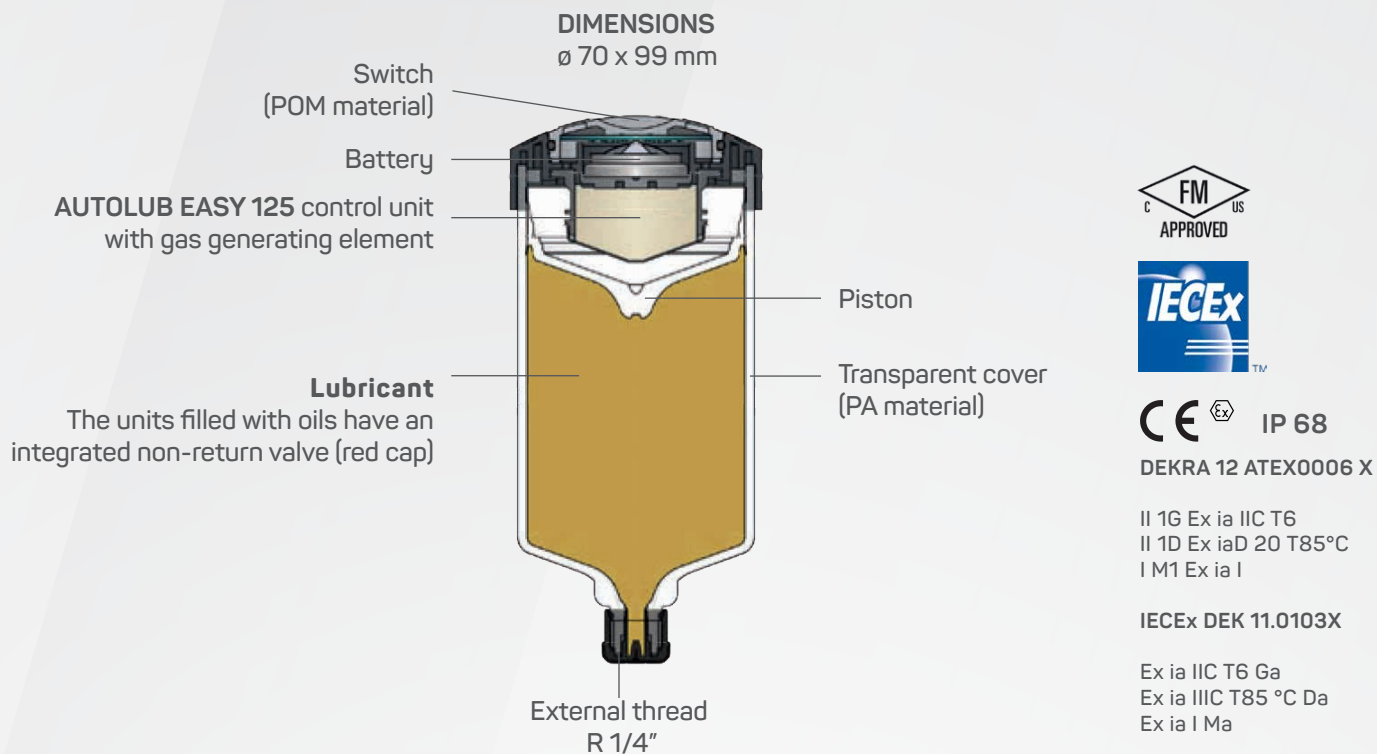
Lubricants available

GREASES

125 cm ³	min. -30°C max. +120°C	DN Factor 300.000							Thickener special calcium
125 cm ³	min. -45°C max. +160°C	DN Factor 300.000							Thickener aluminium complex
30 cm ³ 125 cm ³	min. -30°C max. +150°C	DN Factor 400.000							Thickener lithium complex
125 cm ³	min. -25°C max. +150°C	DN Factor 200.000							Thickener lithium complex

OLI

125 cm ³			CHAIN FOOD HT 220 High temperature food grade synthetic chain oil / ISO VG 220 <i>*Usable only with non-return valve</i>	Base oil saturated synthetic ester
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Selection of the dispensing period in months



Monthly dispensing periods
from 1 to 12 months

Months →	1	3	6	9	12
Operating temperature	Dispensing time (in months)				
a -20°C	2	5	10	13	15
a 0°C	1,3	3,8	7,2	11	13
a +20°C x 125 cm³	1 3,95cm ³ /day	3 1,32cm ³ /day	6 0,66cm ³ /day	9 0,44cm ³ /day	12 0,33cm ³ /day
a +40°C	0,8	2,5	5,2	7,5	10
a +60°C	0,6	2	4	-	-



AUTOLUB

max. 6 bar / min. -20 °C max. +60 °C

AUTOLUB can be used for all the applications with temperatures between **-20 °C** and **+60 °C**. By the setup button on the control unit, a dispensing time from **1 to 12 months** can be easily configured. The control unit calculates the amount of gas needed for a constant and safe lubricant supply, taking in consideration the ambient temperature.

AUTOLUB consists of a re-usable control unit, a cartridge containing the gas generating element and the lubricant, and a safety cover.

Lubricants available

GREASES

ATOMIC RH *Long-life EP grease / NLGI 2*

125 cm³

°C min. -30°C
max. +120°C

DN Factor
300.000



*Thickener
special calcium*

FOOD TTF *Special food-grade grease for extreme temperatures / NLGI 2*

125 cm³

°C min. -45°C
max. +160°C

DN Factor
300.000



*Thickener
aluminium complex*

HTF EP 2 *Semi-synthetic lithium complex grease / NLGI 2*

125 cm³

°C min. -30°C
max. +150°C

DN Factor
400.000



*Thickener
lithium complex*

GR 7000 *PTFE high performance EP grease / NLGI 2*

125 cm³

°C min. -25°C
max. +150°C

DN Factor
200.000



*Thickener
lithium complex*

Product characteristics



The electronic control unit with temperature compensation shows the dispensing time and the status - LCD display and setup button: 1, 2, 3, ... 12 months.

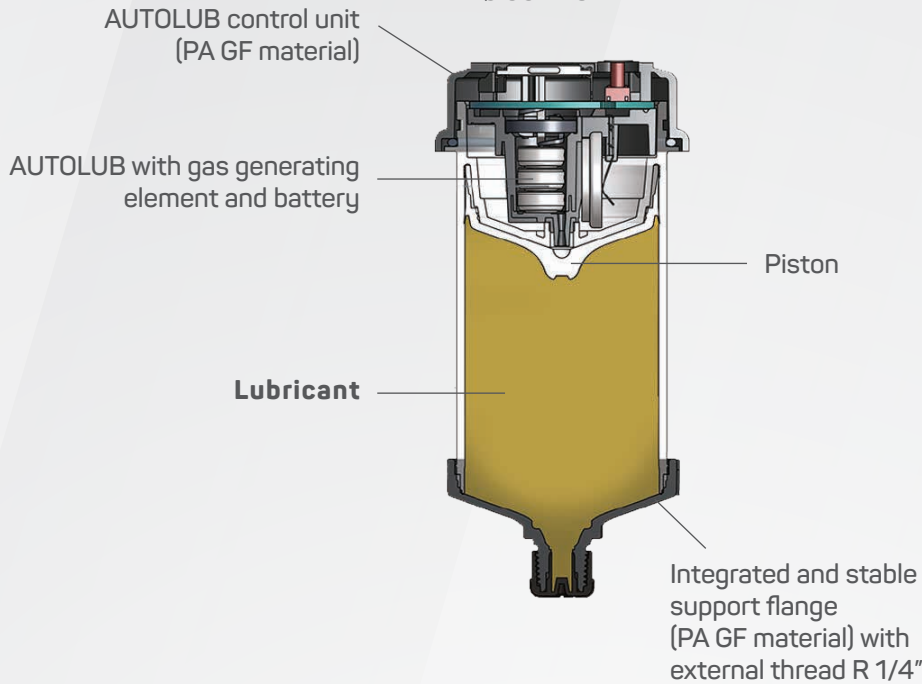
- Constant and precise supply of lubricant regardless of the ambient temperature
- Quick start, within a day
- Easy and safe to use
- Re-usable control unit



The tool operates reliably and accurately from **-20 °C** to **+60 °C**.

- Universal use with low and high temperatures
- Possible use even in case of continuous variations of the ambient temperatures
- High robustness thanks to the integrated support flange

DIMENSIONS
 ø 65 x 132 mm



ZELM 09 ATEX 0420 X

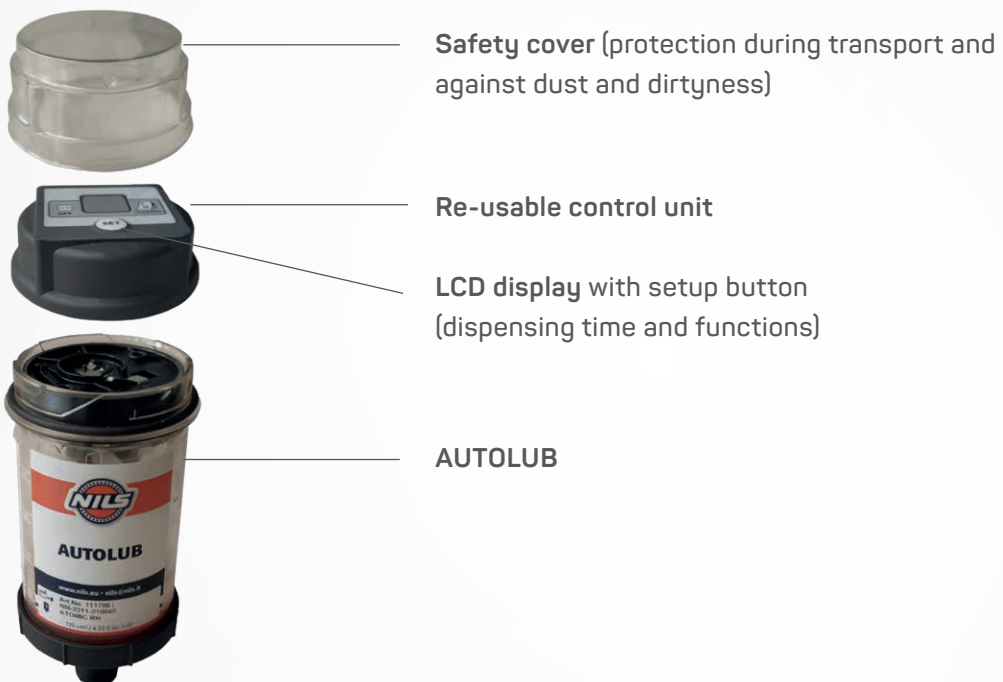
I M1 Ex ia I Ma
 II 2G Ex ia IIC T4 Gb
 II 2D Ex ia IIIC T135°C Db

IECEX ZLM 09.0013X

Ex ia I Ma
 Ex ia IIC T4 Gb
 Ex ia IIIC T135°C Db

Selection of the dispensing period in months

Months →	1	2	3	4	5	6	7	8	9...	..12
Lubricant / day (cm ³)	3,95	1,97	1,32	0,99	0,79	0,66	0,56	0,49	0,44	0,33



Product characteristics



LCD display, with setup button, indicates the dispensing time, the size of the unit (60, 120 to 250 cm³) and the status.

- Easy and intuitive
- Customized and accurate adjustment to save money and lubricant and avoid incorrect lubrication
- Possible changing of the setup at any time
- Possible deactivation in case of prolonged system shutdown



Electromechanical activation mechanism with set of batteries. The 360° LEDs indicate the operating status and the anomalies.

- Reliable and accurate lubrication independent by the temperature and the back pressure
- Quick check of the correct system operation via green/red LEDs



Dispensing pressure of 7,5 bar allows the assembling up to a distance of 5 m (with 6mm internal diameter pipes).

- Assembling outside hazardous areas or in easily accessible locations for higher workplace safety and for time saving
- If assembled in a non-hazardous area, the tool can be replaced without shutting the system down
- The function "PURGE" allows to drain the clogged lubrication points



Safety cover (protection during transport and against dust and dirtiness)



AUTOLUB PROFESSIONAL MOTOR EVO re-usable

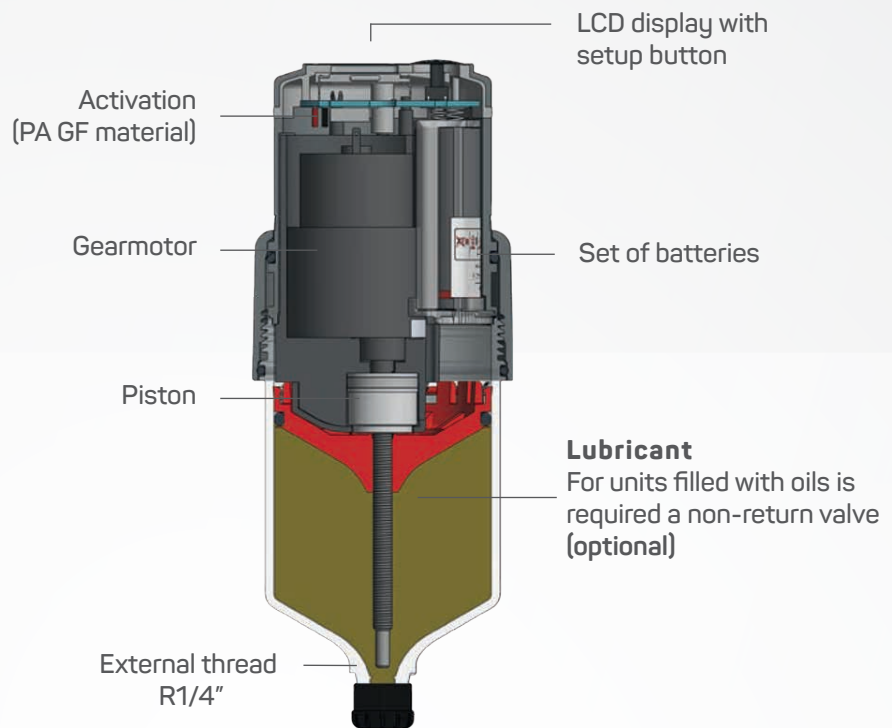


LCD display with setup button (dispensing time and functions). Selection of the dispensing time and the size of the cartridge



AUTOLUB PROFESSIONAL 4,5 V Set of batteries Alkaline or Lithium

AUTOLUB PROFESSIONAL 60, 120 or 250 cm³ cartridge



DIMENSIONS

Cartridge of 60 ø 75 x 155 mm
Cartridge of 120 ø 75 x 178 mm
Cartridge of 250 ø 75 x 228 mm

CE IP 65 (EVO)
IP 54 (ATEX)

Only for AUTOLUB PROFESSIONAL ATEX:



II 1G Ex ia IIB T4 Ga
II 1D Ex ia IIIC T₂₀₀ 135°C Da
I M1 Ex ia I Ma

CML 23ATEX2479X
IECEX CML 21.0169X



Class I/II/III Div 1 Groups C,D,E,F,G,
T4-T135°C
Intrinsically safe/Sécurité intrinsèque

Class I/II/III Zone 0/20 AEx/Ex ia IIB T4 Ga
AEx/Ex ia IIIC T135°C Da
-40°C to +60°C

Selection of the dispensing period in months

Lubricant / day (cm ³)	1	2	3	4	5	6	7	8	9...	..12	15	18	21	24
Cartridge 60 cm ³	1,98	0,99	0,66	0,50	0,40	0,33	0,28	0,25	0,22	0,17	0,14	0,12	0,10	0,08
Cartridge 120 cm ³	3,95	1,97	1,32	0,99	0,79	0,66	0,56	0,49	0,44	0,33				
Cartridge 250 cm ³	8,23	4,10	2,75	2,06	1,65	1,38	1,17	1,02	0,92	0,69				



max. 6 bar / from -40 °C max. +60 °C

AUTOLUB PROFESSIONAL CONTROLLER

Unlike the battery-powered AUTOLUB PROFESSIONAL, the AUTOLUB PROFESSIONAL CONTROLLER is powered by an external source via a cable. It can transmit its operational status to a PLC for evaluation. It offers two modes: TIME, which dispenses lubricant based on operating hours, and IMPULSE, which dispenses a precise amount when it receives voltage. Comprising an electromechanical drive and an LC unit with 60, 120 or 250 cm³ of lubricant, it operates with counterpressure up to 6 bar, regardless of temperature.

Lubricants available

GREASES

120 cm³ **ATOMIC RH** Long-life EP grease / NLGI 2
 250 cm³ min. -30°C max. +120°C DN Factor 300.000 **Thickener special calcium**

250 cm³ **CETAL EP 0** Fluid grease for extreme pressures / NLGI 0
 min. -20°C max. +200°C **Thickener aluminium complex**

120 cm³ **FOOD 1** Universal food-grade grease NLGI 1
 min. -20°C max. +140°C DN Factor 300.000 **Thickener aluminium complex**

60 cm³ **HTF EP 2** Semi-synthetic lithium complex grease / NLGI 2
 120 cm³ min. -30°C max. +150°C DN Factor 400.000 **Thickener lithium complex**

250 cm³ **SILIKON 1-2** Silicon grease / NLGI 1-2
 min. -40°C max. +220°C **Thickener gel**

OILS

120 cm³ **CHAIN SYNT FOOD 220** Synthetic food-grade chain oil / ISO VG 220
Usable only with non-return valve* **Base oil PAO

120 cm³ **VFE 2000** High temperature synthetic chain oil
Usable only with non-return valve* **Base oil saturated synthetic ester

Product characteristics



The LCD display with a setting button shows information about dispensing settings, LC format, and operational status.



Electromechanical drive with external power supply. 360° visible LEDs (red/green) for status and fault indication.



A dispensing pressure of 7,5 bar allows installation up to 5 meters away.

Additional dispensings (Purge).

- Flexible use thanks to the simple selection of TIME or IMPULSE modes, which can be changed at any time
- Easy and quick control of settings, remaining pulses, and operating hours until replacement
- The freely selectable PIN request protects against potential tampering

- Reliable and precise dispensing of the lubricant, independent of temperature and back pressure
- Quick operational monitoring through electronic optical signals on the lubrication system and the fault signaling system of the plant allows for savings in time and resources

- Extra manual dispensing by pressing the button (Purge)
- Installation up to 5 meters outside hazardous areas or in easily accessible locations increases workplace safety
- Greater availability of the system, as the replacement of the LC can be performed during operation
- Possibility to purge the lubrication point to remove any blockages

Drive - reusable

Electromechanical drive with external voltage:
9 - 30 V DC, I_{max} 0.5 A

Dispensing period

Adjusted in time mode (TIME)
Impulse control (IMPULSE)

Lubricant volume

60, 120, 250 cm³

Operating temperature

-40°C a +60°C

Pressure

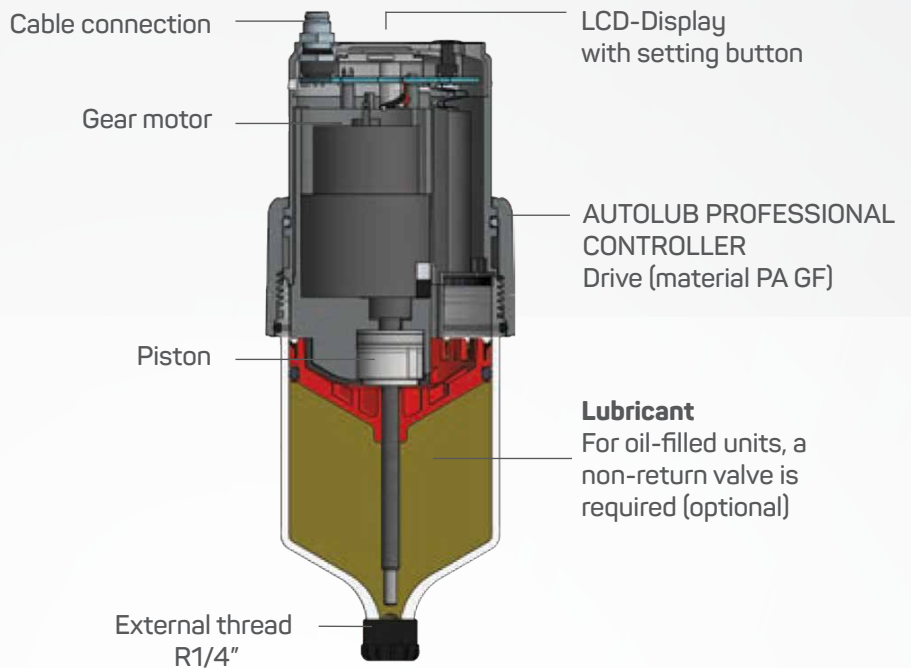
7,5 bar

Protection class

IP 65

Standard and special lubricants

Greases up to NLGI 2 / Oils



DIMENSIONS

Cartridge 60 cm³ 72 x 160 mm

Cartridge 120 cm³ 72 x 183 mm

Cartridge 250 cm³ 72 x 233 mm

CE U_{in} = 9 - 30 V DC
P_{max} = 1,6 W

Selection of the dispensing period in months

Lubricant / day (cm ³)	1	2	3	4	5	6	7	8	9...	..12	15	18	21	24
Cartridge 60 cm ³	1,98	0,99	0,66	0,50	0,40	0,33	0,28	0,25	0,22	0,17	0,14	0,12	0,10	0,08
Cartridge 120 cm ³	3,95	1,97	1,32	0,99	0,79	0,66	0,56	0,49	0,44	0,33				
Cartridge 250 cm ³	8,23	4,10	2,75	2,06	1,65	1,38	1,17	1,02	0,92	0,69				



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