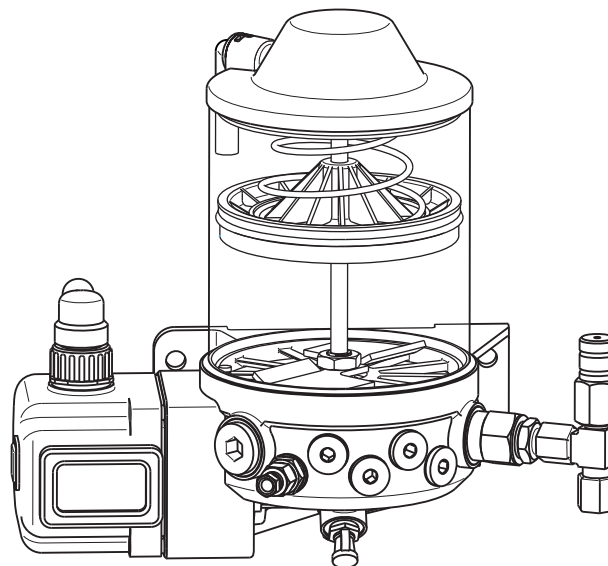


Integrated electronic controller type PICO S-EP 4 with bayonet connector

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Electronic pump PICO with integrated controller PICO S-EP 4



1. General informations:

The electronic control unit PICO S-EP 4 is used to control a central lubrication system depending on time - for the progressive system as well as for the multi-line system or even for mixed systems which are supplied by a PICO central lubrication pump

Installation dimensions:

The installation dimensions of the central lubrication pump PICO with integrated controller PICO S-EP 4 correspond to the installation dimensions of a central lubrication pump without controller (see description PICO).



PICO S-EP 4

2. Function sequence

Once the ignition has been switched on the green LED or the green signal lamp (optional) lights up on the control panel for 1.5 sec. and shows that the controller is operational (activation control).

Every time the controller is activated for the first time, a lubrication process begins. The green LED in the control half shell lit during the entire lubrication procedure.

The S-EP 4 integrated electronic controlling device has memory at its disposal. This also serves to keep a record of time elapsed. Should the ignition be switched off during lubrication or operational pauses occur, then the time is stopped and recorded. Once the ignition is switched on again the remaining lubrication or pause time is read from the memory and the sequence will be resumed where it was interrupted.

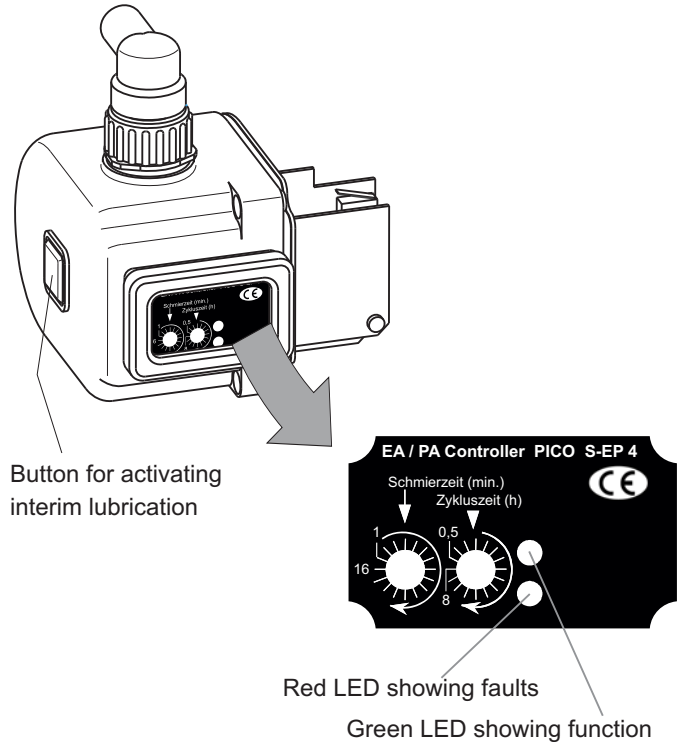
At any time when the ignition is on, an interim lubrication occurs when the button in the side of the pump motor housing or the illuminated button on the control panel is activated, this serves as a check of functionality. The pump then immediately starts its lubrication cycle, the lubrication or break duration recorded up to that point is reset and starts from the beginning.

The indications of the red and green LEDs can also be displayed by a red and green signal lamp in the driver's cab.

The central lubrication pump PICO has an integrated grease level control. The latter is evaluated by the control system PICO S-EP 4. If the minimum grease level is no longer reached, the pump will be switched off automatically. The red LED or the red signal lamp remains lit until the lubricant reservoir is refilled.

To reset a malfunction, actuate the interim lubrication key, except in case of faults regarding the grease level. Then, the pump starts a lubrication process.

Integrated electronic controller type PICO S-EP 4



Technical data for the controller:

Operating voltage:	10 to 60 V DC
Max. current load:	I = 6,0 A
Fuse (not included in device):	F 6,3 A (5x20) medium
Signal lamp outlet:	I = 1 A
Temperature range:	-25 °C to +70 °C
Protection type:	IP 65

Before the electrical connection:

Observe the voltage of the pump motor.

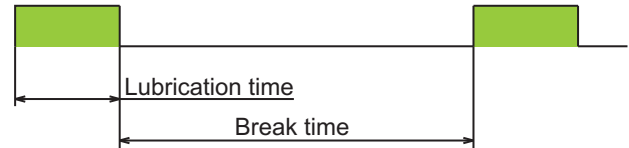
PICO S-EP 4

Method of operation and adjusting the parameters

3. Method of operation - Time controller:

When the central lubrication processor is time controlled, the beak time and the lubrication time can be adjusted. "Break time" means the time interval between two lubrication times.

Diagram of cycle sequence:



4. Adjusting the parameters:

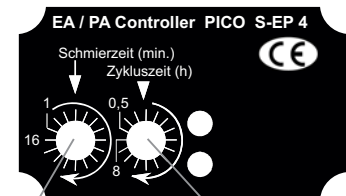
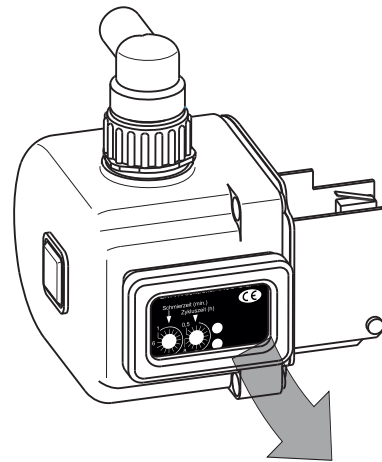
The break time and lubrication time can be set by means of graduating switches in the controller's sight glass.

To adjust the time setting, remove the red frame on the pump's motor housing using a flat screwdriver. Loosen the four Phillips screws and remove the transparent protective cover.

The break time or lubrication time can be adjusted using a flat screwdriver.

If the cover plate is not replaced properly, water may enter the controller and damage it. In this case, the guarantee is no longer valid.

Integrated electronic controller type PICO S-EP 4:



Graduating switch for setting the lubrication duration

Graduating switch for setting the break duration

Adjusting the parameters

Lubrication time:

1 to 16 min. (16 grades every 1 min.)

2 to 32 min. (16 grades every 2 min.)

Break time:

0.5 to 8 h (16 grades every 0.5 h)

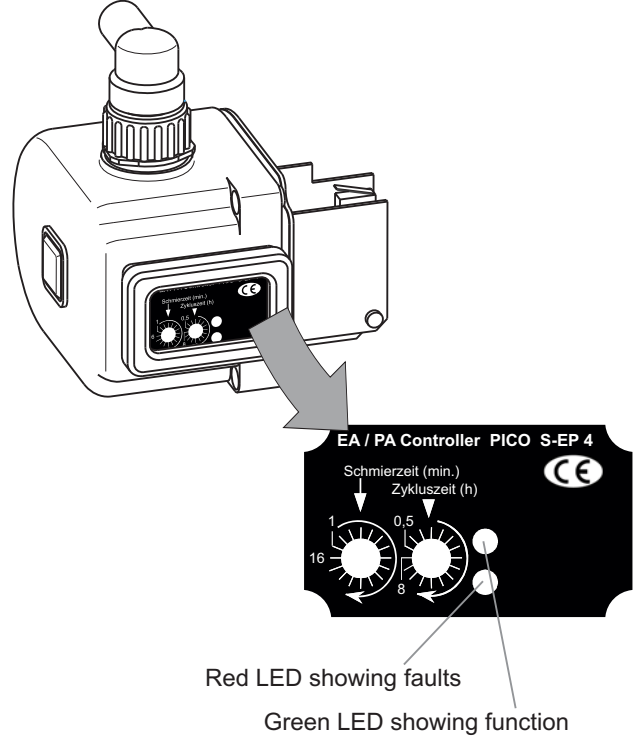
PICO S-EP 4

5. Summary of Signal indicators

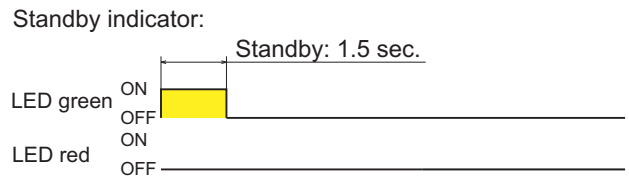
The pump's functions are indicated via two control LEDs (green / red) in the display on the pump's motor casing.

These control LED functions may be indicated in the driver's cap of the vehicle via built-in signal lamps. These must be specially ordered.

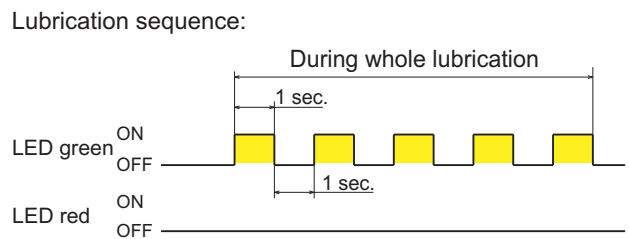
Integrated electronic controller type PICO S-EP 4:



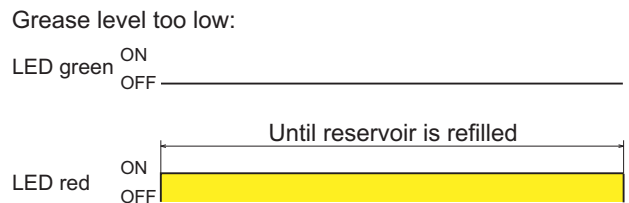
a) Standby:



b) Lubrication activated:



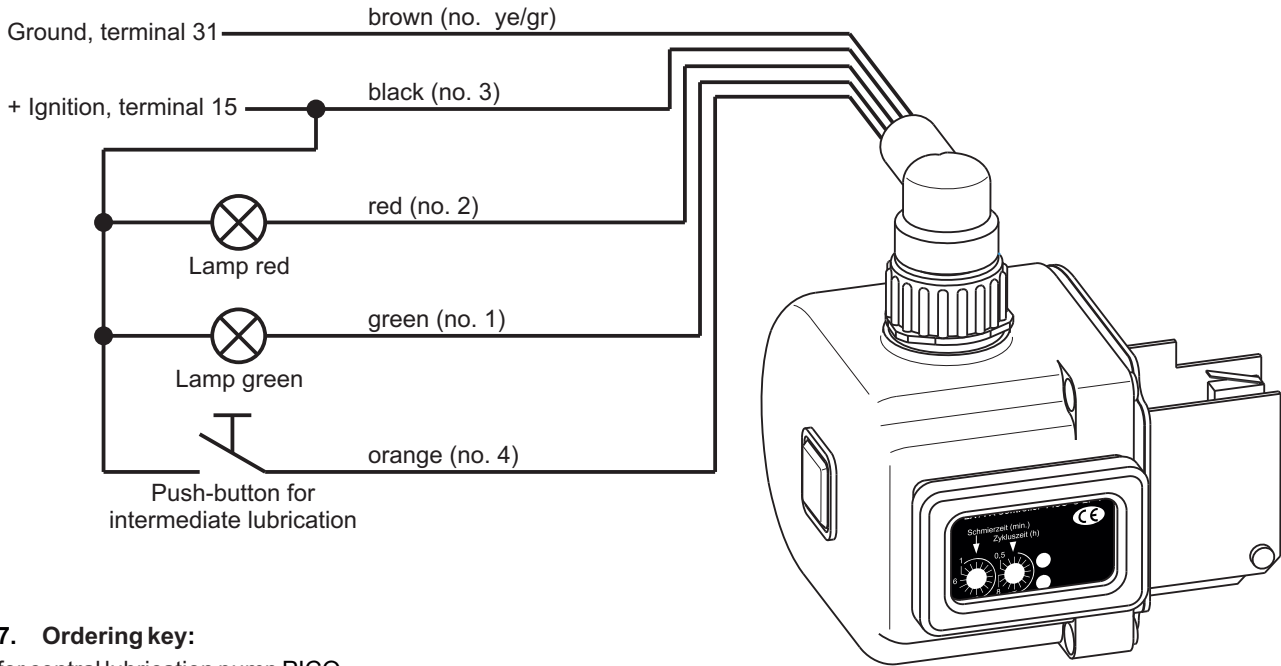
c) Grease level error:



PICO S-EP 4

Terminal diagram and Ordering key for pump

6. Terminal diagram:



7. Ordering key:

for central lubrication pump PICO
 with integrated electronic controller PICO S-EP 4

Construction type	2185 . 3 . 1 . 1 . 2 . Z . 0000			
with bayonet connector				
Motor voltage	12 V	24 V		
Code	3	4		
Outlet type	Outlet-no.			
	4	10	4+10	without
PE-120 F	1	2	3	0
PE-120 FV	4	5	6	
PE-120 F + X			7	
PE-120 FV		X		
PE-120 F + X		X	8	
PE-120 FV X	X			
Size of reservoir	1.2 kg			
Code	1			
Controller	PICO S-EP 4			
Code	2			
Break time	0.5 h - 8 h	0.5 h - 8 h		
Lubrication time	1 min. - 16 min.	2 min. - 32 min.		
Code	Z	T		
Special types	0000			

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PICO S-EP 4

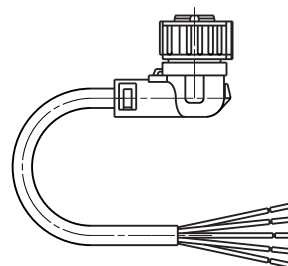
Retrofitting and Spare parts and Ordering key for integrated controller

8. Retrofitting and Spare parts:

The integrated controller PICO S-EP 4 can be retrofitted the electric pump PICO i. e. to pumps which have been delivered without controller and to replace existing controllers.

Controller delivered for retrofitting or replacement are not provided with connection cable, as this is normally available. If the controller is to be installed in a pump which has not been equipped with a controller so far, or to be replaced by a controller with another connector, the connecting cable must be ordered separately.

5-wire connecting cable, with bayonet connector:



Length 10 m: Order-no. FAZ02499-19

9. Order numbers:

for integrated control units PICO S-EP 4 installed in the motor protection housing

Order-no.	Lubrication time	Break time
21859012T	2 min. - 32 min.	0.5 h - 8 h
21859012Z	1 min. - 16 min.	0.5 h - 8 h