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Grease lubrication pump PICO with integrated control unit PICO-troniX1 PICO-tronic

Version 05-2019

Original operating and assembly manual

BAL2185_Grease_lubrication_pump_PICO_with_PICO-troniX1_tronic_0519EN 10158410

1. Technical data

General:

Delivery rate per stroke and outlet: . . . . . depending on pump element (see chapter 8.4 „Pump elements“)
No. of outlets: . . . . . pump elements PE-5 to PE-50: . . . . . max. 8
. . . . . pump elements PE-60 F to PE-170 F: . . . . . max. 2
Pressure connection: . . . . . Ø4 mm, Ø6 mm or thread M10x1 (multi-line lubrication systems)
. . . . . Ø6 mm, Ø8 mm or thread G1/4" (progressive lubrication systems)
Lubricant: . . . . . greases up to NLGI cl. 2
. . . . . (greases with solids content on request)
Operating pressure: . . . . . max. 200 bar (multi-line lubrication systems)
. . . . . max. 300 bar (progressive lubrication systems)
Pressure limiting valve: . . . . . set to 290 bar (progressive lubrication systems)
Operating temperature: . . . . . -35°C up to +70°C
Transport and storage temperature: . . . . . -40°C up to +70°C
Reservoir material: . . . . . plastic, transparent
Reservoir size: . . . . . 1,5 l
Effective volume: . . . . . 1,2 l
Installation position: . . . . . optional (version with follow-up piston)
. . . . . reservoir in a vertically upright position (version with agitator blade)
Level monitoring: . . . . . with, installed in pump body (version with follow-up piston)
. . . . . without (version with agitator blade)
Rotational direction of the agitator blade: . . . . . clockwise
Degree of protection: . . . . . IP 65
Weight: . . . . . approx. 4,8 kg
. . . . . (without pump element, without grease filling, depending on equipment)

Motor:

Supply voltage: . . . . . 12 or 24 V DC
Current load max.: . . . . . 6,3 A at 12 V
. . . . . 3,3 A at 24 V
Pump speed: . . . . . 15 r.p.m

Integrated control unit:

Supply voltage: . . . . . 10 to 60 V
Current load max.: . . . . . 6,0 A
Output for signal lamp: . . . . . 0,4 A
Fuse (not included in device): . . . . . 6,3 A
. . . . . (5x20) medium time lag

The **grease lubrication pump PICO** is subsequently called a **device**.

Devices with integrated control unit PICO-troniX1 can be supplied with **bayonet plug-type connection** or **Hirschmann plug-type connection**. The **connection plug** and a **10 m long connection cable** are included in the scope of delivery for both versions.

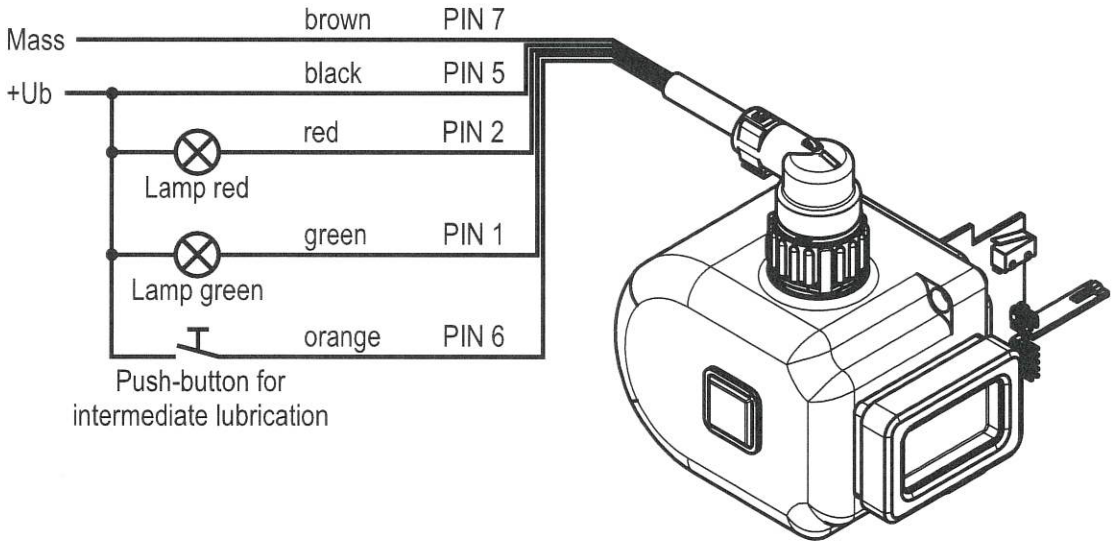
Notice!

Devices with integrated control unit PICO-tronic are supplied with two **Hirschmann plug-type connections**. The **connection plug for the voltage connection** (see fig. 40) and a **10 m long connection cable** are included in the scope of delivery. The **connection plug for the additional equipment** (see fig. 40) is supplied **without connection cable**. If you need a connection cable, it has to be ordered **separately** (order numbers on request).

The following listed connection diagrams are valid for standard versions.
Other connection diagrams may be valid for special versions. These are available on request.

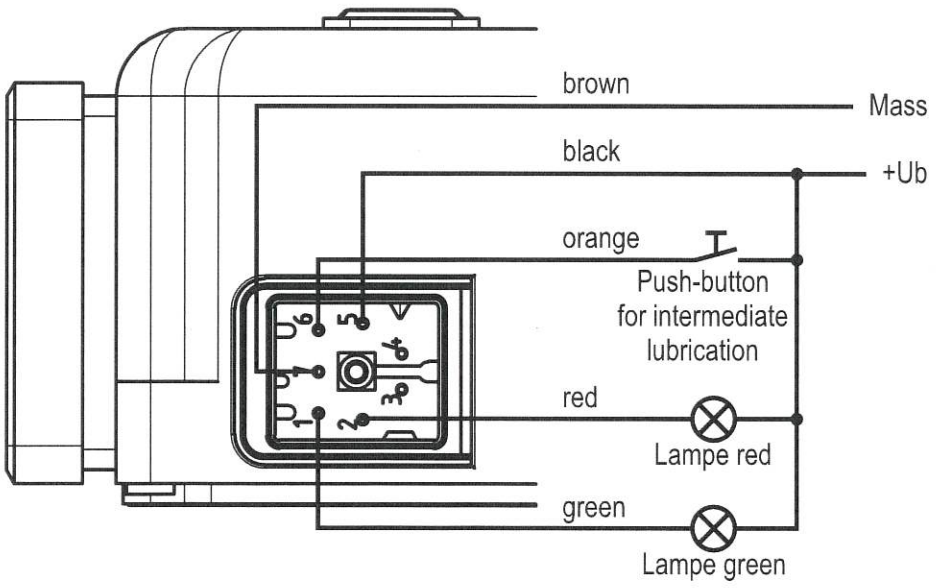
6.2.1 Connection diagram for devices with PICO-troniX1 and bayonet plug-type connection

Fig. 1:



6.2.2 Connection diagram for devices with PICO-troniX1 and Hirschmann plug-type connection

Fig. 2:



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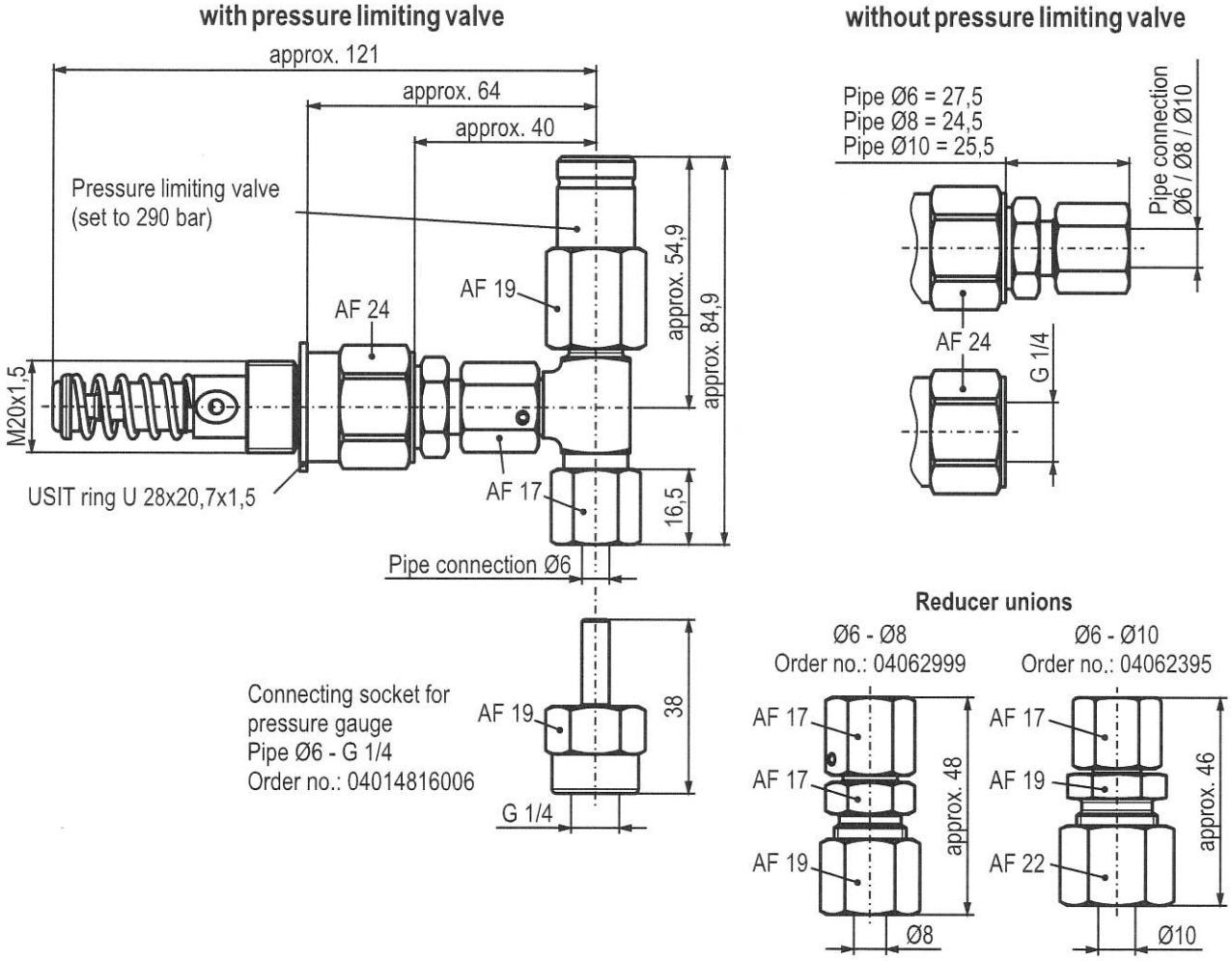
8.4.2 Pump elements PE-60 F, PE-120 F and PE-170 F

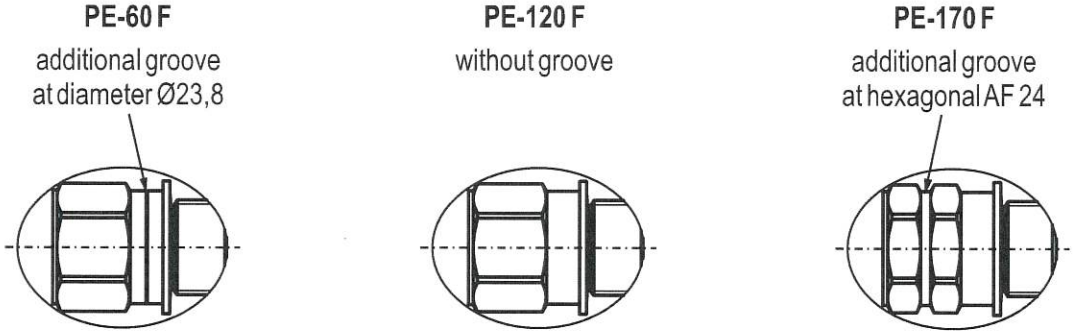
The pump elements PE-60 F, PE-120 F and PE-170 F are intended for the use in progressive lubrication systems. The delivery rate of these pump elements is set to 0,06 cm³/stroke (PE-60 F), 0,12 cm³/stroke (PE-120 F) or 0,17 cm³/stroke (PE-170 F) and cannot be adjusted. The pump elements are deliverable with different pipe connections and with or without pressure limiting valve (see fig. 25).

Fig. 25:



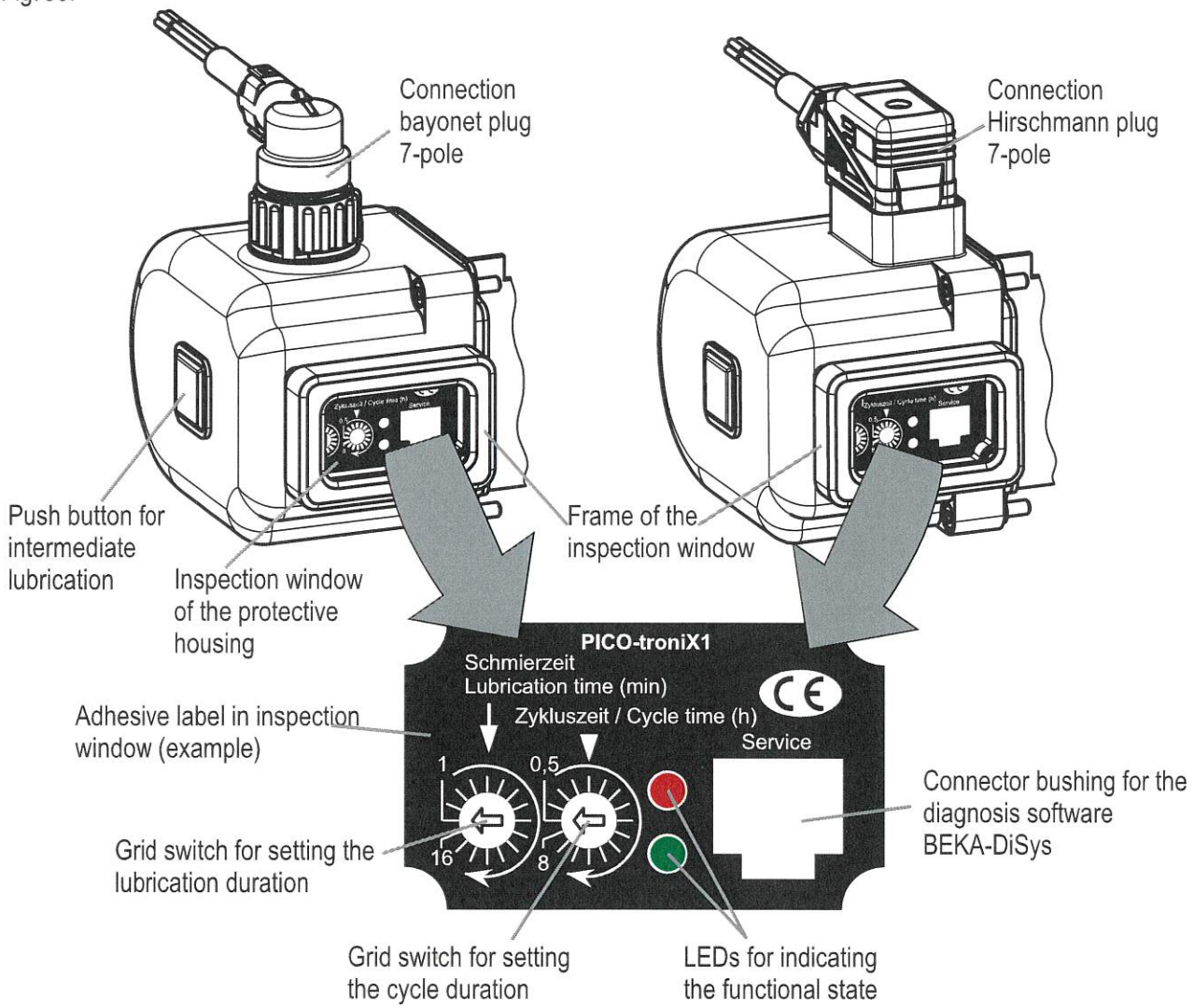
Each type of pump element has its own marking in order to enable a visual differentiation (see fig. 26).

Fig. 26:



9.1.1 Functional description

Fig. 36:



A lubrication starts at initial connection of the integrated control unit.

Each time after the voltage (ignition) is switched on, the red and the green LED glow for approx. 1.5 seconds in the inspection window of the protective housing and display the operational capability of the integrated control unit.

If the voltage is interrupted (ignition switched off) during the cycle sequence or during the lubrication duration, the data is stored in the operational database of the integrated control unit. When the voltage (ignition) is switched on again, the cycle sequence starts where it was interrupted before.

When the voltage is switched on, an intermediate lubrication can be triggered at any time by pushing the push-button for intermediate lubrication. The current data of the cycle is deleted and a new lubrication cycle starts immediately.

Some errors have to be reset after the troubleshooting by pushing the push-button for intermediate lubrication (see chapter 13. „Troubleshooting").

Then, the device immediately starts with a lubrication cycle.