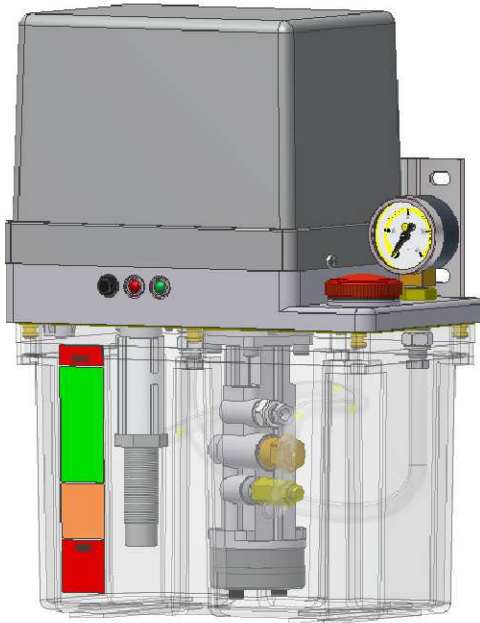


GE41

FLUID GREASE Lubrication Unit NLGI 00-000 Single line system

148.000.000



Application

As an intermittent operation unit to feed volumetric dosing meters in single-line systems.

Operation

It can be operated as follows:

- Without control device. Programmed from the machine's automation (plc, automaton, etc...).
- With control device (only with 3 litres tank).

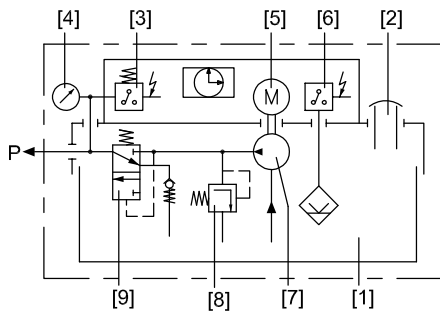
In units with pressure switch, the pump's operation time is the pressure switch signal + 10 seconds.

The correct operation of pressure and decompression cycles is checked from the control and monitoring device..

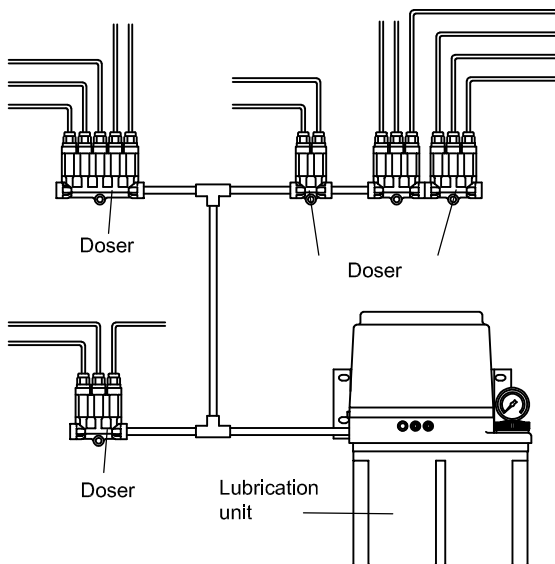
Depending on the control system, the units can be equipped with different accessories for monitoring and controlling the operation:

- Manual pushbutton (intermediate lubrication)
- Electrical level (minimum level control in the tank)
- Pressure gauge (visual control of the pressure cycle)
- Green light (voltage input)
- Red light (alarm or system fault)

Hydraulic diagram



- | | |
|-------------------|---------------------------|
| 1-Tank | 6-Level switch |
| 2-Filling cap | 7-Gear pump |
| 3-Pressure switch | 8-Pressure limiting valve |
| 4-Pressure gauge | 9-Decompression valve |
| 5-Electric motor | P = Pressure outlet |



Technical characteristics

Tank.....3-6 litres in plastic
Degree of protectionIP54

Gear pump

Lubricantup to fluid grease NLGI 00-000
Flow0,2 l/min
Working pressure40 bar
Working temperature.....+10°C + +40°C

Motor

Voltage.....	115V~	230V~	230/400V~	24Vdc
Frequency	50/60Hz	50/60Hz	50/60Hz	
Power (50Hz).....	100W	100W	100W	55W
Consumption (50Hz).....	0,6A	0,3A	0,5A	2,5A
rpm (50Hz).....	2800	2800	2800	2800

Service mode.....S3 20% *
Maximum operation time.....5 min
Maximum cycles/hour.....20
* 20% Is the ratio between the operation time and the stop time.
E.g. 1 min of operation time corresponds to 5 min stop time



Caution!!!

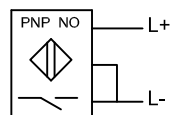
Safety measures must be taken: disconnect the main switch before carrying out connection coupling.

Pressure switch

Without pressureOpen
Breakdown voltage42V
Connection current2,5A
Maximum contact load30VA
Connection pressure14 bar

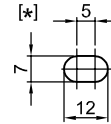
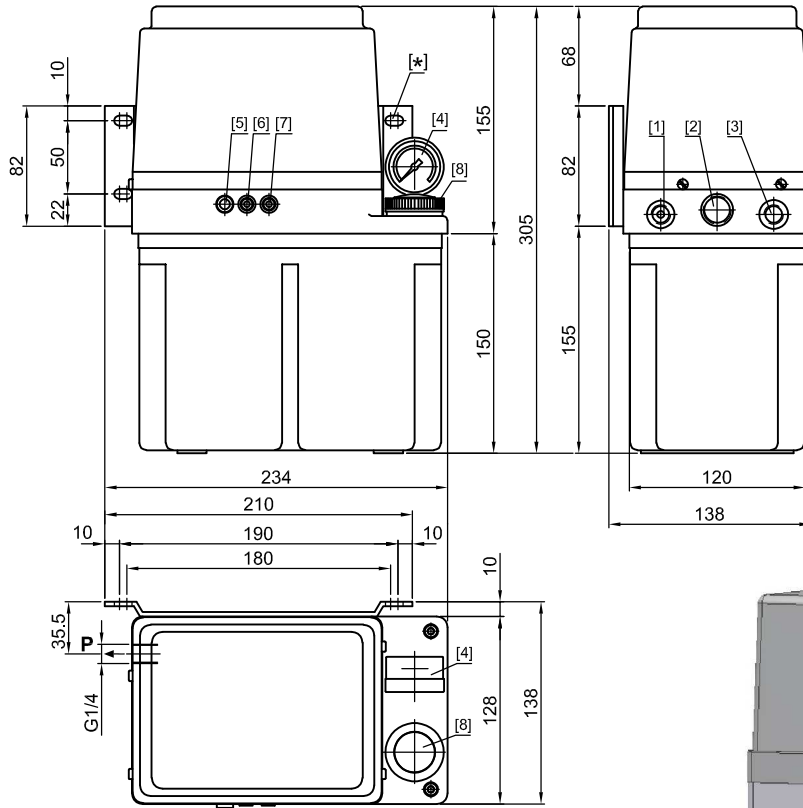
Electric level switch

Type of contact Capacitive sensor
Voltage10 ÷ 30Vdc
Connection.....max. 220mA
Function.....open with lubricant low level

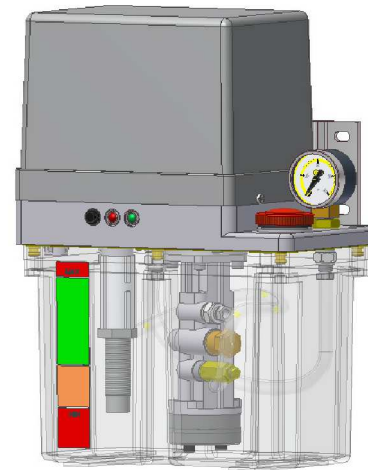


FLUID GREASE Lubrication Unit
NLGI 00-000
 Single line system

GE41/B
3L Plastic
 148.000.000



- [1] Pressure outlet 1/4 BSP
- [2] Inlet for cables PG11
- [3] Return, optional
- [4] Pressure gauge
- [5] Manual pushbutton
- [6] Red light
- [7] Green light
- [8] Filling cap



GE41 / (X) - 1 - (X) (X) (X) (X)

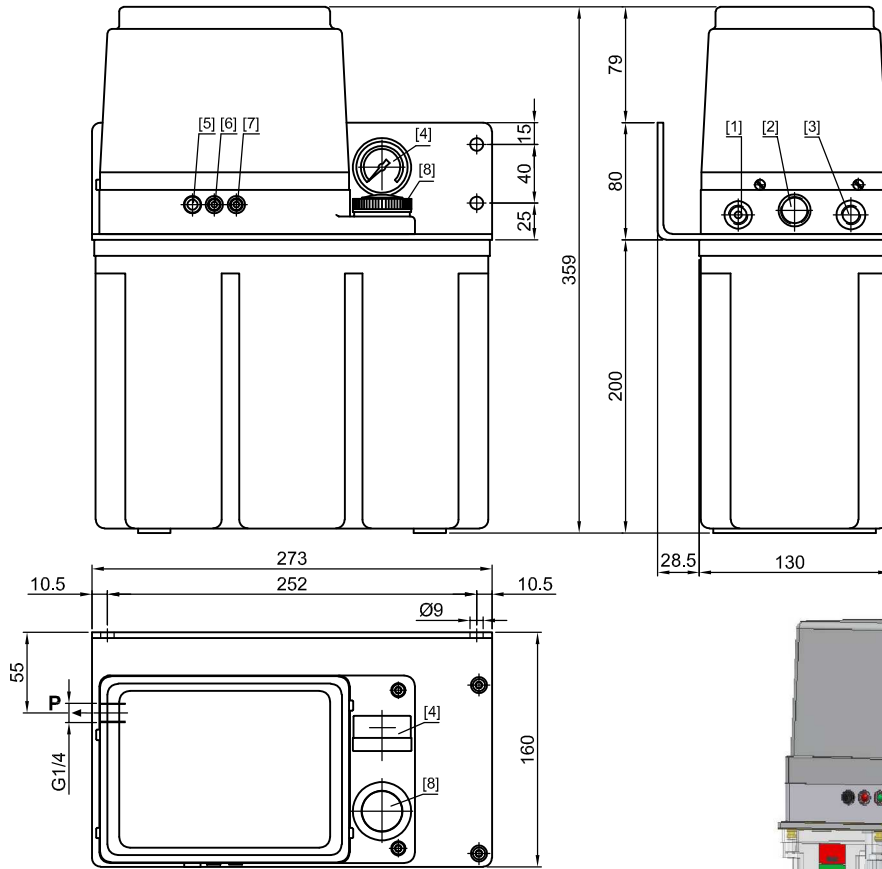
Tank capacity	Control system	Monitoring system						Flow l/min	Voltage	
		Mp	Ls	Pg	Ps	Gl	Rl			
(B) 3 Litres	(0) Without control	(1)	✓					(2) 0,2	(0) 24Vdc	
		(2)	✓	✓					(1) 115V~	
		(3)	✓	✓	✓					(2) 230V~
		(4)	✓	✓	✓	✓				(3) 230/400V~
	(7) Time / Pulse	(4)	✓	✓	✓	✓	✓	✓	(0) 24Vdc	
							(2) 0,2	(1) 115V~		
								(2) 230V~		

Mp = Manual pushbutton
 Ls = Level switch
 Pg = Pressure gauge
 Ps = Pressure switch
 Gl = Green light
 Rl = Red light

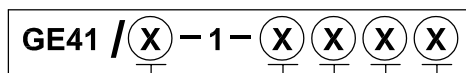
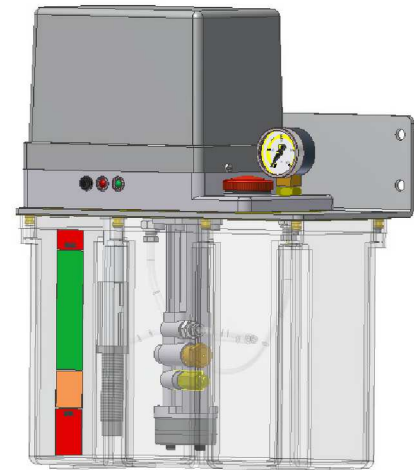
Only units whit control have green and red lights:
 -green light means unit under voltage
 -red light means alarm

FLUID GREASE Lubrication Unit
NLGI 00-000
 Single line system

GE41/C
6L Plastic
 148.000.000



- [1] Pressure outlet 1/4 BSP
- [2] Inlet for cables PG11
- [3] Return, optional
- [4] Pressure gauge
- [5] Manual pushbutton
- [6] Red light
- [7] Green light
- [8] Filling cap



Tank capacity	Control system	Monitoring system						Flow l/min	Voltage	
		Mp	Ls	Pg	Ps	Gl	RI			
C 6 Litres	0 Without control	1	✓					2 0,2	0 24Vdc	
		2	✓	✓					1 115V~	
		3	✓	✓	✓					2 230V~
		4	✓	✓	✓	✓				3 230/400V~
	7 Time / Pulse	4	✓	✓	✓	✓	✓	✓	0 24Vdc	
									1 115V~	
									2 230V~	

Mp = Manual pushbutton
 Ls = Level switch
 Pg = Pressure gauge
 Ps = Pressure switch
 Gl = Green light
 RI = Red light

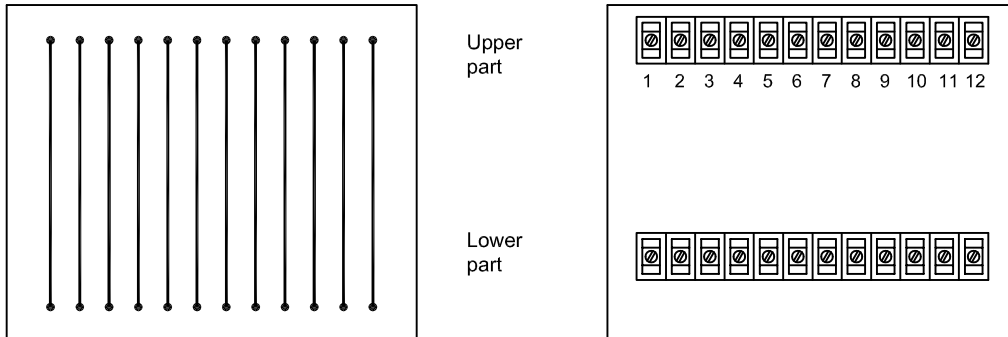
Only units whit control have green and red lights:
 -green light means unit under voltage
 -red light means alarm

Connection plate for units without control

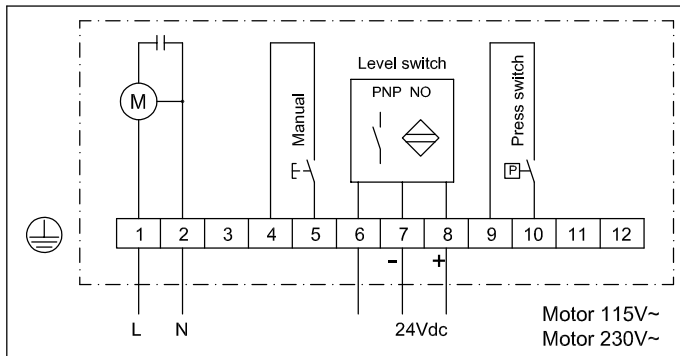
EF01/0-2

451060000

For application to connect the units' internal signals on the lower part with the control sources on the upper part.



Electrical connection diagram



All the contacts in this diagram are shown in resting position.

At the electrical level (tank without oil) the minimum level contact is open.

Electrical level ⇒ Tank without oil

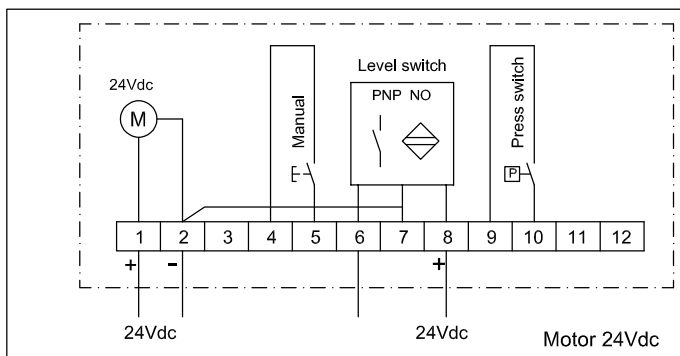
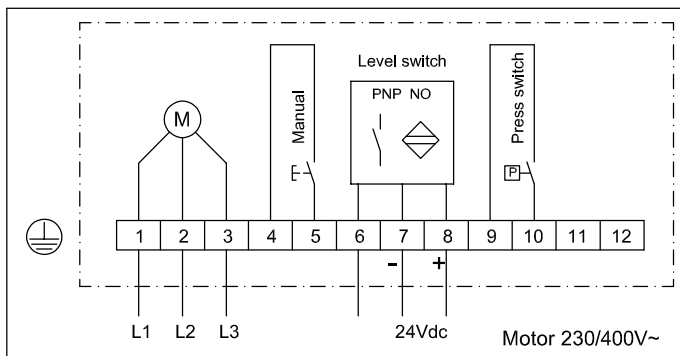
Pressure switch ⇒ Circuit without pressure

Manual pushbutton ⇒ Not pressed



Caution!!!

Safety measures must be taken: disconnect the main switch before carrying out connection coupling.



Control and Monitoring device

24Vdc ⇒ **EE03/C-1-0**
115V~ ⇒ **EE03/C-1-1**
230V~ ⇒ **EE03/C-1-2**

450.500.000

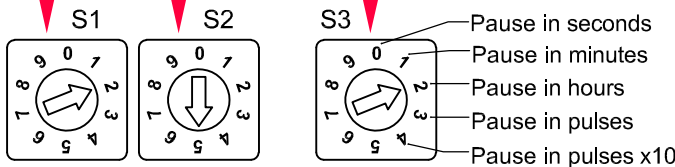
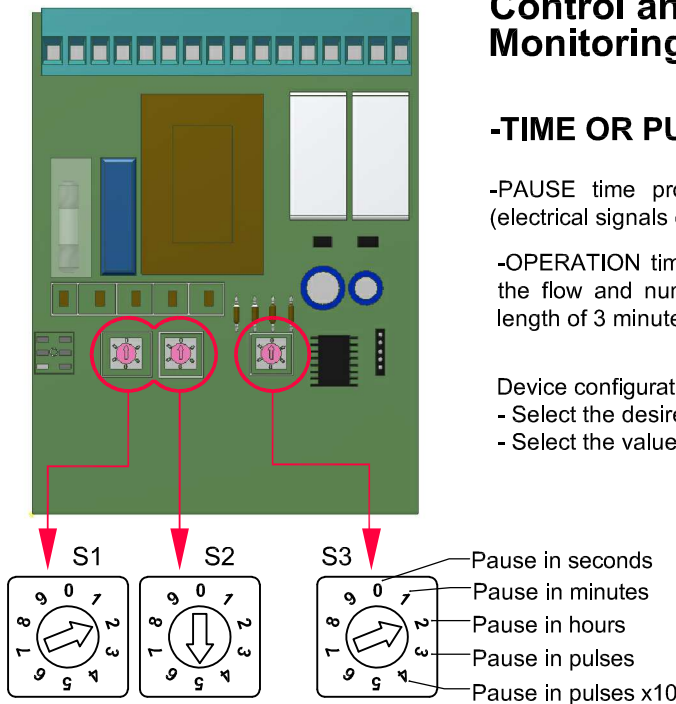
-TIME OR PULSES-

-PAUSE time programmable through the selector by time or pulses (electrical signals emitted during the working time of the machine)

-OPERATION time: pressure switch signal +10 seconds. It depends on the flow and number of points within the installation. A maximum time length of 3 minutes has been set after which the alarm will be activated.

Device configuration:

- Select the desired pause mode through the selector S3: Time / Pulses.
- Select the value of this pause through selectors S1 and S2 (Tens and Units).



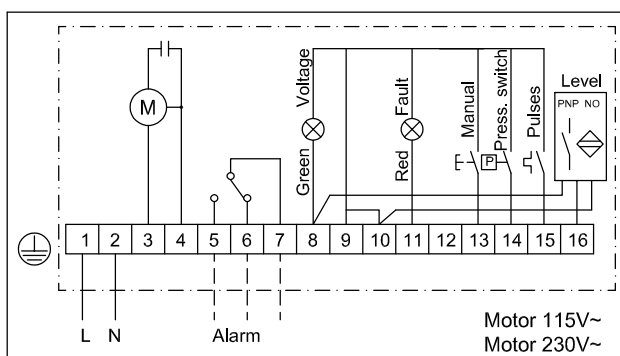
Application examples:

S1	S2	S3	One lubrication cycle every:
9	0	0	90 seconds
3	5	1	35 minutes
0	1	2	1 hour
8	0	3	80 pulses
7	5	4	75 pulses (x10)=750 pulses

Monitoring system

If the alarm is activated during start-up, the red led will light up indicating the relevant fault:

Alarm type	It indicates	To cancel the fault
Fixed red led	1- Minimum level of oil in the tank 2- Level switch fault	- Fill the tank and press the manual pushbutton. - Check the level switch.
2 flashes of red led	Pressure fault (not enough pressure after motor being in operation for 3 minutes)	- Check there are no leaks in the circuit. - Check pressure switch status.
3 flashes of red led	Device configuration fault	Check that: - The pause mode selector is not out of range. - Selectors s1 and s2 are not at "0" at the same time



All the contacts within this diagram are shown at resting position.

At the electrical level (tank without oil) the minimum level contact is open.

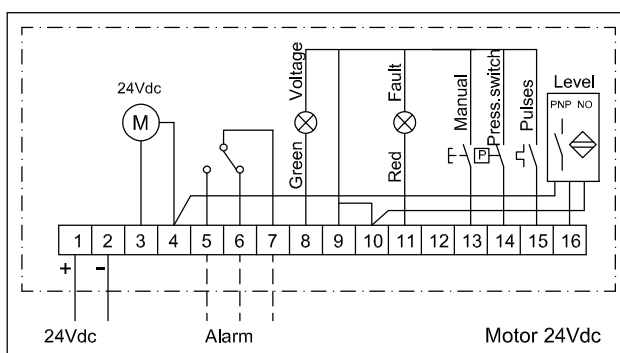
Electrical level ⇒ Tank without oil

Pressure switch ⇒ Circuit without pressure

Manual pushbutton ⇒ Not pressed

Heat protector only incorporated to single-phase motors 115V~ y 230V~.

If the current is cut as a result of abnormal overheating this device is resetable (it is automatically reactivated when the temperature returns back to normal) therefore it is not necessary to carry out any work to the motor.



CAUTION!!!

Safety measures must be taken: disconnect the main switch before carrying out connection coupling.