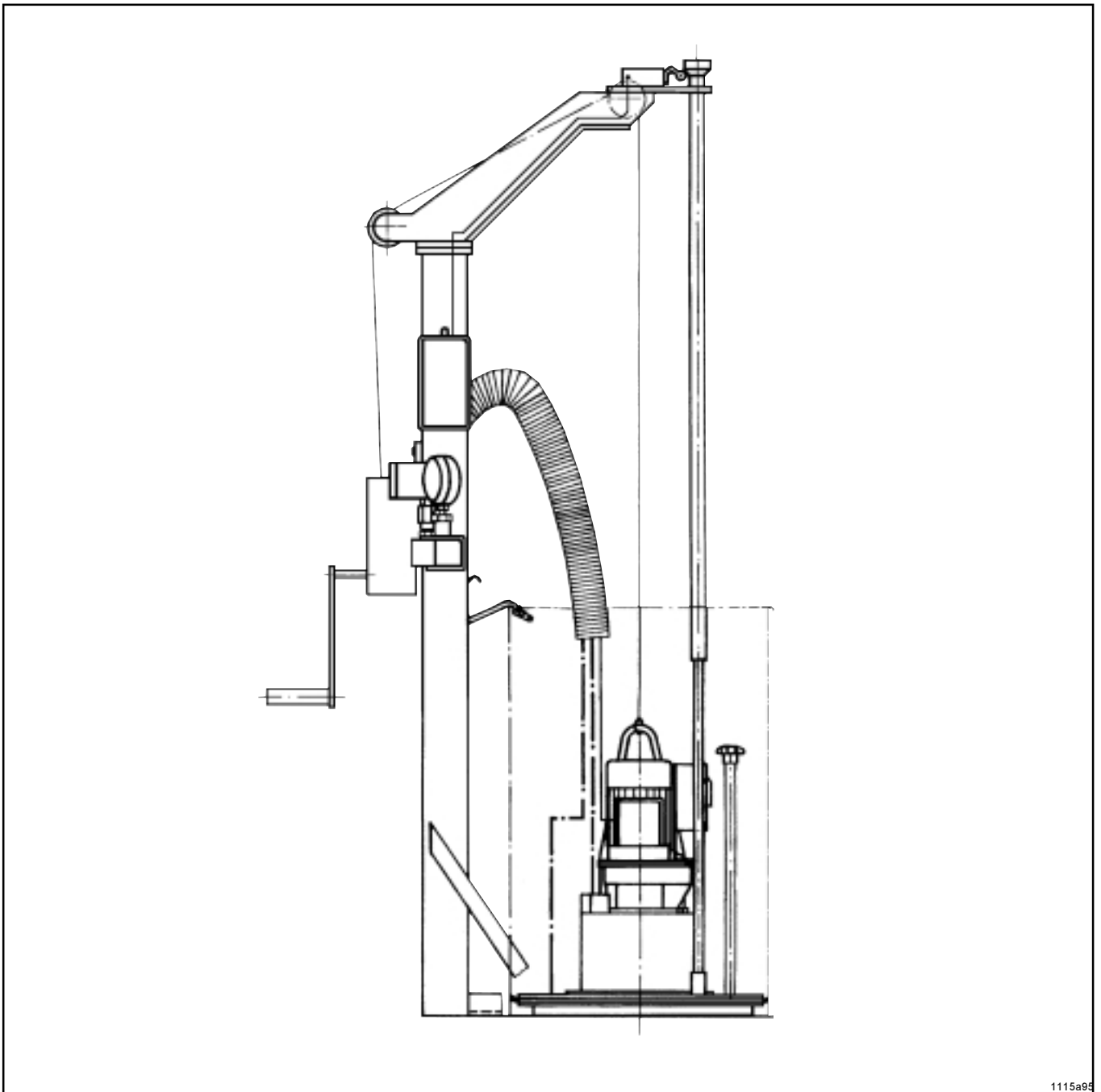


High Pressure Barrel Pump Model ZPU 75



1115a95

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Owner Manual Operating Instructions and Service Parts List

Preface to the Owner manual

This Owner manual is intended to familiarize the user with the pump/lubrication system and to enable him to use its various features.

The Operating Instructions contain important information for safe, correct and economic operation of the pump/lubrication system. Their observance will help avoid hazards, reduce repair costs and downtime, increase the reliability and prolong the service life of the pump/lubrication system.

These Operating Instructions must be completed to include the respective national regulations concerning the prevention of accidents and protection of the environment.

The User Manual must always be available on the site where the pump/lubrication system is in operation.

If persons who are charged with work with the pump/lubrication system do not have a good command of the english language, it is the user's responsibility to take the necessary action to make the User Manual, particularly the Operating Instructions, understandable to these persons.

The User Manual must be read and used by all persons who are charged with work with the pump/lubrication system, e.g.

- **Operation**, including adjustment, troubleshooting during operation, elimination of production waste, maintenance, disposal of process materials
- **Maintenance** (inspection, repairs)
- **Transport**

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1 Safety Instructions

The Operating Instructions include general instructions which must be followed when a pump/pump unit is installed, operated or serviced. Therefore, it is absolutely necessary for the fitter and the specialist/user to read the Operating Instructions before a unit is installed and commissioned. The Operating Instructions must always be available on the site where the machine/system is erected.

All general safety instructions contained in this main chapter on safety must be observed as well as all special safety instructions given in other main chapters.

Hazard warnings in the Operating Instructions

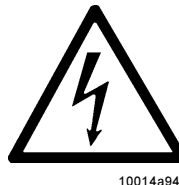
The notes referring to safety contained in the Operating Instructions whose failure to observe may result in personal injury are marked by the following symbol

Safety symbol acc. to DIN 4844-W9



The symbol warns of an electrical hazard.

Safety symbol acc. to DIN 4844-W8



If ignoring the safety note might result in machine damages and malfunction, the word



is added.

Warnings directly fixed to the machine must always be observed and must be kept in completely legible condition.

Staff Qualification and Training

The staff responsible for operation, maintenance, inspection and installation must be adequately qualified for these jobs. The user must properly regulate the field of responsibility and supervision of the personnel. If the personnel is not in command of the necessary expertise, they must receive appropriate training and instructions.

If necessary, this can be done by the manufacturer/supplier on behalf of the machine user. Furthermore, the user must ensure that the contents of the Operating Instructions are fully understood by the personnel.

Hazards resulting from failure to observe the safety instructions

Failure to heed the safety warnings may result in damage to equipment and the environment and/or personal injury. Failure to observe the safety notes may result in the loss of all claims for damage.

As an example, in the following we list some dangers which may result from failure to observe the warnings:

- failure of machine/system to fulfill important functions
- failure of specified methods for maintenance and repair
- personal injury due to electrical, mechanical and chemical influences
- danger to the environment due to leakage of harmful materials

Safety-Conscious Working

The safety instructions given in the Operating Instructions, the prevailing national regulations for the prevention of accidents and any internal working and shop regulations and accident prevention measures of the user must be observed.

Safety Instructions for the User/Operator

- If warm or cold machine parts may involve hazards, the customer must protect them against accidental contact.
- Do not remove protection devices for moving parts while the machine is in operation
- Leakages of harmful materials must be disposed of so as to jeopardize neither persons nor the environment. The requirements of the law must be satisfied.
- Danger caused by electrical current must be excluded (for details refer to the applicable specifications of VDE and the local power supply companies).

Safety Instructions for Maintenance, Inspection and Installation Services

The user must make sure that all maintenance, inspection and installation work is executed by authorized and qualified experts who have thoroughly read the Operating Instructions. On no account may work be done on the machine while the machine is in operation. Follow all instructions for shutting down the machine as described in the Operating Instructions. Decontaminate pumps and pump units delivering harmful materials.

Reassemble all safety and protection devices immediately after completion of the cleaning procedure.

Dispose of material harmful to the environment in accordance with the applicable official regulations.

Before putting the pump/pump unit into operation, ensure that all points given in the chapter „Commissioning“ are observed.

Unauthorized Modification and Spare Parts Production

Alteration and modifications of the machine are only allowed if approved by the manufacturer. Original spare parts and accessories authorized by the manufacturer ensure safe operation. If other parts are used, the manufacturer may be released from its liability for the resulting consequences.

Inadmissible Operating Modes

The operational safety of the supplied product is only granted if the product is operated according to the instructions given in chapter 1 - General - of the Operating Instructions. The max. ratings listed in the Technical Data sheet must never be exceeded.

Commissioning of the product (pump/pump unit) within the European Union is forbidden until it has been decided that the machine in question meets the requirements of the EU guidelines.

Description

1.1A-38001-C00

2 Description

2.1 General

This Owner manual only refers to high-pressure barrel pumps of the series ZPU 75.

It is intended for the personnel charged with the installation, operation and maintenance of the pump.

If faults should occur although the Operating Instructions have been followed, please contact our Service Department below:

LINCOLN GMBH
 Abt. Zentraler Kundendienst
 Postfach 1263
 D-69183 Walldorf
 Tel.: 06227 330
 Fax: 06227 33259

2.2 Appropriate Use

The high-pressure barrel pump model ZPU 75 is designed for use in centralized lubrication systems only.

Take care that the max. ratings mentioned in the Technical Data, particularly the max. operating pressure of 300 bar, is not exceeded.

Any other use is not in accordance with the instructions and will result in the loss of claims for guarantee and liability.

The pump is mainly used as a supply pump for two-line lubrication systems.

If an electro-hydraulic pressure switch and a control unit are installed on the pump, it can also be used as a lubricating unit.

2.3 Technical Data

| | |
|---|---|
| Lubricant output | 6 dm ³ /h |
| Drive: | flanged gear motor, construction V 1, protection IP 65, power 0.25 kW, speed 23.5 rpm, voltage: 220/380 V, 50 Hz (other ratings on request) |
| Sense of rotation: | lefthand (seen from the top of the motor fan impeller) |
| Operating pressure: | 300 bar |
| Working pressure set on pressure switch | 280 bar |
| Suitable lubricants: to DIN 51825 | grease of NLGI grades 1, 2 and 3 acc. (NLGI grade 3 on request) |
| Ambient temperature: | - 20° C to + 60° C |
| Safety valve: | set to 300 bar, tamper-proof |
| Barrel size: | lidded barrels acc. to DIN 6644 see model designation |
| Connection thread: | pressure line: 3/4" BSP relief line: 3/4" BSP |
| Sound level: | <70 dB(A) |
| Weights: | ZPU75-570 : 72 kg ZPU75-400 : 55 kg (weight of the pump without stand and without guide tube) |

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2.4 Structure

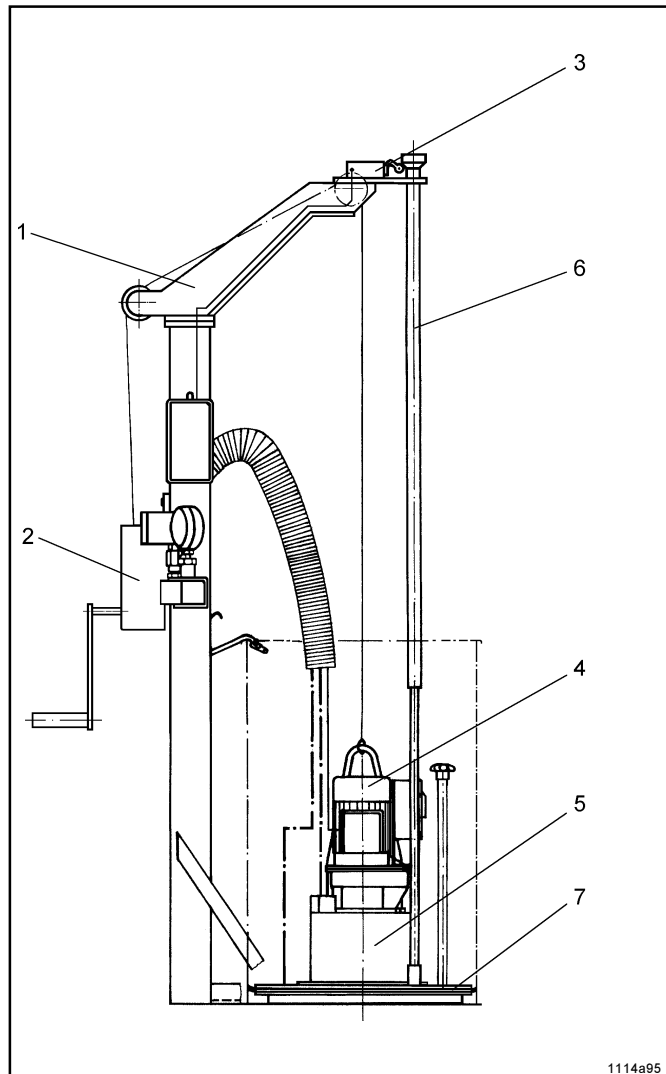


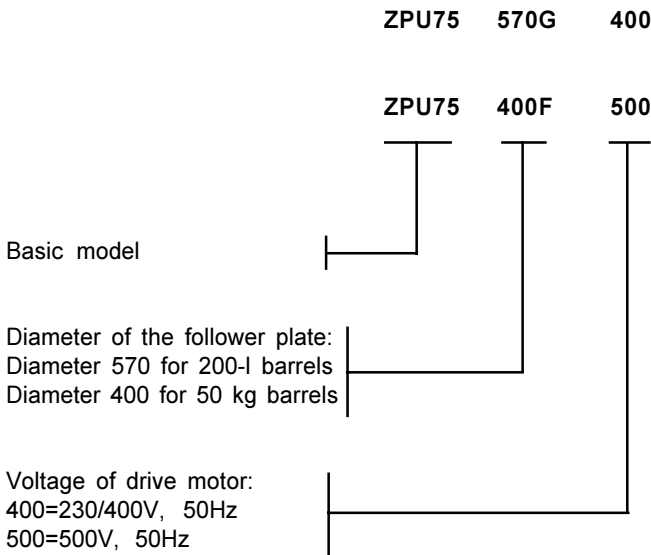
Fig. 2.4.1: structure of the high-presure barrel pump ZPU 75

| Item | Designation |
|------|-------------|
|------|-------------|

- | | |
|---|-------------------|
| 1 | stand |
| 2 | winch |
| 3 | low level control |
| 4 | drive motor |
| 5 | pump |
| 6 | guide |
| 7 | follower plate |

Model Designation

Examples of model designations



2.6 Mode of Operation

The pump supplies the lubricant directly from the original drum and sinks together with the follower plate with the grease level decreasing.

The flanged gear motor drives a stirring paddle which delivers the lubricant to the suction boreholes of the pump element. Via an eccentric pin the rotating movement is simultaneously converted into an oscillating movement of the drive of the pump element.

The pump element operates as a piston pump with 2 pistons operating in opposite direction which alternately suck in lubricant and deliver it via the outlet borehole to the pressure line.

The outlet channels of the high-pressure pistons are controlled via a floating valve piston.

The lubricant supplied by the pump element is directed via 2 check valves to a connection block which is installed on the stand. A safety valve is installed in the pressure line channel.

A pressure gauge and a pressure switch are installed in the connection block for the pressure monitoring and control.

A stand with winch is used for facilitating the barrel change.

2.5 Electrical Equipment

- Flanged gear motor: technical data in enclosed sheet
- Electric low level control: position switch with roller lever actuator (data sheet enclosed)
- Pressure switch: position switch with plunger actuator (data sheet enclosed)

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3 Erection and Assembly

3.1 Erection of Pump

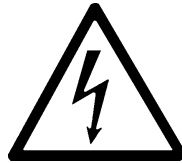
The pump stand must be securely fixed on the floor.

Requirements on the place of installation

- protected from dust and dirt
- safe against atmospheric influences
- enough space for replacing the barrels and executing the maintenance work
- even, solid and vibration-free place of erection

3.2 *Electrical Connection*

All electrical work should be undertaken only by qualified personnel



Electrical connection of the drive motor:

- terminal diagram in cover of terminal box
- fuse protection in conformity with the national regulations in force. Nominal current consumption mentioned in enclosed motor data sheet.
- please note sense of rotation: lefthand (seen from the top of the motor fan impeller)

Electrical connection of pressure switch and low level control

- in accordance with enclosed terminal diagram and circuit diagram
- The switch on the control unit of the pump must be completed by a main circuit breaker (emergency circuit breaker) on the control box.

4 Operating Instructions

4.1 Commissioning

Lift the pump until a full barrel can be pushed under the pump.
Remove lid of barrel.

CAUTION

Take care that no impurities or foreign particles enter the barrel. The grease surface must be even.
Let pump down until the follower plate lies on the grease level.
NOTE: When descending the pump, move it to and fro to avoid air bubbles forming between follower plate and grease level.
Loosen winch eyelet from pump support.
Fasten barrel by means of barrel holder (item 52).

Venting and connection of the tube lines

Switch pump on (drive shaft rotates lefthand) and let it run until the lubricant emerges from the pressure line connecton without air bubbles.

NOTE: If no lubricant emerges, this indicates that there are still air bubbles between the follower plate and the grease level. They can be removed by opening a venting borehole (during normal operation closed with spindle item 53).
Then, connect the tube lines of the pump.

All system components connected downstream of the pump (change-over valve, lubricant metering devices, tube lines, tube fittings, hoses) must be designed for the max. operating pressure of the system.



Barrel change

When the follower plate has reached the barrel bottom, there follows an electric low level signal via the telescopic rod with switching ring (item 49) which actuates a limit switch.
If the low level signal should be given earlier, the switching ring may be installed at a lower point.
Turn spindle (item 53) clockwise to vent the area beneath the follower plate.
Hang up winch eyelet on pump holder.
Remove the pump from the emptied barrel by means of the winch.

Note: If the follower plate has settled on the drum bottom it can be vented by tilting the spindle for easier loosening.

Remove the empty barrel and replace it by a full one.

Then, proceed as described under paragraph 4.1 (Commissioning).

CAUTION

Replace the barrel in due time (a full barrel should always be available).

Avoid dust in the pump area.

4.2 Maintenance and Repairs

Before executing any repair on the pump, take care of the following:

- Switch drive motor off and secure it against inadvertent restart.
Risk of injury by the stirring paddle
- Disconnect pressure connection fitting of pump to decrease the pressure in the pump and system down to 0 (observe pressure gauge).
Risk of injury by lubricant splashing
- Don't let the pump run after it has been removed from the barrel.



The repair work should be executed only by qualified personnel using original spare parts.

Under the condition that the pump only supplies clean lubricant, it does not need any particular maintenance. The pump element is lodged in a chamber together with the eccentric shaft and they are protected by a cover. This chamber is connected with the grease lying beneath the follower plate via the overflow tube (item 32) so that the element and the drive are lubricated by the supplied medium.

This chamber is filled in the factory with 1.5 kg CEPATTYN KG 10 to allow the pump running in and the initial pump operation. After big repair work, e.g. replacement of the pump element, the chamber must be refilled.

Maintenance work

- If there are problems with the pressure build up, replace the check valve
The pump is equipped with 2 check valves: item 7, fitted to connection block 1 and item 11, fitted to connection block 2
In case of malfunctioning, clean both check valves and replace them, if necessary.

Note: To remove the second check valve, remove the cover.

Lubrication instructions

Flanged gear motor, construction V 1
Gear type G 100

The flanged gear motors are filled in the factory with the initial lubricant quantity. This quantity is generally sufficient for about 10.000 operating hours under normal working conditions. Refilling is not necessary since overfilling might lead to inadmissible temperature rises.

When the lubricant is changed - every 10 000 operating hours - the gear must be cleaned thoroughly.

Lubricant quantity: 420 cm³

Sorts of grease: Deutsche Calypsol D 4024
(first filling in factory)

| | | |
|------------------------|-------|-----------------------|
| Other sorts of grease: | Aral | FDP 00 |
| | BP | Energrease HT0 |
| | Esso | Fibrax EP-370 |
| | Mobil | Multiplex 44 |
| | Shell | Spezialgetriebefett H |

4.3 Troubleshooting

Note: The following only describes pump failures. Failures due to electrical malfunctioning or system malfunction are indicated in the System Description.

• Fault: pump does not supply the lubricant

• **Cause:**

- Grease barrel empty
- Pump sucks in air
- Suction boreholes clogged (are located near the axle of the stirring paddle)

• **Remedy:**

- Replace barrel and then proceed as described under item 4.1.
- Vent area beneath the follower plate. Screw in spindle (a few rotations). Move pump to and fro. Turn spindle back.
- Remove pump from barrel by means of the winch. Clean the boreholes and remove the contaminated grease.

• Fault: pump runs, but there is no pressure rise

• **Cause:**

- Check valves clogged or defective
- Pump element item 4 damaged or worn
- Change-over valve malfunctioning or failure in the system connected downstream

• **Remedy:**

- Replace check valves. First, replace upper check valve item 11 and check its function. If there is still no pressure rise, also replace check valve item 7.
Note: For replacing check valve item 7, loosen bulkhead fitting item 31 and hexagon socket screws item 10.
- Replace pump element. This should be undertaken only by qualified personnel having special knowledge.
Note: The pump element cannot be repaired since its pistons are precision-fitted in our factory.
- See paragraph „Failures of the change-over valve“ and „System Description“.

All repairs which are beyond the personnel's knowledge must be executed by Lincoln's specialists. For this, either send the defective pump back to the Repair Department of our Walldorf factory or call a specialist for the repair on site.

Service Address:

LINCOLN GmbH
Abt. Zentraler Kundendienst
Postfach 1263
D-69183 Walldorf
Tel. 06227 330
Fax. 06227 33259

4.4 Adjustments

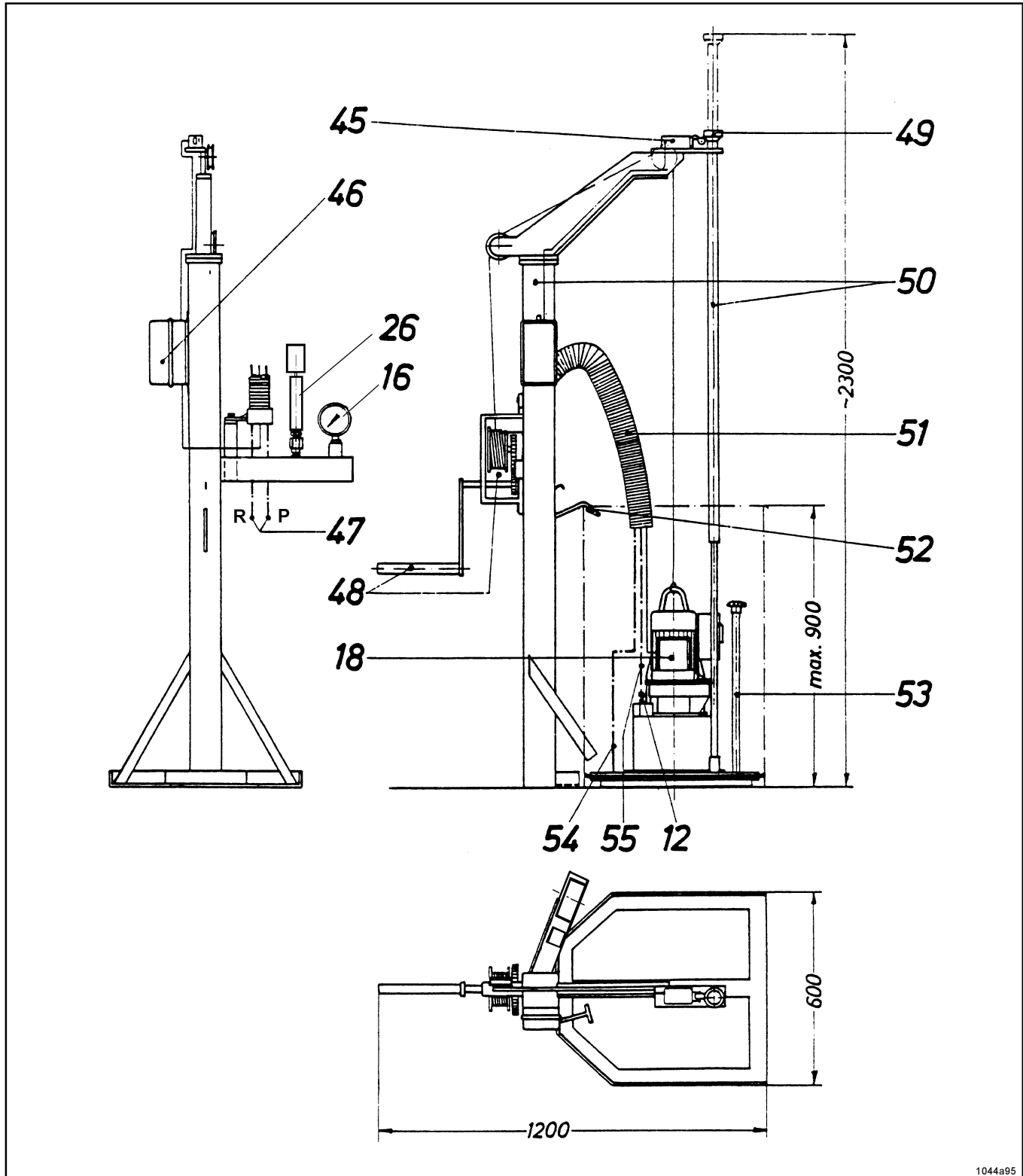
The shut-off pressure of the electro-hydraulic pressure switch is set in the factory to 280 bar.

If this pressure must be decreased or increased, take care - in the case of an increase - that it does not exceed the admissible pump pressure of 300 bar.

The pressure switch and its adjustment are described on page 18 para. 6.1

5 Spare Parts Drawing and Spare Parts List

High-pressure Central Lubrication Pump ZPU 75
with Stand and Guide for 200 - barrel



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Spare Parts Drawing and Spare Parts List

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High-pressure Central Lubrication Pump ZPU 75
 with Stand and Guide for 200 - barrel

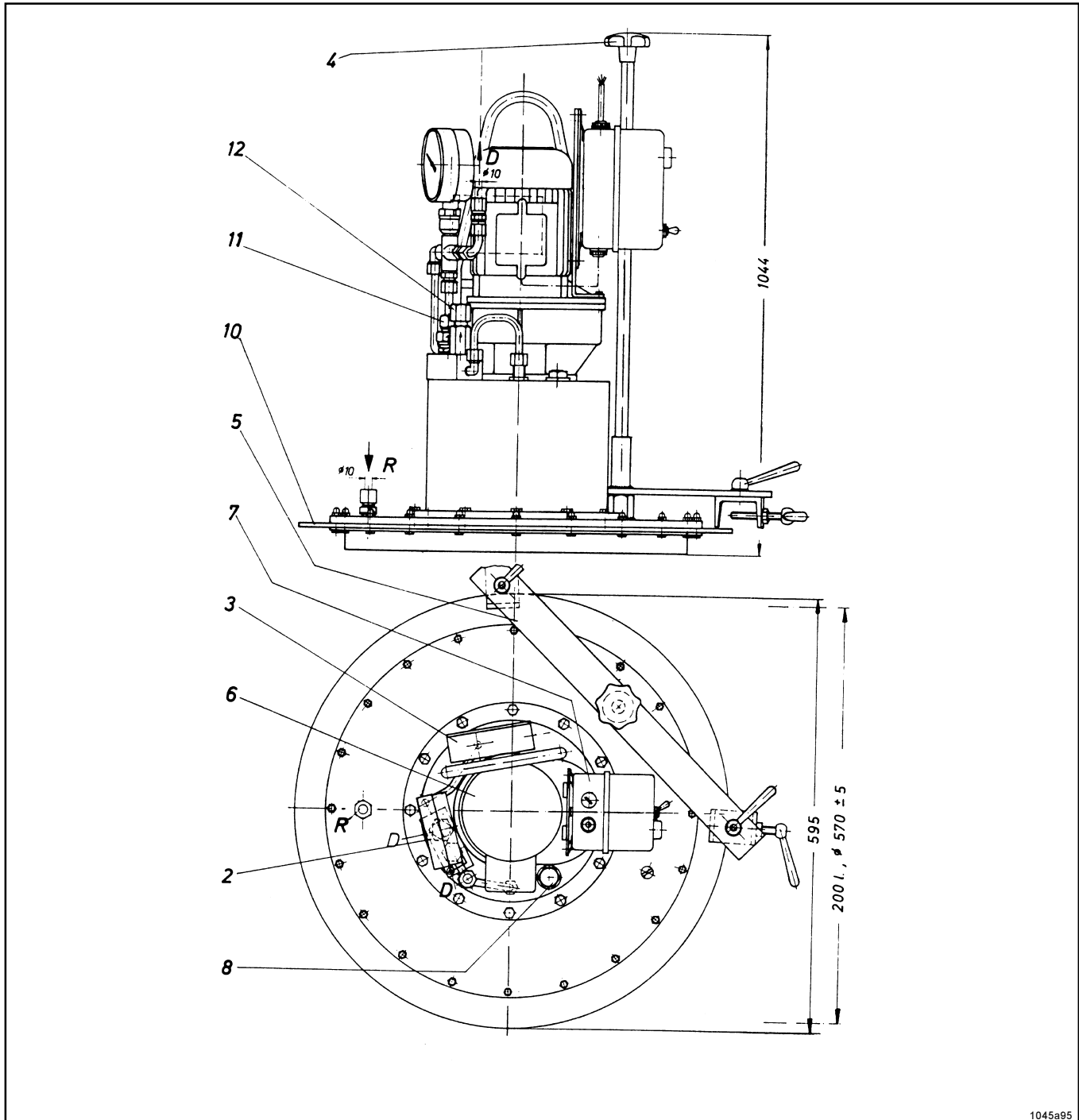
| Item | Designation | Qty. | Part Number |
|------|--|------|---|
| 12 | check valve | 1 | 505-30447-1 |
| 16 | pressure gauge 0-600 bar, DIA 100 | 1 | 234-13101-2 |
| 18 | flanged gear motor 0.25 kW, 25 min ⁻¹ ,220/380 V, 50 Hz or flanged gear motor 0.25 kW, 25 min ⁻¹ ,500 V, 50 Hz | 1 | 245-13557-1 245-13518-6 |
| 26 | pressure switch | 1 | 623-25452-2 |
| 45 | limit switch for low level control | 1 | 236-13244-2 |
| 46 | control box for 380 V, 50 Hz 220 V, 50 Hz 500 V, 50 Hz | 1 | 664-36029-7 664-36029-8 664-36029-9 |
| 48 | winch mechanism | 1 | 223-13041-9 |
| 49 | actuating ring for low level control | 1 | 408-20487-1 |
| 50 | stand with guide | 1 | |
| 51 | protective hose DIA 60, 1250 long | 1 | 225-12502-1 |
| 52 | barrel holding bracket | 1 | 408-20488-1 |
| 53 | stop cock (for venting) | 1 | |
| 54 | high-pressure hose NW 8 x 1840 long pipe connectors DIA 10 | 1 | 225-12325-7 |
| 55 | high-pressure hose NW 8 x 1640 long pipe connectors DIA 10 | 1 | 225-12325-6 |

Subject to change without notice

Spare Parts Drawing and Spare Parts List

1.1A-38001-C00

High-pressure Central Lubrication Pump ZPU 75
with Stand and Guide for 200 l- barrel



Subject to change without notice

Spare Parts Drawing and Spare Parts List

1.1A-38001-C00

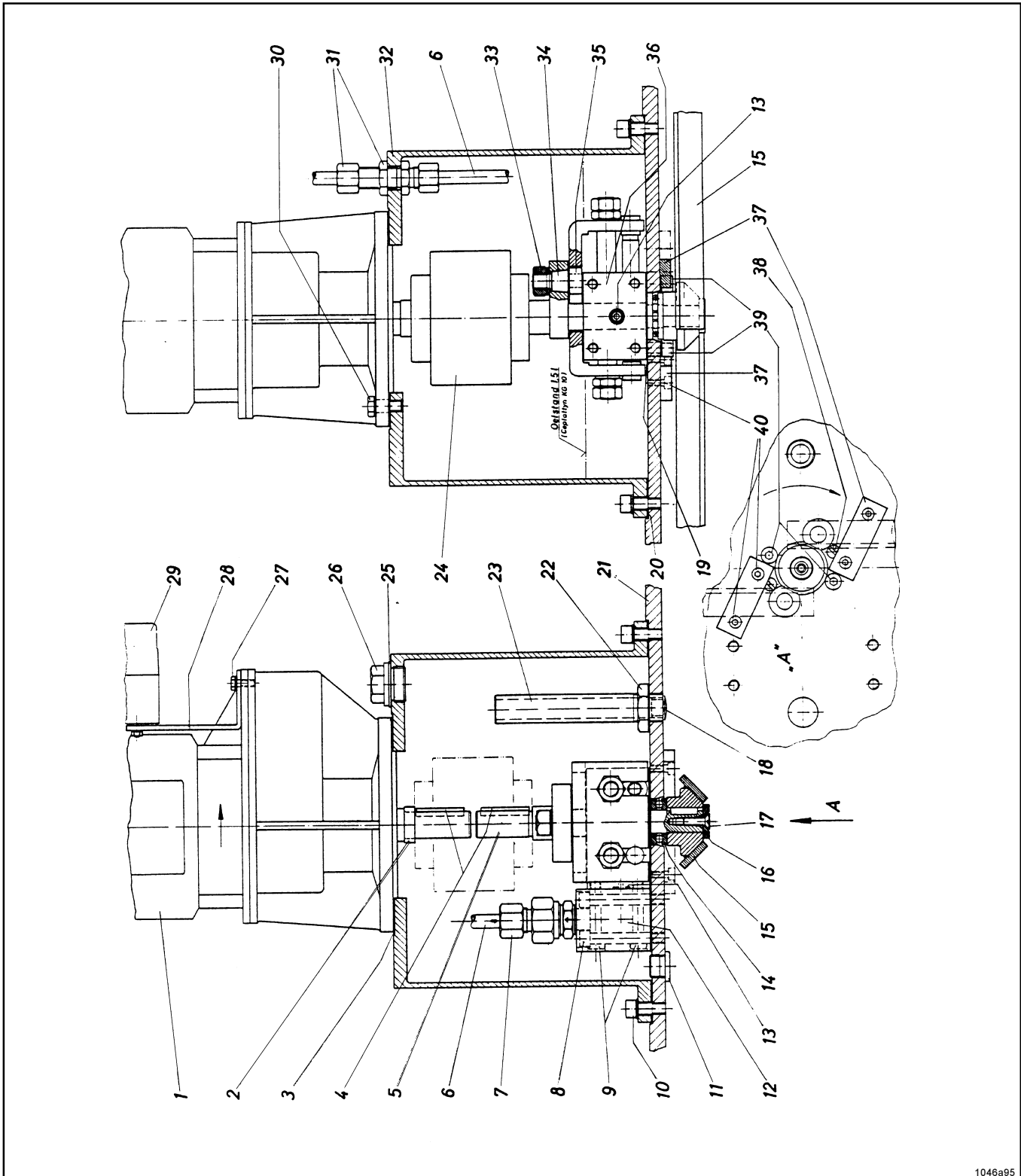
High-pressure Central Lubrication Pump ZPU 75
with Stand and Guide for 200 l- barrel

| Item | Designation | Qty. | Part Number |
|------|---------------------------------------|------|-------------|
| 2 | pressure gauge, 0-600 bar, DIA 100 | 1 | 234-13101-4 |
| 3 | pressure switch, set to 280 bar | 1 | 523-31315-1 |
| 10 | gasket | 1 | 306-17877-1 |
| 11 | check valve | 1 | 505-30447-1 |
| 12 | safety valve, set to 300 bar | 1 | 624-25466-1 |

Spare Parts Drawing and Spare Parts List

1.1A-38001-C00

High-pressure Central Lubrication Pump ZPU 75
Sectional View of Cover with Pump Element and Coupling



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Spare Parts Drawing and Spare Parts List

1.1A-38001-C00

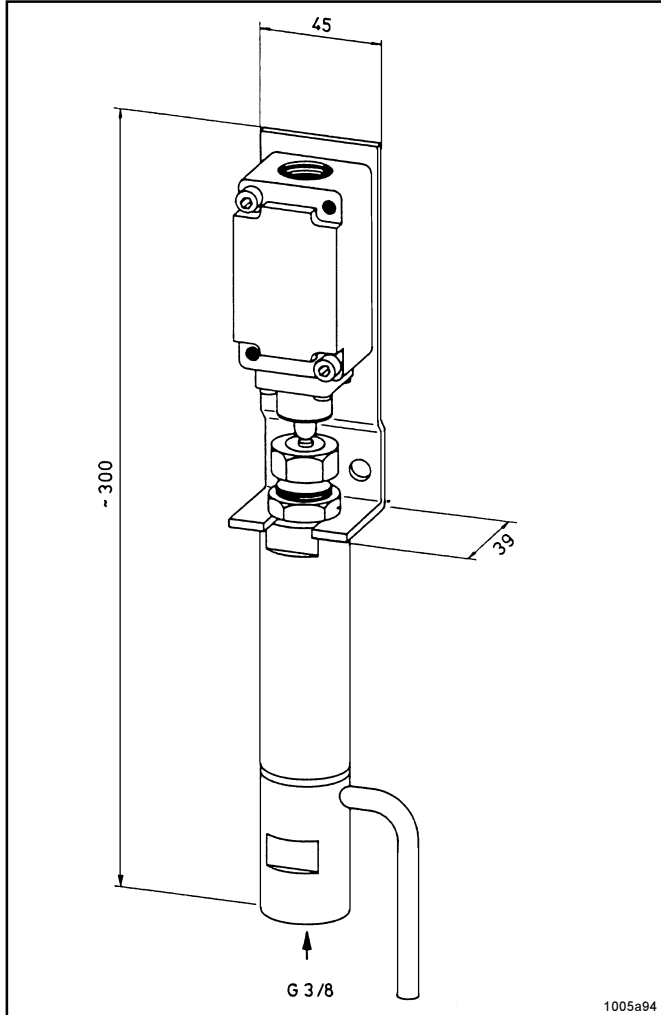
High-pressure Central Lubrication Pump ZPU 75
 Sectional View of Cover with Pump Element and Coupling

| Item | Designation | Qty. | Part Number | Item | Designation | Qty. | Part Number |
|------|---|------|-------------|------|--|------|-------------|
| 1 | flanged gear motor 0.25 kW, 25 min ⁻¹ , 220/380 V, 50 Hz or flanged gear motor 0.25 kW, 25 min ⁻¹ , 500 V, 50 Hz | 1 | 245-13557-1 | 30 | hexagon head screw M8 x 20 C | 4 | 200-12553-4 |
| | | | | | washer DIA 8.4 | 4 | 209-13077-1 |
| | | | | 31 | bulkhead union SV 10 LC | 1 | 223-12368-8 |
| 3 | gasket DIA 110 x DIA 160 x 1 | 1 | 306-17856-1 | 32 | cover | 1 | 407-20400-1 |
| 4 | key 6 x 6 x 36 | 2 | 214-12175-2 | 33 | hexagon nut M12 C | 1 | 207-12138-5 |
| 5 | eccentric shaft with eccentric pin | 1 | 507-30472-1 | 34 | roller pivot (no spare part) | 1 | 407-20398-1 |
| 6 | connectioin pipe DIA 10 x 2 | 1 | 105-35019-4 | 35 | roller | 1 | 407-20392-1 |
| 7 | check valve | 1 | 505-30447-1 | 36 | pump element assembly | 1 | 507-30469-2 |
| 8 | hexagon socket head screw M8 x 55 C | 4 | 201-12021-1 | 37 | fixed paddle | 2 | 407-20424-1 |
| 9 | hexagon socket head screw M8 x 45 C | 4 | 201-12021-9 | 38 | flat head screw M5 x 16 C | 2 | 202-12415-2 |
| 10 | hexagon head screw M8 x 18 for 200 l or 50 l barrel | 14 | 201-12020-3 | 39 | hexagon head screw M8 x 20 C | 2 | 200-12553-4 |
| | M8 x 40 for 35 l barrel | | 201-12021-5 | | tooth lock washer DIA 8.4 | 2 | 210-12161-8 |
| | tooth lock washer DIA 8,4 | 14 | 210-12161-8 | 40 | hexagon socket head screw M5 x 12 C | 4 | 201-12016-4 |
| 11 | closure plug (draining) 3/8" BSP | 1 | 203-12075-3 | | | | |
| 12 | junction block | 1 | 407-20399-1 | | | | |
| 13 | O-ring 7.5 x 2 | 1 | 219-12222-6 | | | | |
| 14 | grooved thrust ball bearing DIA 17 x DIA 35 x 12 | 1 | 250-14001-1 | | | | |
| 15 | stirring paddle for 200 l barrel | 1 | 407-20409-1 | | | | |
| | for 50 l barrel | | 407-20410-1 | | | | |
| | for 35 l barrel | | 407-20411-1 | | | | |
| 16 | washer | 1 | 407-20423-1 | | | | |
| 17 | flat head screw M6 x 20 C | 1 | 202-12049-6 | | | | |
| | tooth lock washer DIA 6.4 | 1 | 210-12160-1 | | | | |
| 18 | protection plug (remove at commissioning) | 1 | 233-13100-4 | | | | |
| 19 | gasket DIA 135 x DIA 120 x 1 | 1 | 306-17892-1 | | | | |
| 20 | gasket DIA 242 x DIA 300 x 1 | 1 | 306-17869-1 | | | | |
| 21 | follower plate | 1 | | | | | |
| 22 | hexagon nut 1/2 „ BSP | 1 | 207-12143-5 | | | | |
| 23 | overflow pipe | 1 | 407-20428-1 | | | | |
| 24 | coupling M42, D1 = 20, D2 = 25 | 1 | 252-14030-1 | | | | |
| 25 | sealing washer DIA 26.6 x DIA 34 x 1 | 1 | 306-17815-1 | | | | |
| 26 | closure plug (filling) 3/4" BSP | 1 | 203-12077-1 | | | | |
| 27 | hexagon head screw M6 x 16 C | 6 | 200-13017-9 | | | | |
| | tooth lock washer DIA 6.4 | 8 | 210-12161-9 | | | | |
| 28 | bracket | 1 | 407-20412-1 | | | | |
| 29 | control box for 380 V, 50 Hz | 1 | 664-36029-8 | | | | |
| | 220 V, 50 Hz | | 664-36029-7 | | | | |
| | 500 V, 50 Hz | 1 | 664-36029-9 | | | | |

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6 Appendix

6.1 Pressure Switch



Adjustment of pressure switch:

Before adjusting the pressure switch, switch off current supply to lubrication pump.

After loosening counter nut SW 27, re-adjust the spring tension.

On turning set screw SW 24 clockwise, the compression spring is tensed and the switching pressure is increased. Inverse procedure will result in a pressure decrease.

Scope of delivery:

As illustrated, please indicate the piston diameter when ordering

To be supplied by customer:

Wiring of limit switch to switch cabinet by means of oil-resisting cable 3 x 1.5 mm²

| Pressure range | Pressure reducer Piston and cylinder DIA | Compression spring Wire DIA | Part Num. |
|----------------|--|-----------------------------------|-----------|
|----------------|--|-----------------------------------|-----------|

| | | | |
|---------------|------|--------|-------------|
| 160 - 400 bar | 6 mm | 4.0 mm | 623-25461-2 |
|---------------|------|--------|-------------|

Connection thread 3/8" BSP

Limit switch: 1 NC contact, 1 NO contact

6.2 Motordata sheet ZPU 75

| Voltage | | 220-240/380-415V | 243-277/420-480V | 290/500V | Units |
|----------------------------|--------------------------------|------------------|------------------|---------------|----------------------|
| Motor manufacturer | | ABM | | ABM | |
| Motor type | | G100F/4D71A-4 | | G100F/4D71A-4 | |
| Frequency | f | 50 | 60 | 50 | [Hz] |
| Nominal power | P | 0,25 | 0,21 | 0,25 | [kW] |
| Nominal speed | n | 1380/25 | 1690/31 | 1360/25 | [min ⁻¹] |
| Rated torque | M | 95 | 95 | 95 | [Nm] |
| Nominal current | I _N | 1,2 | — | — | [A] at 220-240 V |
| | | 0,70 | — | — | [A] at 380-415 V |
| | | — | 1,04 | — | [A] at 243-277 V |
| | | — | 0,60 | — | [A] at 420-480 V |
| | | | | 1,0 | [A] at 290 V |
| | | | | 0,58 | [A] at 500 V |
| Starting current/ ratio | I _A /I _N | 3,9 | 4,8 | 3,6 | [A] |
| Power factor | cos φ | 0,7 | 0,7 | 0,74 | |
| Efficiency | η | 61 | | | [%] |
| Frame size | | 63 | | | |
| Type of construction | | B14 | | | |
| Type of protection | IP | 65 | | | |
| Insulation class | | F | | | |
| Weight | | 13 | | 13 | [kg] |
| Flange | | Ø 160 | | | [mm] |
| Shaft end | | Ø 25 x 60 | | | [mm] |
| Part-No. | | 245-13575-4 | | 245-13518-6 | |

The multi-range motors can be connected at the following networks:

220/380 V ± 5%, 50Hz
230/400 V ± 10%, 50Hz
240/415 V ± 5%, 50Hz
254/440 V ± 5%, 60Hz
265/460 V ± 5%, 60Hz
480 V ± 5%, 60 Hz

Other voltages and/or special designs as well as other manufactures available on request

The 290/500 V-motor can be connected to the following network::

290/500 V ± 10%, 50Hz

**7. Declaration by the
manufacturer as defined by machinery
directive 89/392/EEC Annex II B**

Herewith we declare that the supplied model of

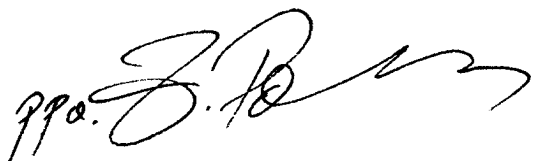
Pump Typ ZPU 75...

is intended to be incorporated into machinery covered by this directive and must not be put into service until the machinery into which it is to be incorporated has been declared in conformity with the provisions of the directive.

Applied harmonized standards in particular

*EN 292 T1/T2
prEN 809
EN 563*

29.12.1994

A handwritten signature in black ink, appearing to be 'J. B.' with a stylized flourish at the end.