

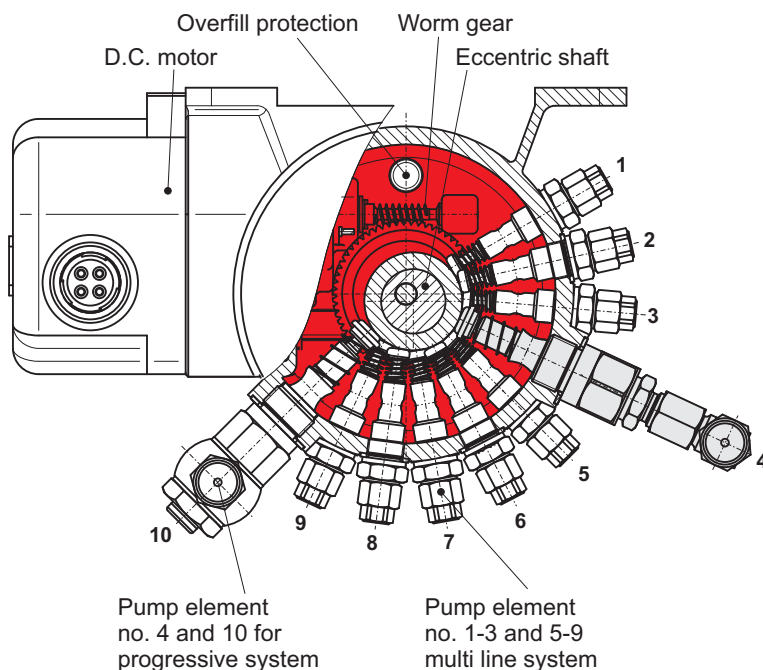
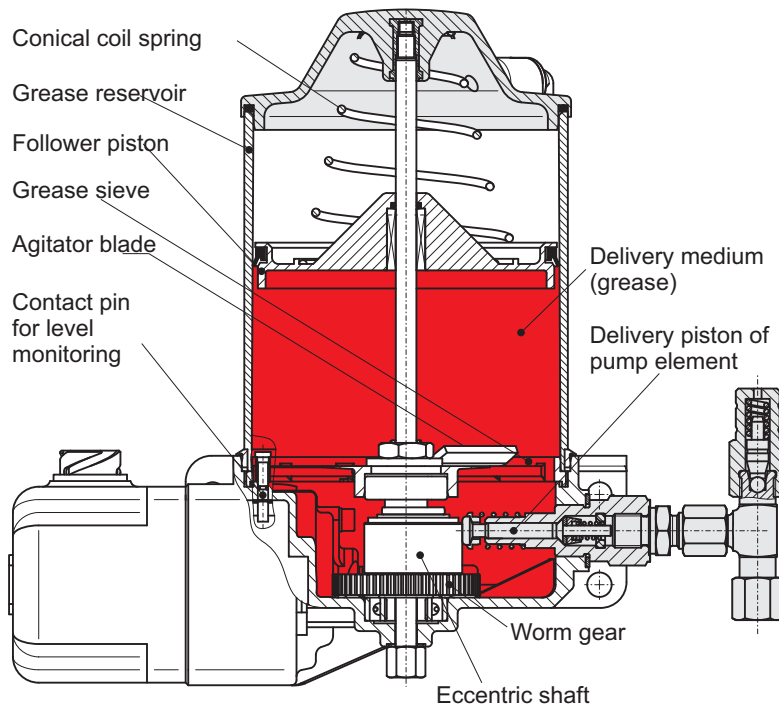
# Piston Pumps (Grease)

## Series PICO - electric drive



### Table of contents

▶ Use , function .....	06-2-30-02
▶ PICO - (DC) - type 2185 .....	06-2-30-03



### Use

Can be used as progressive or multi line pump in compressors, machine tools, textile machines, wood working machines and printing machines, etc.

### Function

A d.c. motor (12 or 24 V) drives the eccentric shaft via a worm gear. The pistons of the pump elements are pushed into the outlet fitting by the rotative movement and the eccentricity (=delivery stroke). The piston spring causes a return of the delivery piston into original position (= priming).

The non-return valves, integrated into the pump elements, prevent that the already displaced delivery medium can be sucked back.

At the eccentric shaft above the grease sieve is an agitator blade, which is firmly connected to the eccentric shaft. This agitator blade pushes the delivery medium in the direction of the pump elements.

In the grease reservoir is a follower piston which is pressurized with a conical coil spring. The follower piston's task is to push the delivery medium well-proportioned to the pump elements. With the use of a follower piston, the pump has not necessarily be assembled in horizontal position.

When the pump is empty, the follower piston touches a contact pointer, which then gives a signal to the control unit (pump empty).

Filling is effected via the hydraulic type lubricating nipple at the pump housing. An overfill protection is integrated into the pump housing so that the pump cannot be overfilled.

# Piston Pumps (Grease)

## Series PICO - electric drive



PICO (DC)

Grease lubrication pumps

### Technical data

#### Pump

Delivery volume per stroke (= 1 pump revolution) and outlet: 0,005 to 0,12 cm<sup>3</sup>  
(depend on pump element)

Regulation: possible for PE 120 FV

Reservoir content: 1,2 kg

Material: plastic, transparent

Operating pressure: max. 200 bar at multi line system  
max. 280 bar at progressive system

Delivering medium: greases up to NLGI cl. 2  
(grease with solid contents only on demand)

Operating temperature: -25 to 70 °C

No. of outlets: max. 10

Outlet type: see order key

Rotation direction of agitator blade: clockwise

Installation position: reservoir vertical as shown

Weight: max. 4,5 kg  
(without pump elements, with basic grease filling)

Level monitoring: integrated into the pump

#### Motor

Drive: d.c. motor

Operating voltage: 12 V DC or 24 V DC

Current consumption at 280 bar counter-pressure and -25° C: max. 3,8 A for 24 V DC  
max. 7,5 A for 12 V DC

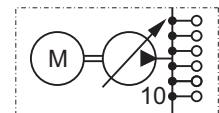
Speed (= pump revolutions): 15 r/min

Protection class: IP 65

**Note:** The installation of an integrated control unit PICO-tronic (standard) is possible for this pump\*\*\* (see documentation control- and monitoring devices).



### Symbol



Pump elements (see documentation pump elements)		Metering volume cm <sup>3</sup> / stroke and outlet	System
PE 5		0,005	Multi line
PE 10		0,010	
PE 15		0,015	
PE 25		0,025	
PE 50		0,050	
PE 120 F	with/without pressure limitation valve	0,12	Progressive
PE 120 FV		max. 0,12 (adjustable)	

### Order key for type 2185

2185 3 1 1 10 0000\*\*\*

<b>Type-no.</b>	2185			
Code	2185			
<b>Motor voltage</b>	with bayonet connector	12 V DC	24 V DC	
Code		3	4	
<b>Pump elements **</b>				
<b>Outlet position</b>		<b>4</b>	<b>10</b>	<b>4+10 without PE</b>
PE 120 F with DBV*		1	2	3 0
PE 120 FV with DBV*		4	5	6
PE 120 F with DBV* (pos. 4) + PE 120 FV with DBV* (pos. 10)				7
PE 120 F with DBV* (pos. 10) + PE 120 FV with DBV* (pos. 4)				8
<b>Reservoir content (kg)</b>		1,2		
Code		1		
<b>Control unit</b>		without		
Code		10		
<b>Special models</b>				

\* with DBV = mit Druckbegrenzungsventil = with pressure limiting valve

\*\* Please indicate pump elements PE 5, PE 10, PE 15, PE 25, PE 50 separately; see documentation on pump elements.

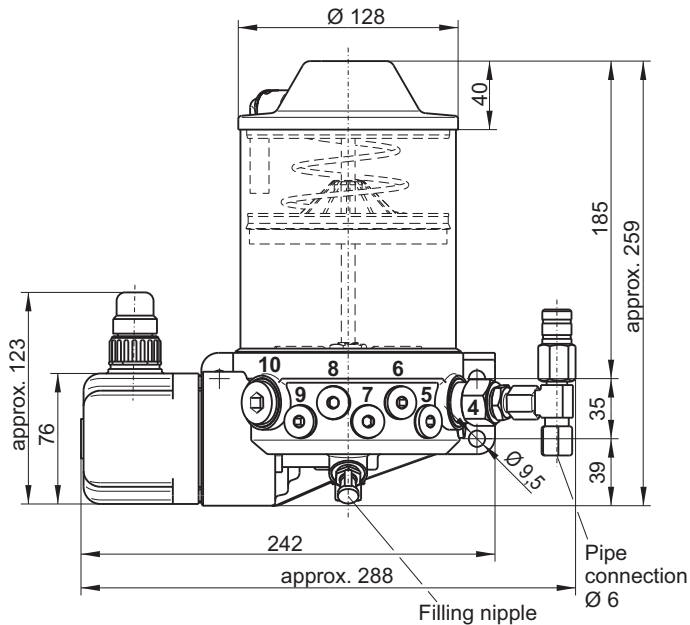
\*\*\* Please indicate type of control separately for model with integrated control unit.

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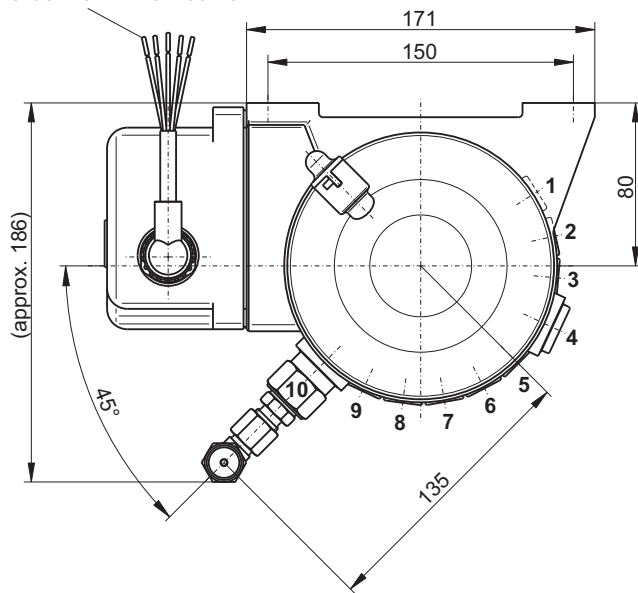
Subject to alterations!

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06-2-30-03 state: 01.16EN



Spare cable with plug, 10 m  
Order-no.: FAZ02499-19



### Pump elements

The PICO can be equipped with 10 outlets as a maximum, whereas two outlets are intended for the connection to a progressive system and eight outlets for the direct connection to the lubrication point.

For connecting a progressive system can the pump elements PE 120 F and PE 120 FV optionally be installed into the outlet positions 4 and 10.

The pump elements PE 5 or PE 10, PE 15, PE 25, PE 50 can be installed into the outlet positions 1 to 3 and 5 to 9.

When a pump element is disassembled, the outlet position has to be locked with a corresponding screw plug and a sealing ring.

#### Order-no. for outlet position 4 and 10:

Screw plug M20 x 1,5: 090090800850  
Sealing ring Ø28 x Ø21: 100150010149

#### Order-no. for outlet position 1 to 3 and 5 to 9:

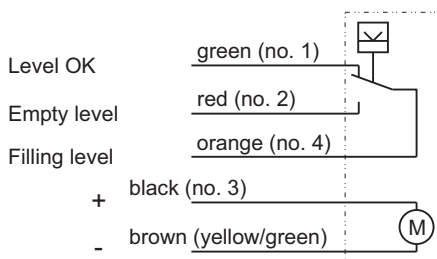
Screw plug M14 x 1: 090090801450  
Sealing ring Ø14 x Ø18: 100150010148

### Level monitoring

As a standard, the pump is equipped with an electrical filling level indicator. The pump has to be switched off in the case of minimum level in order to prevent that air is sucked into the system.

### Wiring diagram

Connection possibilities to existing machine control, for example:



(no. ...) = cable-no. for uni-colored cable

Subject to alterations!

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