

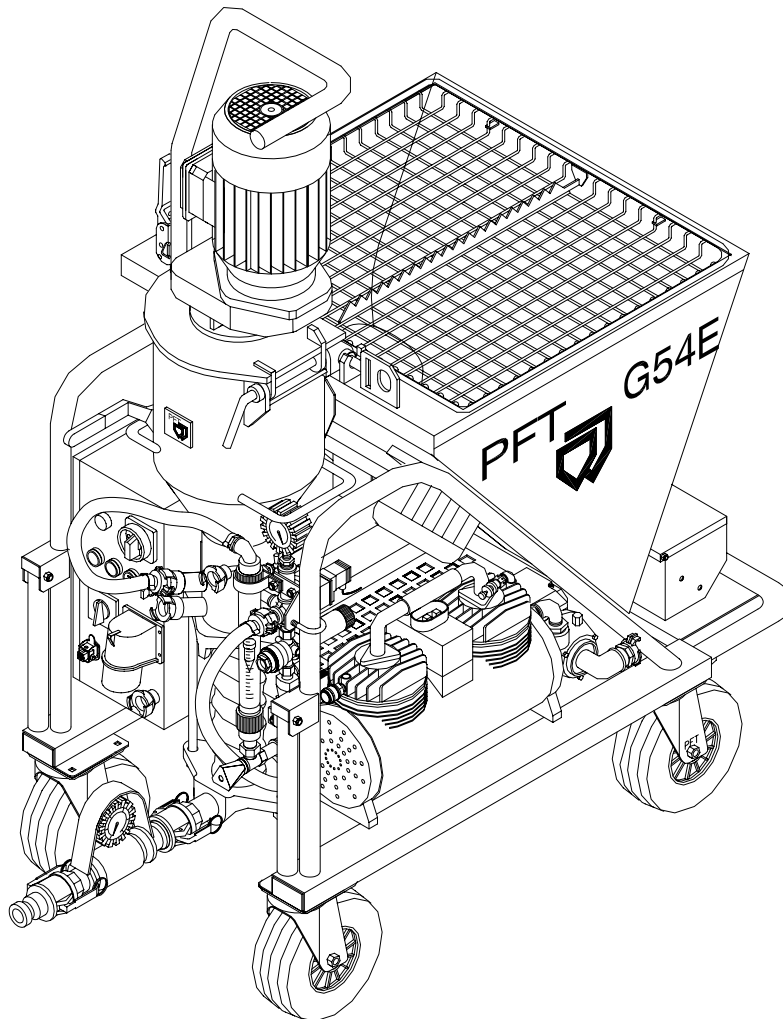
## OPERATING INSTRUCTIONS

(Item number of the operating instructions: 00 08 31 50)

(Item number of the machine – parts list: 00 05 69 13)

MIXER PUMP

# PFT G 54 E



WE KEEP THINGS MOVING



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Dear Customer,

Congratulations on your purchase. You have made a wise choice, since the quality you appreciate is of a brand from a company with a name that exemplifies quality.

The PFT G 54 E is a state-of-the-art mixer pump. It has been designed in a task-optimised way in order to be a reliable aid in rough construction site conditions.

These operating instructions should always be kept at the site of the machine so that they are always readily available. They contain information on the various functions of the appliance. Study the operating instructions thoroughly before putting the machine into service, since we assume no liability for accidents or damage caused by incorrect operation.

The PFT G 54 E mixer pump will be a reliable aid if it is operated properly and handled with care.

#### Initial inspection after delivery

An important task of all technicians delivering the PFT G 54 E mixer pump is the inspection of the machine settings at the end of the first work cycle. The factory settings may change during the initial operation cycle. Malfunctions can be expected if these changes are not corrected in time, immediately after putting the mixer pump into service.

The following inspections and settings should be made by the technician about two service hours after handing over the PFT G 54 E mixer pump and giving appropriate instructions:

- Water safety switch
- Pump pressure, backpressure
- Air safety switch
- Pressure reducer

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## Intended use

The PFT G 54 E is a continuously operating mixer pump for pre-mixed machinable mortar with a grain size of up to 3 mm. The PFT G 54 E can also be used to pump pasty materials. Observe all processing guidelines from the material manufacturer.

## Operating principle

The material hopper of the PFT G 54 E mixer pump is filled with ready-mix dry mortar (from bags or with delivery hood or injection hood).

The diagonal star wheel conveys the ready-mix dry mortar into the mixing tube.

The motor, which drives the mixing shaft and pump unit, is situated on the mixing tube. The ready-mix dry mortar is mixed and water is added to it in the mixing tube.

It is pumped into the material hose by the screw pump.

**Please observe the processing guidelines of the material manufacturer.**

The machine consists of portable individual components of small, handy dimensions and light weight that allow fast, convenient transport.

The following points should be observed during operation:

- Worksite power – control box connection
- Control box – pump motor connection
- Control box – compressor connection
- Compressor – air manifold connection
- Water supply – water manifold connection
- Air manifold – air hose connection
- Air hose – spraying gun connection
- Mixing tube – mortar pressure gauge connection
- Mortar pressure gauge – mortar hose connection
- Mortar hose – spraying gun connection

## Basic safety instructions

The following terms and symbols are used in these operating instructions for particularly important information:

### NOTE:

Special information for running the machine efficiently

### WARNING!

Special information, regulations and restrictions concerning the prevention of damage



### WARNING!

The machine should only be used as intended in a perfect technical condition and in compliance with safety regulations and the operating instructions. It is especially important to immediately eliminate any faults that could impair safety.



### WARNING!

The operating, safety and maintenance regulations must be observed if integral parts are installed for special types of processing which are not specified in the current operating instructions.



### WARNING!

It is forbidden to use the machine other than intended.



### WARNING!

It is forbidden to use the machine within explosive environments.



### WARNING!

The machine must always be used in a perfect condition in accordance with these instructions, while observing the safety instructions and danger warnings. Any damage which can impair the operational reliability must be repaired immediately.



### WARNING!

The user must be aware of the risk of getting one's clothes or long hair caught in movable parts.  
Chains, bracelets and rings can also pose a risk.

**WARNING!**

The workplace of the user must be clean, tidy and free from objects which could restrict your freedom of movement.

**WARNING!**

The workplace must be illuminated appropriately for the intended work. Insufficient or excess illumination can be dangerous.

**WARNING!**

The protective grille may not be removed while preparing or operating the machine.

**WARNING!**

Special information, regulations and restrictions for the prevention of damage.

The machine should only be used as intended in a perfect technical condition and in compliance with safety regulations and the operating instructions. It is especially important to immediately eliminate any faults that could impair safety.

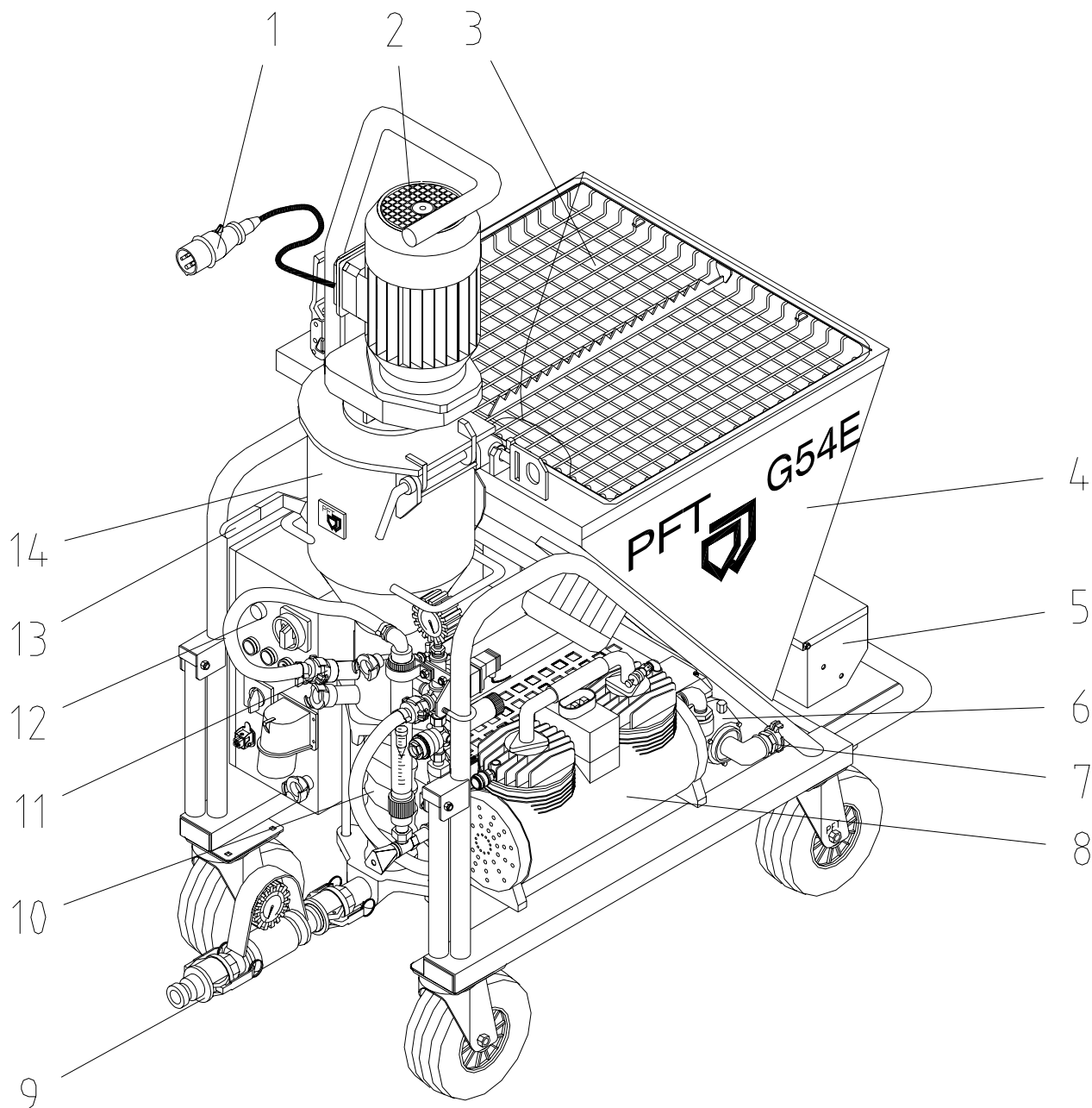
## General instructions

1. The safety instructions and danger warnings on the machine must be observed and kept in a readable condition.
2. All procedures for switching the machine on and off and control indicators and signal lamps should be in compliance with the operating instructions.
3. Install the machine on stable and even ground and secure it against accidental movements. It may neither tilt nor roll away. The machine must be installed in such a way that it cannot be hit by any falling objects. The controls must be freely accessible.
4. Inspect the machine for visible damage and defects at least once every shift. When doing so, pay special attention to electrical power cables, couplings, plugs and air, water and conveying lines. Any visible defects must be eliminated immediately.
5. Spare parts must comply with the technical requirements of the manufacturer. This is guaranteed for all original PFT parts.
6. The machine may only be connected to a worksite switchgear assembly with an earth-leakage circuit breaker (30 mA). If the control system of the machine has a 3-phase frequency converter, the 30 mA earth-leakage circuit breaker of the worksite switchgear assembly must be sensitive to all currents.
7. The machine may only be put into service by trained or instructed personnel. Clearly define the responsibilities of the staff for operation, setup, maintenance and repairs.
8. Personnel undergoing training should only be allowed to operate the machine under the supervision of experienced personnel.
9. Work on electrical equipment of the machine may only be carried out by qualified electricians or by trained personnel under the supervision of a qualified electrician in accordance with electro-technical regulations.
10. The machine must be completely switched off for maintenance and repairs and secured against being accidentally switched back on again (lock the main switch and pull the key, for example, or attach a warning sign to the main switch).
11. If work has to be carried out on live components, a second person should be present to disconnect the power in the event of an emergency.
12. Depressurise all conveying systems before opening conveying lines.
13. Before cleaning the machine with a water jet, seal all openings through which water could enter and impair the safety and functions of the machine (e.g.: electric motors and control boxes). Remove all covers after cleaning.
14. Only use original fuses of the prescribed amperage.
15. Disconnect the machine from any external power supplies before relocating it, even it is only to be moved a short distance. The machine should be connected properly to the mains before being restored to service.
16. The machine may only be moved by a crane if it is firmly strapped to a Euro pallet. All removable parts must be removed first. Make sure nobody enters the danger area of the crane. All precautions must be taken to prevent parts from falling down.
17. Safety devices such as inclination switches, protective grilles etc. may not be manipulated. The safety devices should be checked separately before beginning with work.
18. Longer work breaks can cause the mortar to set, resulting in malfunctions during operation. This is why the machine (incl. spraying gun and conveying hoses) should always be emptied and cleaned during long breaks.
19. Never put any objects in the dry mortar hopper or pump container.
20. Appropriate noise protection devices must be provided if the permanent noise level exceeds 85 dB (A).
21. The machine must be inspected by a specialist once a year. This inspection must be documented and include a visual inspection for damage, a functional check, an inspection of the safety devices and a high-voltage check of the control box.
22. Safety-relevant components can be damaged by frost. Drain the machine whenever there is a danger of frost.
23. The machine's lubrication and maintenance schedule must be complied with, since otherwise the warranty will lose its validity.



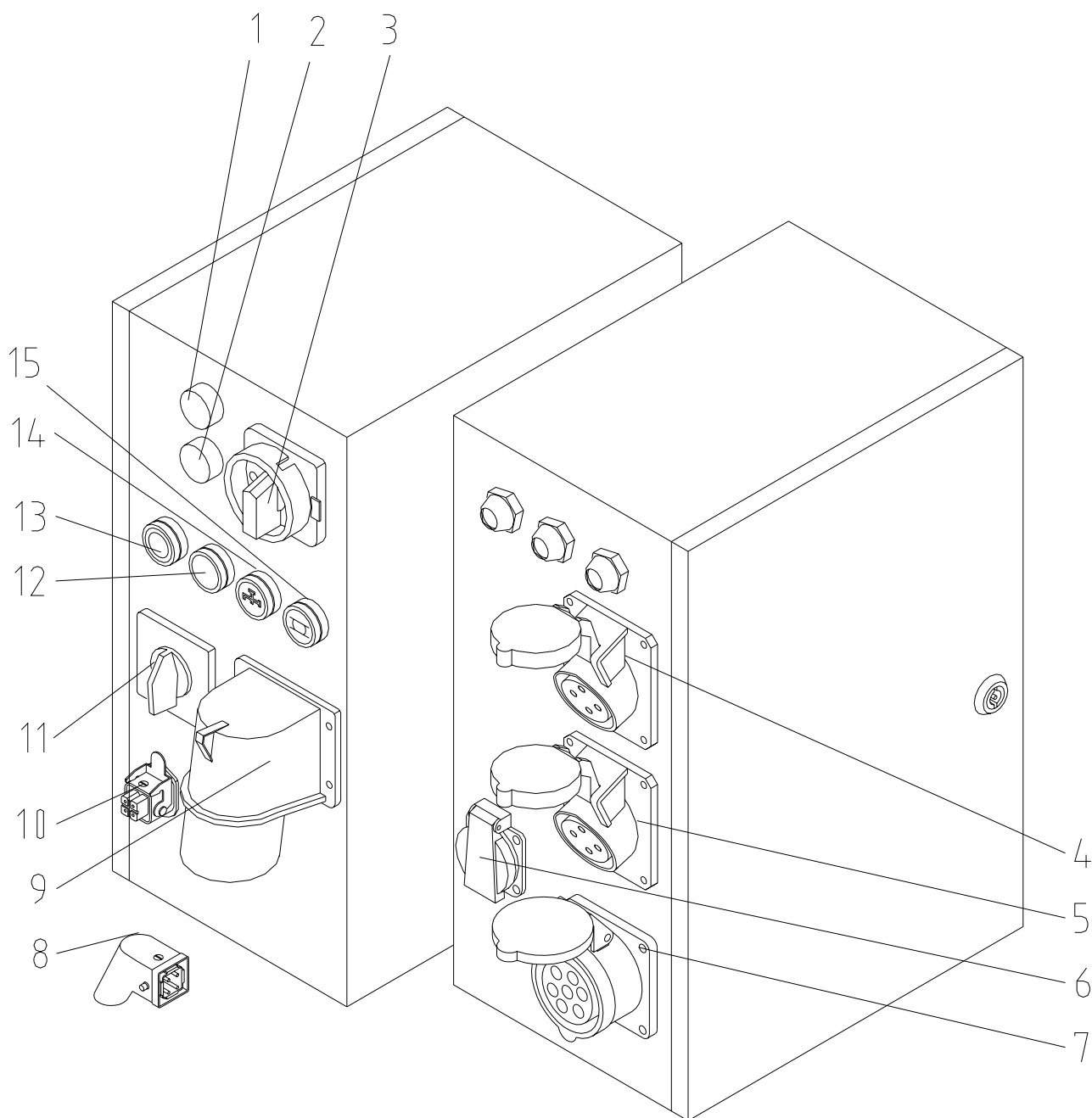
24. Alterations to the machine are not permitted and result in Knauf PFT GmbH & Co. KG excluding any liability for claims.
25. The following safety instructions must also be observed for pumps and mixer pumps: Wear appropriate protective clothing during spraying work: safety goggles, safety shoes, safety clothing, gloves and, if necessary, protective skin cream and respirator masks.
- When unblocking hoses, stand away from the machine to avoid injury through high-pressure discharges of mortar. Furthermore wear safety goggles. No other persons may be within the immediate vicinity of the machine in the process.
- Only conveying hoses with a permissible operating pressure of at least 40 bar may be used. The burst pressure of the conveying hose must be at least 2.5 times the operating pressure. The machine may not be operated without a mortar pressure gauge.
- Depressurise all conveying systems before opening any mortar pressure hoses. The machine can be switched on and off at any time without anyone working directly at the machine if it is remote-controlled by means of a spraying gun or remote control.

## Overview of the G 54 E, item number: 00 05 69 13



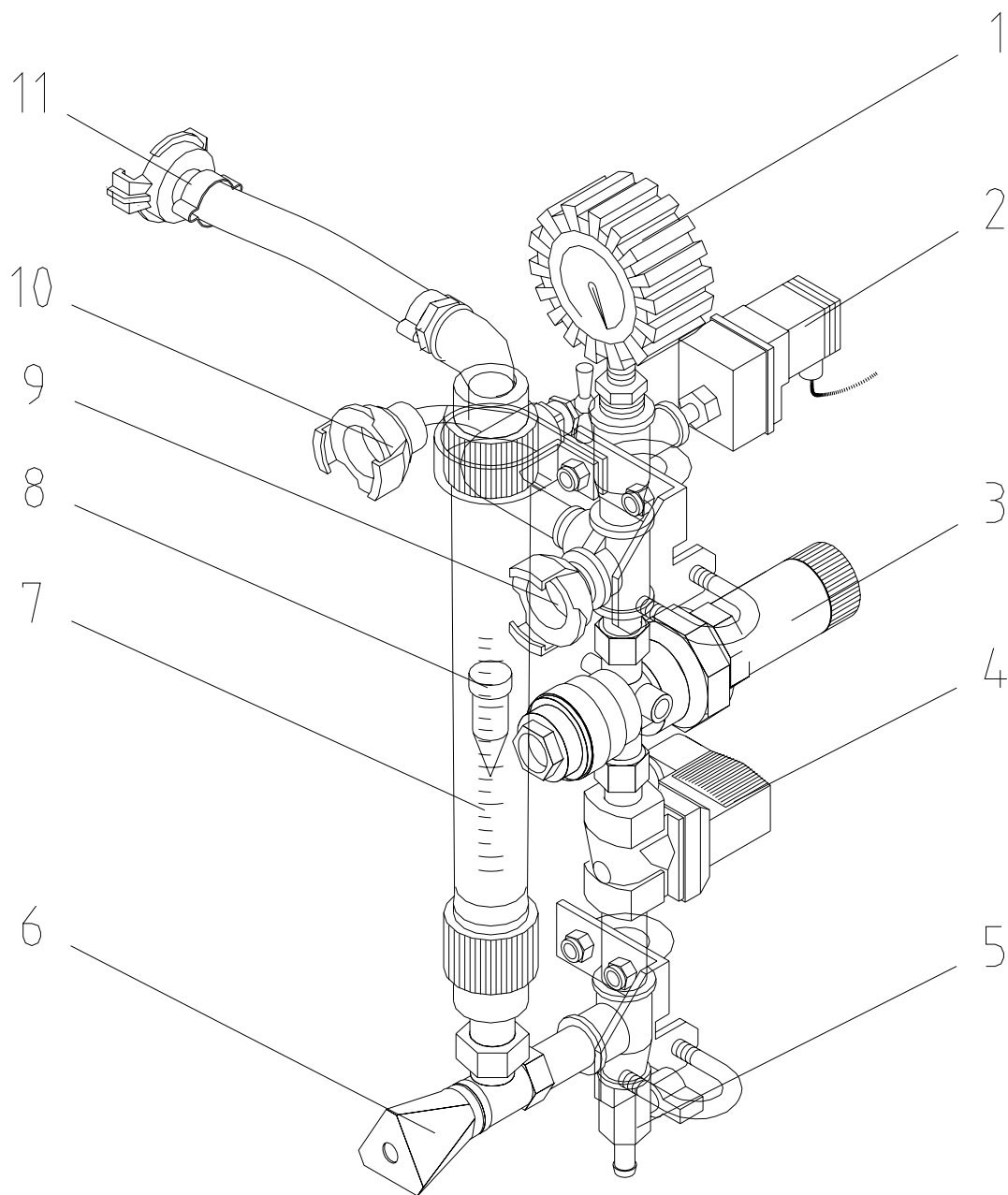
1. Motor connection cable	2. Mixer pump motor
3. Protection grille / material hopper	4. Material hopper
5. Tool box	6. High pressure pump
7. Water supply	8. Compressor
9. Mortar pressure gauge	10. Pump system
11. Water inlet / mixing tube	12. Control box
13. Locking lever / mixing tube	14. Mixing tube

## Overview of the control box, item number: 00 02 13 43



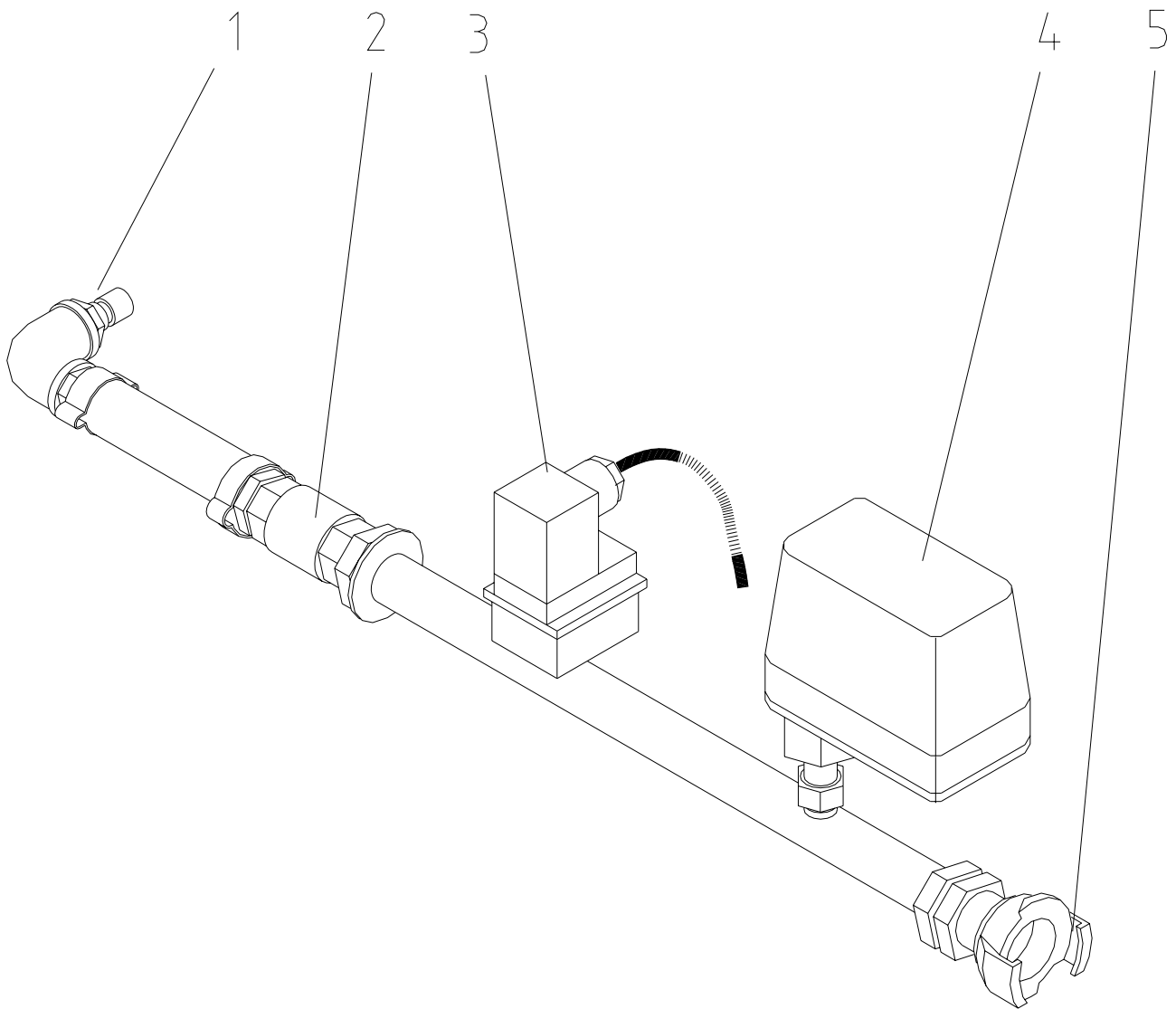
1. Red "fault" control lamp	2. Orange "change direction of rotation" control lamp
3. Main reversing switch	4. Water pump socket, 16 A
5. Compressor socket, 16 A	6. 230 V earthling outlet, 16 A fuse
7. Mixer pump motor socket	8. Blind plug, 4-pin, HAN 3A
9. Mains connection, 32 A	10. 4-pin remote control plug
11. Star wheel selector switch	12. Operation ON
13. Operation OFF	14. Water flow button
15. Pump motor reverse pressure switch (blue)	

## Overview of the water manifold, item number: 00 04 22 53



1. Water pressure gauge	2. Water safety switch
3. Pressure reducer	4. Solenoid valve
5. Outlet tap (antifreeze)	6. Needle valve (for regulating the water volume)
7. Water flow meter	8. Cone
9. Water supply	10. Water outlet valve
11. Water to mixing tube	

## Overview of the air manifold, item number: 00 04 22 62



1. Air from compressor	2. Counter flow valve
3. Compressor shutdown	4. Air pressure safety switch
5. Air to spraying gun	

## Checking the setting values (factory setting)

### Safety switch

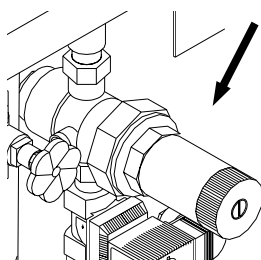
	Switching on the machine	Switching off the machine
Water	2.2 bar	1.9 bar
Air	1.5 bar	1.9 bar
Compressor	2.5 bar	3.1 bar

### Compressor shutdown

	Switching on the compressor	Switching off the compressor
Compressor	2.5 bar	3.1 bar

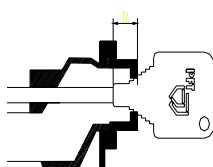
### Compressor safety valve

4 bar against completely closed air pipe (factory setting)



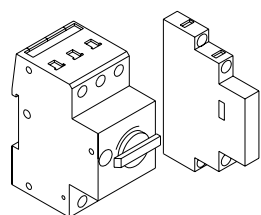
### Pressure reducing valve:

1.9 bar at maximum flow rate (1500 l/h)



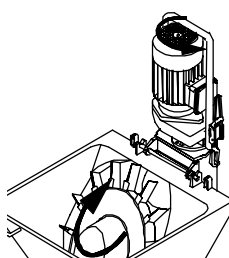
### Air nozzle tube clearance

The distance between the air nozzle tube and spray cap should always be equivalent to the diameter of the spray cap hole;  
e.g. 14 mm spray cap = 14 mm distance.



### Motor protection switch

	Output	Setting value	Designation
Star wheel	0.75 kW	2.2 A	Q3
Mixer motor	5.5 kW	11.5 A	Q2

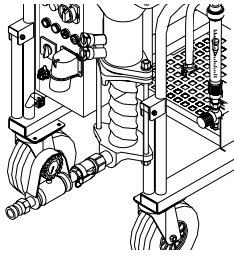


### Direction of rotation

The **PFT G 54** mixer pump is equipped with a phase sequence relay that disables the machine if the direction of rotation is incorrect.

The star wheel must be turned clockwise for right-hand rotation.

If the direction of rotation is incorrect, turn the main reversing switch to the zero position. The direction of rotation is changed by pushing the laterally protruding selection plate to the other side. Switch the machine back on again afterwards.

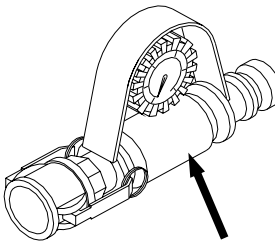


A TWISTER D5-2.5 or D6-3 pump system belongs to the standard equipment of the PFT G 54 E mixer pump.  
The rotor and stator are subject to wear and must be checked regularly.



### **WARNING!**

A mortar pressure gauge must be used in compliance with the accident prevention regulations of the Builders' Guild.



### **Mortar pressure gauge**

The PFT mortar pressure gauge is used to monitor the mortar consistency quickly and easily.

The mortar pressure gauge is part of the scope of delivery.

Some advantages of the mortar pressure gauge:

- Constant monitoring of the correct conveying pressure
- Early detection of clogging or overloading of the pump motor
- Establishment of zero pressure
- Significant contribution to the safety of the operating personnel
- Durability of the pump components



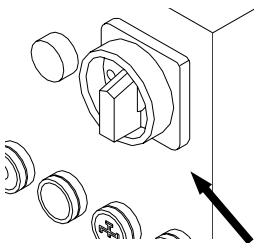
### **WARNING!**

Make sure the main switch is switched off during the installation when installing/removing the mortar pump.

### **NOTE:**

**Furthermore, observe that:**

- A new rotor and new stator need to be run in; real pressure values can only be determined after the first spraying cycle.
- Pump components which do not achieve the specified operating pressure (15 bar) are worn out and must be replaced.
- With a conveying hose of 10 m, new pump components should attain a conveying pressure of approx. 25 or 30 bar and maintain a back pressure of approx. 2/3 of the conveying pressure from the screw pump before and after the first spraying cycle.
- We recommend using the PFT pressure tester with coupling and outlet tap (item no. 20 21 68 10) to monitor the back pressure.



## Checking the conveying pressure and backpressure

### Checking the conveying pressure and backpressure:

- Connect a 10 m conveying hose.
- Connect a pressure tester with outlet tap to the end of the hose.
- Open the ball valve of the pressure tester.
- Switch on the machine and let it run with water (800 l/h) only (without dry material) until water comes out of the tap (the hose has now been bled).
- Now connect the ball valve to the tap.
- Let the pump run against the closed tap until the pressure no longer rises.
- Switch off the machine.
- If the operating pressure is not reached, the maintenance-free pump must be replaced.
- Check the backpressure.

A backpressure of approx. 2/3 of the conveying pressure of the screw pump should now be maintained in the hose.

### NOTE:

The testing pressure with water should be approx. 5-10 bar above the anticipated mortar pumping pressure!

An adverse position of the screw pump in the liner will result in water flowing back to the hopper accompanied by a distinct gurgling noise. Switch the machine on and off repeatedly until you find the position in which the screw pump seals.

### NOTE:

1. The TWISTER D6-3 or D5-2.5 stator can be used up to an operating pressure of 30 or 25 bar.
2. The minimum conveying distance depends mainly on how the mortar flows. Heavy, coarse-grained mortar does not flow well. Fluid mortars, filling compounds and floor screed flow well.
3. We recommend using thicker mortar hoses if an operating pressure of 30 or 25 bar is exceeded.
4. Use original spare parts to avoid malfunctions to the machine and excessive wear of the pump motor, pump shaft and pump.

PFT rotors

PFT stators

PFT pump shafts

PFT mortar pressure hoses

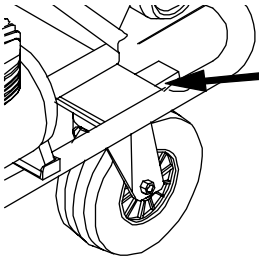
PFT clamps.

These components are compatible with one another and form a single constructive unit together with the machine.

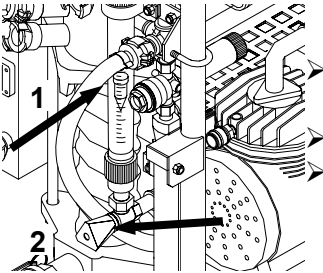
If you do not follow these recommendations, you will not only lose your warranty rights, but the quality of the mortar will also suffer.



## Putting the machine into service



Transport the assemblies as closely as possible to the object to be processed (refer to Transport for the assembly).  
Lock the castor before putting the machine into service.



Connect the water intake to a  $\frac{3}{4}$ " hose. Open the supply line to vent and clean the hose line. Close the supply line again.  
Connect the water hose to the water inlet (1).  
Close the drainage valves (2) on the water manifold.



### **WARNING!**

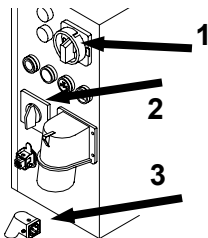
When working with water from the tank, the suction inlet must be fitted with a water filter (item no. 00 00 69 06) (de-aerate water pump).

The machine may only be connected to a worksite switchgear assembly with 32 A fuse protection and a 30 mA earth leakage circuit breaker that conforms to regulations. The connection cable must correspond to version H07 RN-F 5 x 4.0 mm<sup>2</sup>. The earthing socket is available for connecting all 230 V consumers (such as portable lamps etc.) and the water pump for 5-pin connections only.



### **WARNING!**

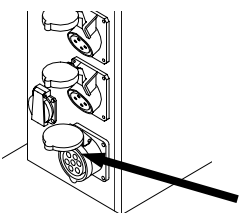
The protective grille may not be removed while preparing or operating the machine. For the safety of the operator, the protective grille is equipped with a magnetic switch which switches off the machine when removing the grille.



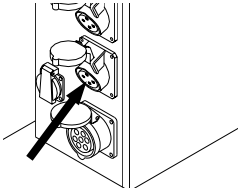
Before the control box is connected to the power supply, the following must be observed:

Turn off the main reversing switch (1) ("0" position, lockable).  
Turn the star wheel switch (2) to "0".

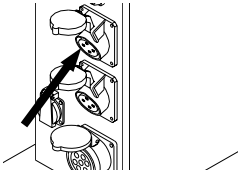
Pull the blind plug (3).



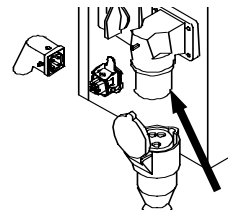
Connect the mixer pump motor.



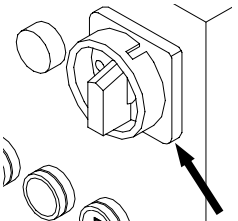
Connect the compressor.



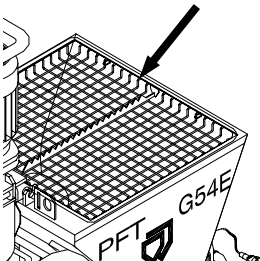
Connect the water pump.



Connect the control box to the power supply.

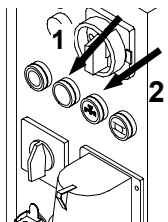


Turn on the main switch.

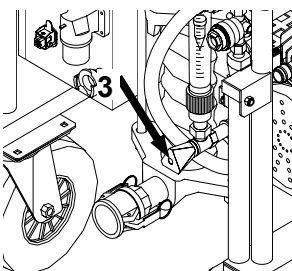


### Warning!

The protective grille may not be removed while preparing or operating the machine.



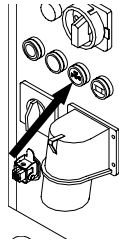
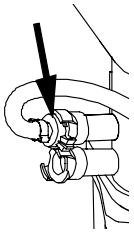
Press the green "ON" pressure switch (1).  
Press the water flow button (2) (water pump runs).



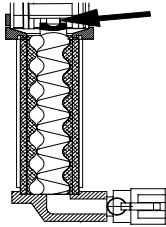
### Adjust the water factor

Adjust the expected water volume at the needle valve (3). Observe the specifications of the material manufacturer.

**During operation:** Every interruption of the spraying procedure results in minor irregularities of the mortar consistency, which normalise, however, as soon as the machine has been working for a while. So do not change the water quantity each time you detect irregularities, but instead wait until the consistency of the mortar emerging at the spraying gun has self-adjusted.



Connect the water hose of the water flow meter to the upper water inlet of the mixing tube.  
Press the water flow button briefly.



When starting the machine, there must be a sufficient amount of water in the mixing area so that the rotor head is covered (check for leaks, screw pump might be defective).

Check the water level (with pump motor tilted).

**IMPORTANT!**

The **TWISTER** pump unit **must** always be **pre-whetted!**



The control circuit is interrupted (starting lock) whenever the 7-pin connection plug is removed or the mixing tube or mixer pump motor is tilted.

Turn the star wheel switch briefly to “Hand”.

The star wheel can be switched to the positions:

**HAND**

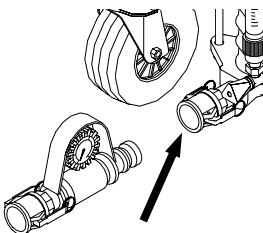
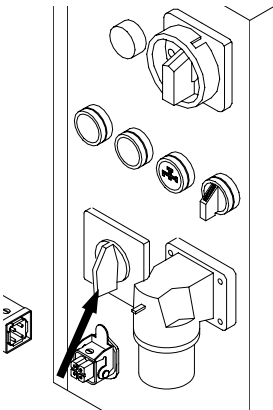
The star wheel runs whenever the machine is connected and switched on. Mortar can be added to the mixing area in this position if the pump is not running. For heavy or dispersion mortars we recommend “pre-wetting” it and briefly opening the mixing area’s lower water supply so that excess water can escape. (The control circuit must be interrupted by removing the blind plug).

**ZERO**

The star wheel is switched off thus interrupting the material supply to the mixing area, for example when cleaning the mixing area with a mixing cleaner or when adjusting the pump.

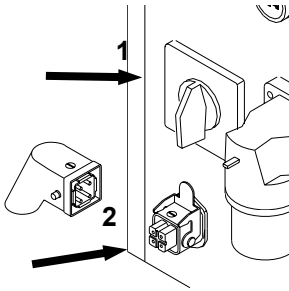
**AUTOMATIC**

The star wheel runs in synchronisation with the mixer pump and is switched on and off with the air pressure control or remote control.



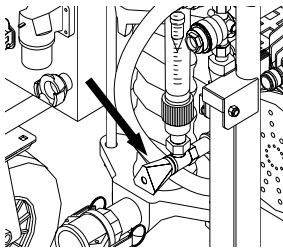
Connect the mortar pressure gauge to the pressure flange.

## Filling the storage container with dry mortar



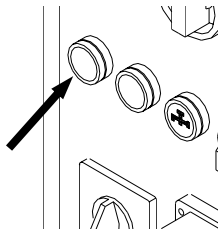
Fill the storage container with dry mortar.

Turn the star wheel switch (1) to automatic. Insert the blind plug (2). The machine is now ready for operation. The mortar consistency can now be checked at the mortar outlet flange (do not connect the mortar hose yet). Set the water quantity to approx. 10 % above the reference value with the motor running. The nominal setting is the water setting at which the mortar has the right flowing consistency, e.g.: Knauf MP 75 – reference value approx. 650 to 750 l/h.

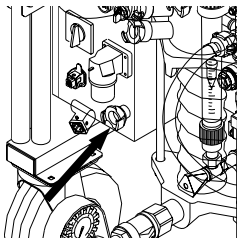


If mortar emerges, correct the water supply for optimum consistency by adjusting the water quantity with the needle valve – visible on the cone of the water flow meter.

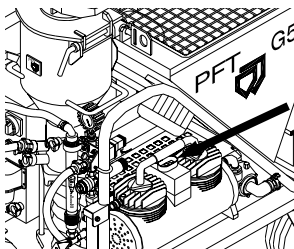
Turn the hand wheel clockwise to reduce the water flow rate. Turn it in the opposite direction to increase the flow rate.



Press the red “OFF” pressure switch (machine stops).



Connect the air hose to the air manifold and spraying gun.



Switch on the compressor.



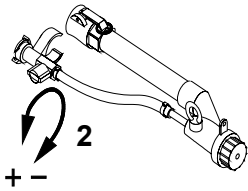
### **WARNING!**

Make sure the coupling is clean and connected properly.

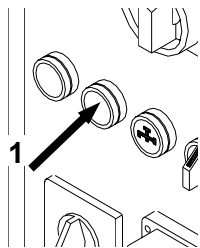
Connect all required mortar hoses to each other and flush them with water to avoid blockages (do not leave water in the hoses). Use the transition adapter (in the tool kit).

If the mortar quality is unknown, pour approx. 3 litres of lime or plaster slurry into the first hose behind the machine.

## Spraying gun



Connect the spraying gun (finishing coat gun or crimp valve gun) to the mortar hose.



Press the green “ON” pressure switch (1) and open the air tap on the spraying gun.

The machine starts; cleaning can now be started.

At first material of low consistency flows out of the spraying gun, then mortar of the correct consistency. If necessary, adjustments can be made with the needle valve.

The machine can now be switched on and off by opening and closing the air tap (2, top figure) on the spraying gun.

## Mortar consistency

The right mortar consistency is achieved once the material on the sprayed surface merges (we recommend applying material to wall surfaces from top to bottom). Even mixing and spraying cannot be ensured if the amount of water is insufficient, resulting in clogged hoses and the pumping components being subjected to greater wear.

## Spraying guns and nozzles

Spraying nozzles of 10, 12, 14, 16 or 18 mm should be used, depending on the mortar consistency. Larger nozzles reduce the projection speed and thus the rebound effect. Smaller nozzles create a better spraying effect. It is important that the distance between the air nozzle tube and the nozzle outlet corresponds to the diameter of the nozzle.

## Interruption of work

### **Warning!**

Observe the guidelines of the material manufacturer regarding interruptions.

It is recommended to clean the pump prior to longer interruptions. Proceed in accordance with page 23 "Measures at the end of work and during cleaning".

Every interruption of the spraying procedure results in minor irregularities of the mortar consistency, which normalise, however, as soon as the machine has been working for a while. Do therefore not change the water supply each time you detect an irregularity, but wait instead until the consistency of the material emerging from the spraying gun is correct.

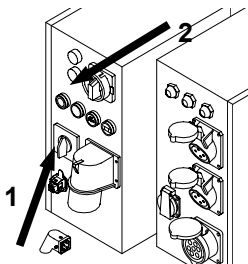
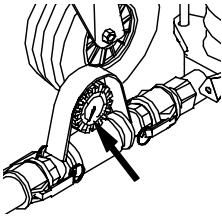


## Measures at the end of work and during cleaning

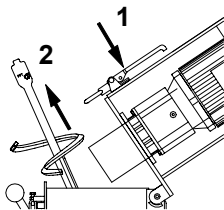


### WARNING!

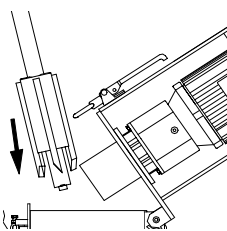
Before removing the screw pump and opening the motor tilt flange, make absolutely sure the pump and hoses are depressurised.  
Observe the mortar pressure gauge display.



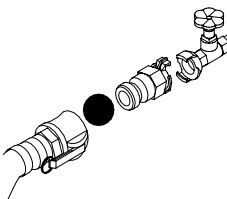
Switch off the mortar supply (star wheel) and turn the star wheel (1) switch to "0" at the end of work.  
Empty the mixing tube.  
Press the red "Operation OFF" pressure switch (2).  
Switch off the compressor and open the tap on the spraying gun.  
Disconnect the mortar hose (only if depressurised).



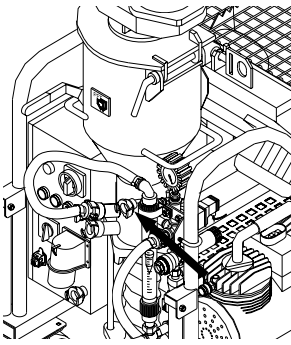
Release the snap lock (1) on the motor flange and tilt the motor.  
Remove the mixing shaft (2) and clean it.  
Clean the mixing area with a spatula.



Insert the cleaning shaft and mixing tube cleaner with the scrapers pointing downwards.  
Close the motor flange and lock it with the snap lock.  
Press the green "Operation ON" pressure switch about 5-10 seconds and let the motor run until the mixing tube is clean.  
Press the red "Operation OFF" pressure switch and remove the mixer cleaner.  
Install the cleaned mixing shaft. Close the motor flange and lock it with the snap lock.



To clean the hoses, they are connected together with the mortar pressure gauges to the water outlet valve using the cleaner coupling (in the tool bag). This protects the pump from damage. First a water-soaked sponge ball must be pressed into the hose inlet.



Then open the water valve until the sponge ball comes out of the end of the hose. For different hose diameters, the hoses should be cleaned separately with the appropriate sponge balls.

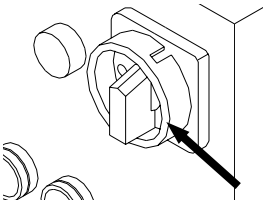
Repeat this procedure if the hoses are very dirty.

Clean the spraying gun separately under running water.

Close the water intake valve.

Depressurise the water hose by opening and then carefully disconnecting the water valve on the side.

Now disconnect the power supply.



### **WARNING!**

The main switch must be switched off or the power supply disconnected before removing the hopper cleaning flap.



Empty the material hopper if the machine is probably not going to be used for several days.

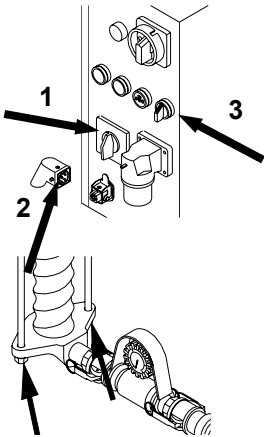
To do so, the wing nut on the outside of the base of the container under the star wheel motor should be opened.



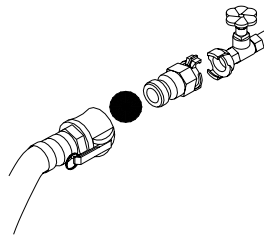
## Clearing hose blockages



According to the accident prevention regulations of the Builders' Guild, for safety reasons, all personnel assigned with unblocking hoses should wear safety goggles and position themselves in such a way as to avoid injury by discharged mortar.

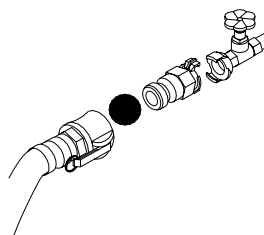


Switch off the star wheel motor (1).  
Pull the blind plug (2) from the remote control.  
Cover the outlet opening of the pump tube with foil.  
Let the pump motor run in reverse until the pressure on the mortar pressure gauge falls to 0 bar by turning the selector switch (3) (water supply is automatically interrupted). Undo the nut on the pressure flange slightly to allow the residual pressure to be released.



Undo the hose coupling and clean the hose.

## Measures to be taken in the event of a power failure

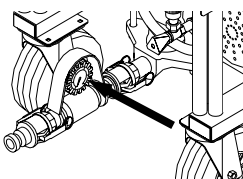


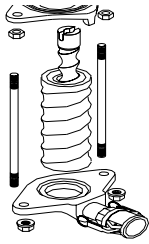
The mortar hoses must be cleaned immediately. They can be cleaned at the water outlet valve. To do so, connect the cleaner coupling (in the tool bag) to the mortar hose first and then to the water outlet valve. Push out the mortar by opening the water valve and then clean the hoses with sponge balls soaked in water.



### **WARNING!**

Make sure all hoses are depressurised before opening the couplings (observe the mortar pressure gauge display).





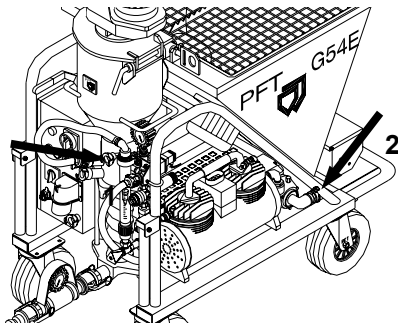
Release the tie rod screws, remove the pump, push the rotor out of the stator and clean it thoroughly. Clean the pressure flange or agitator (ROTOMIX or ROTOQUIRL). Clean the mixing area and the mixing shaft with water and a spatula. Then assemble the entire pump and prepare it for operation.

## Measures to be taken in the event of a water supply failure

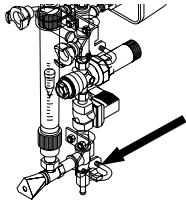
Use the suction inlet (item number 00 00 69 06) and high pressure pump to supply the machine with clean water from a container.

## Measures to be taken if there is a risk of frost

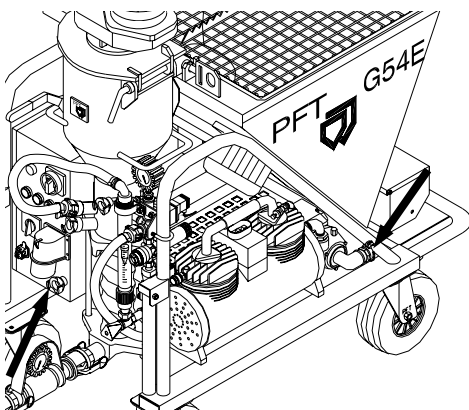
After cleaning the machine:  
Interrupt the water supply.  
Take out the mixing shaft.



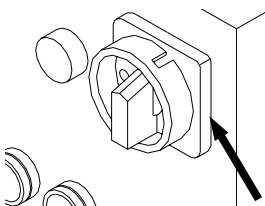
Close the water supply.  
Open the water outlet valve (1) and relieve the water pressure in the hose.  
Disconnect the water hose (2) and empty it.



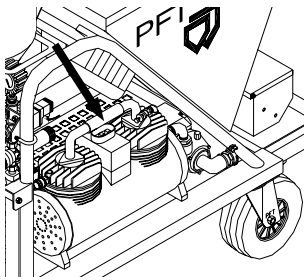
Open the outlet tap on the water manifold.



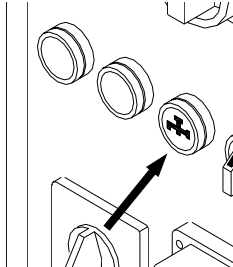
Remove the air hose from the spraying gun and connect it to the water inlet (water pump) and the outlet of the air manifold (control box).



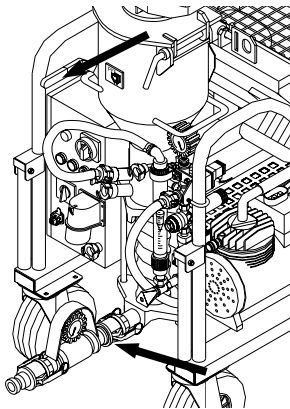
Switch on the main switch.



Switch on the compressor.

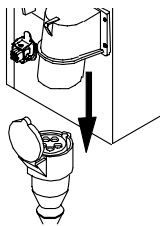


Press the water flow button. The water is now blown out of the manifold with compressed air (at 1.5 bar for about 1 minute)!



Empty the mixer pump by folding up the entire pump component. Disconnect and empty the mortar hoses. The machine is now completely empty with the exception of a small rest in the screw pump. The machine must still be started carefully the next day however.

## Transport



First pull the main power cable and then undo all other power connections.

Remove the water supply lines.

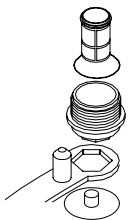
The **G 54 E** consists of two units (mixing tube and material hopper), which can be transported separately.



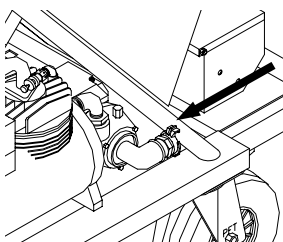
### **WARNING!**

Make sure all hoses are depressurised before opening the couplings (observe the mortar pressure gauge display).

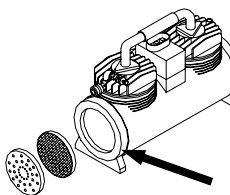
## Maintenance



The water inlet filters in the pressure reducer should be taken out and cleaned at least once every two weeks and replaced if necessary.



Check the brass water inlet filter every day.



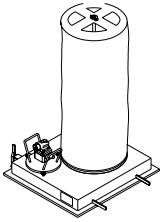
Beat the dirt out of the compressor filter once a week, depending on operation.

Replace the filters if they are very dirty.

### Note:

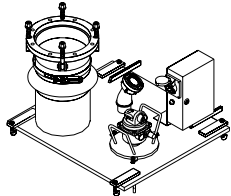
The coarse side of the filter should be on the inside!

## Accessories



### **PFT injection hood E1 for G 54 E (item no. 20 60 02 13)**

The PFT injection hood is used to fill the mixer pump with dry material with the PFT SILOMAT pneumatic conveying system.



### **PFT delivery hood with electrical safety cabinet for G 54 E (item number 20 60 05 00)**

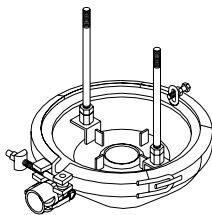
The PFT delivery hood is used to fill the PFT **G 54 E** mixer pump with dry material directly from the silo or container. If the material hopper is reported to be empty, the mixer pump is switched off by means of the remote control plug.



### **ROTOMIX D pumps, cpl. with 35 coupling and reducer (item number 20 11 80 00)**

Agitator for the improved solubilisation and mixing of the material. Direct drive via the rotor tangs. Volume of approx. 1.2 l

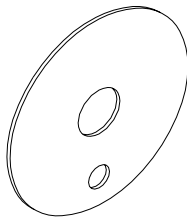
**All guidelines of the material manufacturer must be observed.**



### **ROTOQUIRL II, cpl. (LW34 coupling), volume of 4.2 l (item number 20 11 84 00)**

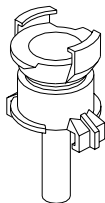
Agitator for the improved solubilisation and mixing of the material. Direct drive via the rotor tangs. Volume of approx. 4.2 l

**All guidelines of the material manufacturer must be observed.**



### **Star wheel spacer for coarse plaster (item no. 20 10 19 00)**

Increases the distance between the star wheel and the base of the material hopper by 3 mm.



### **Nozzle for water intake with Geka coupling (item no. 20 21 58 00)**

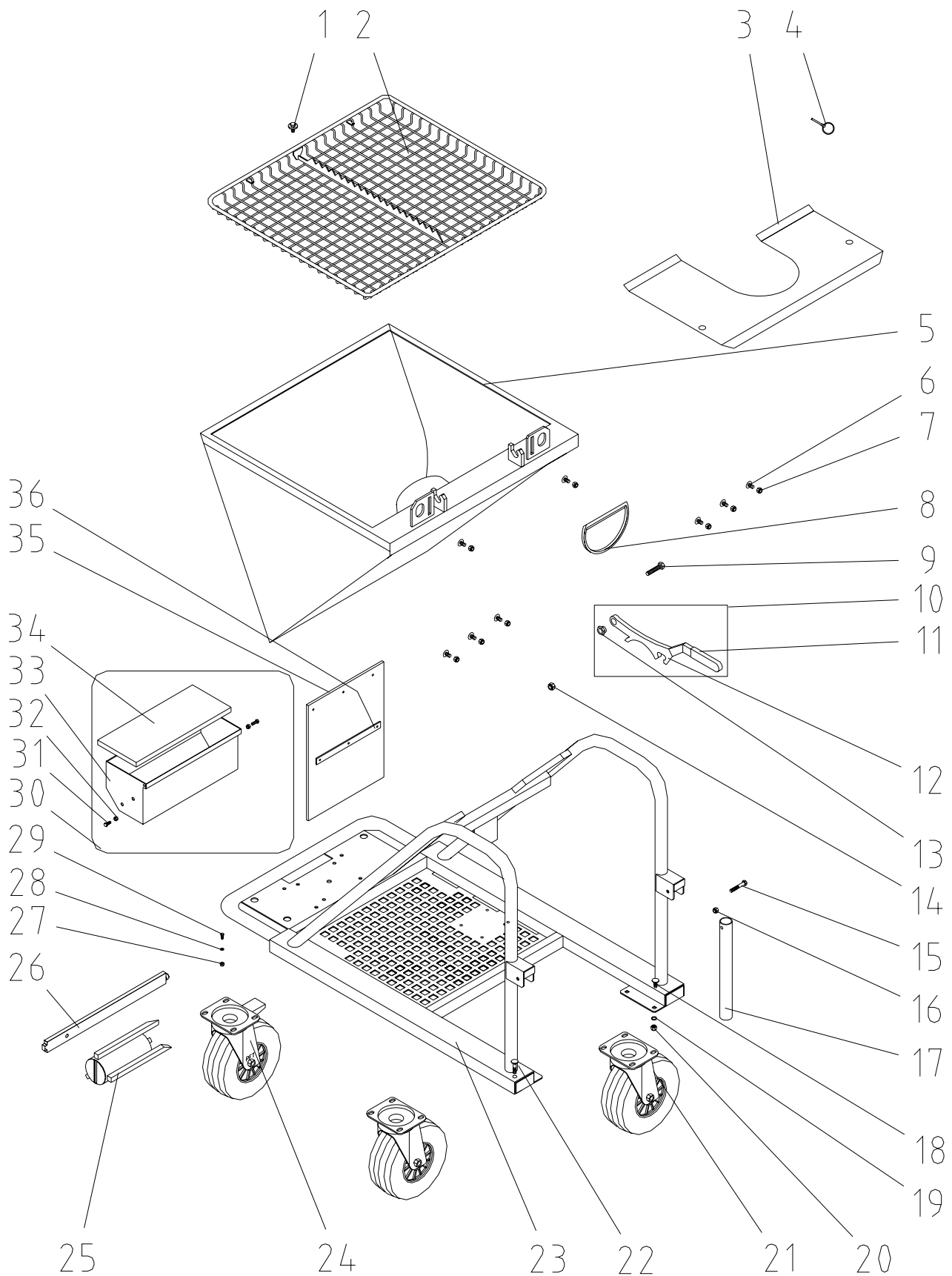
For the improved injection of water into the mixing area in the event of a low water factor.

## Fault – Cause - Remedy

<b>Fault</b>	<b>Cause</b>	<b>Remedy</b>
Machine will not start	Water Water pressure too low - Gauge indicates less than 2.2 bar	- Check water supply - Clean water inlet filters - Switch on high pressure pump
Machine will not start	Electricity - Power supply okay? - Earth leakage circuit breaker activated? - Main switch on? - Fault lamp on? - Motor protection switch actuated? - Self-locking key not pressed? - Contactor defective? - Fuses defective? - Water safety switch misadjusted?	
Machine will not start	Air - Insufficient pressure gradient in remote control due to blocked air line or air nozzle tube - Air safety switch misadjusted	Clean blocked air line or air nozzle tube!
Machine will not start	Material - Too much thickened material in the hopper or mixing area - Material in pump component too dry	Half-empty the hopper and restart it. <b>WARNING!</b> Turn off main switch and pull plug first
Water is not running (no indication by flow meter)	- Solenoid valve (bore hole in membrane blocked) - Solenoid coil defective - Pressure reducing valve closed - Water inlet on pump tube blocked - Needle valve closed - Cable to solenoid valve defective	
Pump motor will not start	- Pump motor defective - Connection cable defective - Plug or mounted socket defective - Motor protection switch defective or actuated	
Stops after a short time	- Water inlet filter dirty - Pressure reducer filter dirty - Hose connection or water line too small - Water suction line too weak or long	Clean or replace filter and  enlarge water inlet.  Connect additional high pressure pump if necessary

Machine will not stop	<ul style="list-style-type: none"> <li>- Air pressure safety switch misadjusted or defective</li> <li>- Air hose or gaskets defective</li> <li>- Air tap on spraying gun defective</li> <li>- Insufficient compressor output</li> <li>- Air supply not connected to compressor</li> </ul>	<ul style="list-style-type: none"> <li>- Adjust air pressure safety switch</li> <li>- Replace air hose or check compressor</li> </ul>
No constant mortar flow (air bubbles)	<ul style="list-style-type: none"> <li>- Bad mixture in mixing tube</li> <li>- Mortar clogs and narrows mixing tube inlet</li> <li>- Inlet filter on mixing tube has become wet</li> <li>- Mixing shaft defective</li> <li>- Motor clutch defective</li> </ul>	<ul style="list-style-type: none"> <li>Add more water</li> <li>If unsuccessful, clean or replace mixing shaft</li> <li>Dry mixing tube inlet and restart</li> <li>Replace motor clutch</li> </ul>
"Thick-thin" mortar flow	<ul style="list-style-type: none"> <li>- Not enough water</li> <li>- Water safety switch misadjusted or defective</li> <li>- Mixing shaft defective; no original PFT mixing shaft</li> <li>- Pressure reducer misadjusted or defective</li> <li>- Rotor worn out, defective</li> <li>- Stator worn out or clamped too loosely</li> <li>- Clamp defective (oval)</li> <li>- Inner wall of mortar hose defective</li> <li>- Rotor too deep in pressure flange</li> <li>- No original PFT spare parts</li> </ul>	<ul style="list-style-type: none"> <li>If there is not enough water, increase water quantity by 10% for about half a minute and then return slowly</li> <li>to normal setting or readjust or replace pump</li> <li>Eliminate any other causes</li> <li>Replace mortar hose</li> <li>Check mixing shaft and motor clutch</li> </ul>
Water level rises in mixing tube during operation	<ul style="list-style-type: none"> <li>- Backpressure in mortar hose higher than pump pressure</li> <li>- Rotor or stator worn out</li> <li>- Hose blockage due to mortar being too thick (high pressure due to low water factor)</li> </ul>	<ul style="list-style-type: none"> <li>Readjust or replace stator</li> <li>If necessary, replace rotor too</li> <li>Unblock hose</li> </ul>
Fault lamp goes on	<ul style="list-style-type: none"> <li>Overload</li> <li>- Motor protection switch (16 A) actuated (pump motor)</li> <li>- Pump blocked with dry material</li> <li>- Insufficient water quantity</li> <li>- Star wheel motor safety switch actuated</li> <li>- Thickened material in hopper</li> </ul>	<ul style="list-style-type: none"> <li>Turn protection switch back on, clean mixing tube and increase water supply when restarting machine</li> <li>Clean hopper and star wheel</li> </ul>

## Spare parts drawing of material hopper and frame

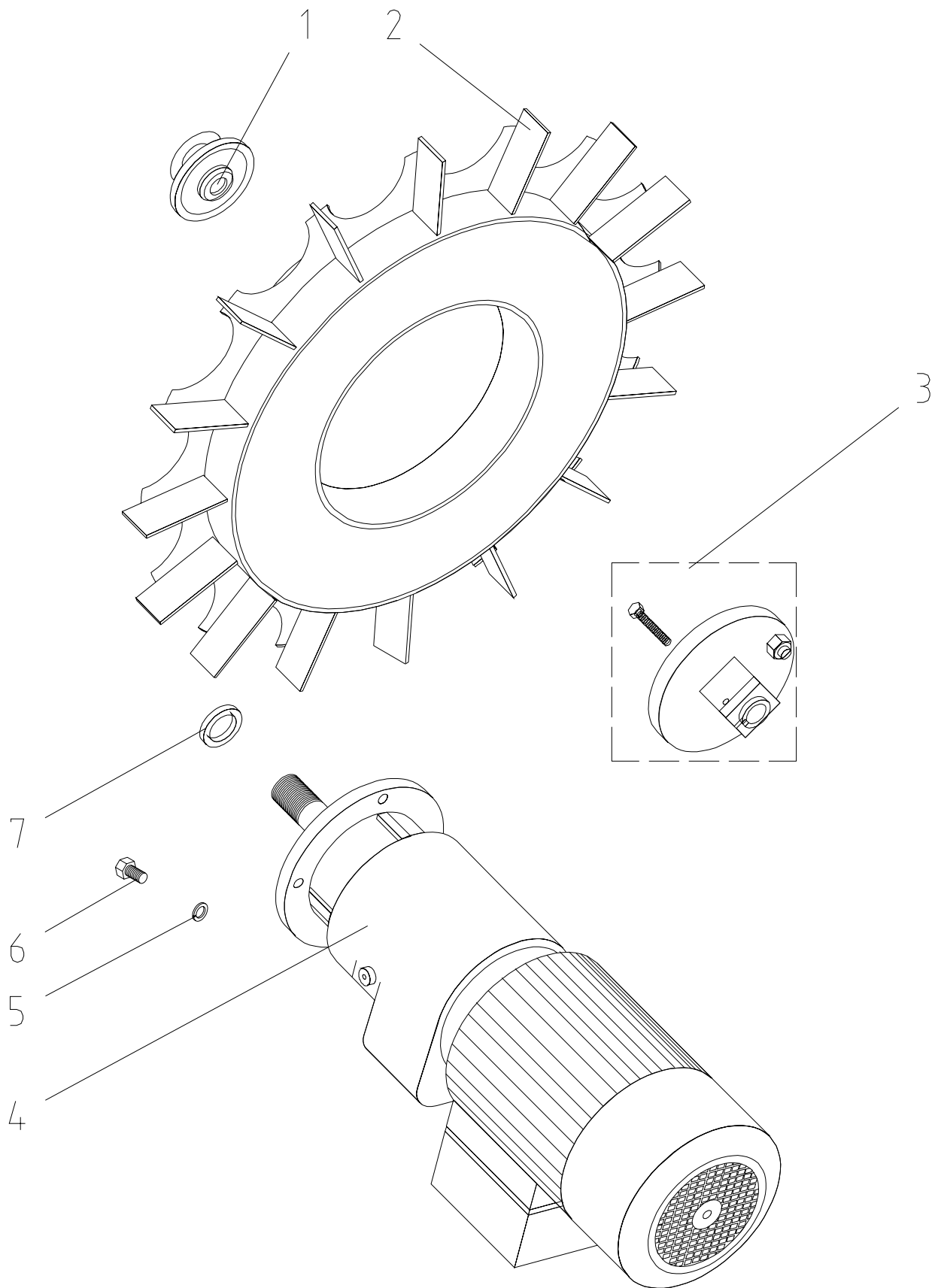




## Material hopper and frame spare parts list

Pos.	Qty	Item no.	Description
1	1	20 20 78 19	Hex screw, M8 x 16 with collar
2	1	00 00 21 13	Protection grille with round steel frame
3	1	00 00 13 40	Dust guard G 4 RAL 2004
4	2	20 10 10 10	Splint D 4.5 with ring
5	1	00 05 33 70	Material hopper G 54 E RAL 2004
6	6	20 20 63 14	Flat screw, M8 x 16, DIN 603, zinc-plated
7	8	20 20 72 00	Nut, M8, DIN 985, zinc-plated
8	1	20 10 11 00	Outlet opening gasket G 4, sponge rubber, 20 x 15 x 670
9	1	20 20 96 01	Hex screw, M10 x 45 DIN 931, zinc-plated
10	1	00 01 13 86	Locking lever G 4 with rubber cap RAL 2004
11	1	00 01 04 62	Handle plastic 25 x 12 locking lever
12		00 00 25 84	Locking lever for mixing tube G 4 with one notch RAL2004
13		00 08 80 29	Excenterbuchse MS für G 4 Arretierungshebel
14	1	20 20 72 10	Nut, M10, DIN 985, zinc-plated
15	2	20 20 78 02	Hex screw, M8 x 50, DIN 933, zinc-plated
16	2	20 20 72 00	Nut, M8, DIN 985, zinc-plated
17	2	00 04 89 96	Carrying handle G 54 E RAL 2004
18	12	20 20 63 22	Flat screw, M8 x 20, DIN 603, zinc-plated
19	16	20 20 91 00	Spring washer B 8, DIN 127, zinc-plated
20	16	20 20 72 00	Nut, M8, DIN 985, zinc-plated
21	3	00 00 11 15	Castor G 4.66
22	4	00 05 09 40	Flat screw, M8 x 55, DIN 603, zinc-plated
23	1	00 04 91 83	Frame G 5 C, canted, RAL 2004
24	1	00 00 11 16	Double stop castor G 4.66
25	1	20 10 23 20	Mixing tube cleaner, D and R pumps
26	1	20 10 23 00	Cleaning shaft
27	2	20 20 62 00	Nut, M6, DIN 985, zinc-plated
28	2	20 20 93 00	U disc, B6.4, DIN 125, zinc-plated
29	2	20 20 71 01	Hex screw, M6 x 16, DIN 933, zinc-plated
30	1	20 10 80 10	Tool kit ZP3V / MONOPJET, complete
31	2	20 20 62 00	Nut, M6, DIN 985, zinc-plated
32	2	20 20 71 01	Hex screw, M6 x 16, DIN 933, zinc-plated
33	1	20 10 80 26	Tool kit housing ZP3V / MONOJET
34	1	20 10 80 27	Tool kit cover ZP3V / MONOJET
35	1	00 03 73 54	Star wheel motor dust cover G 5 c RAL 2004
36	1	00 01 99 64	Terminal strip rubber cover G 5 RAL 9002

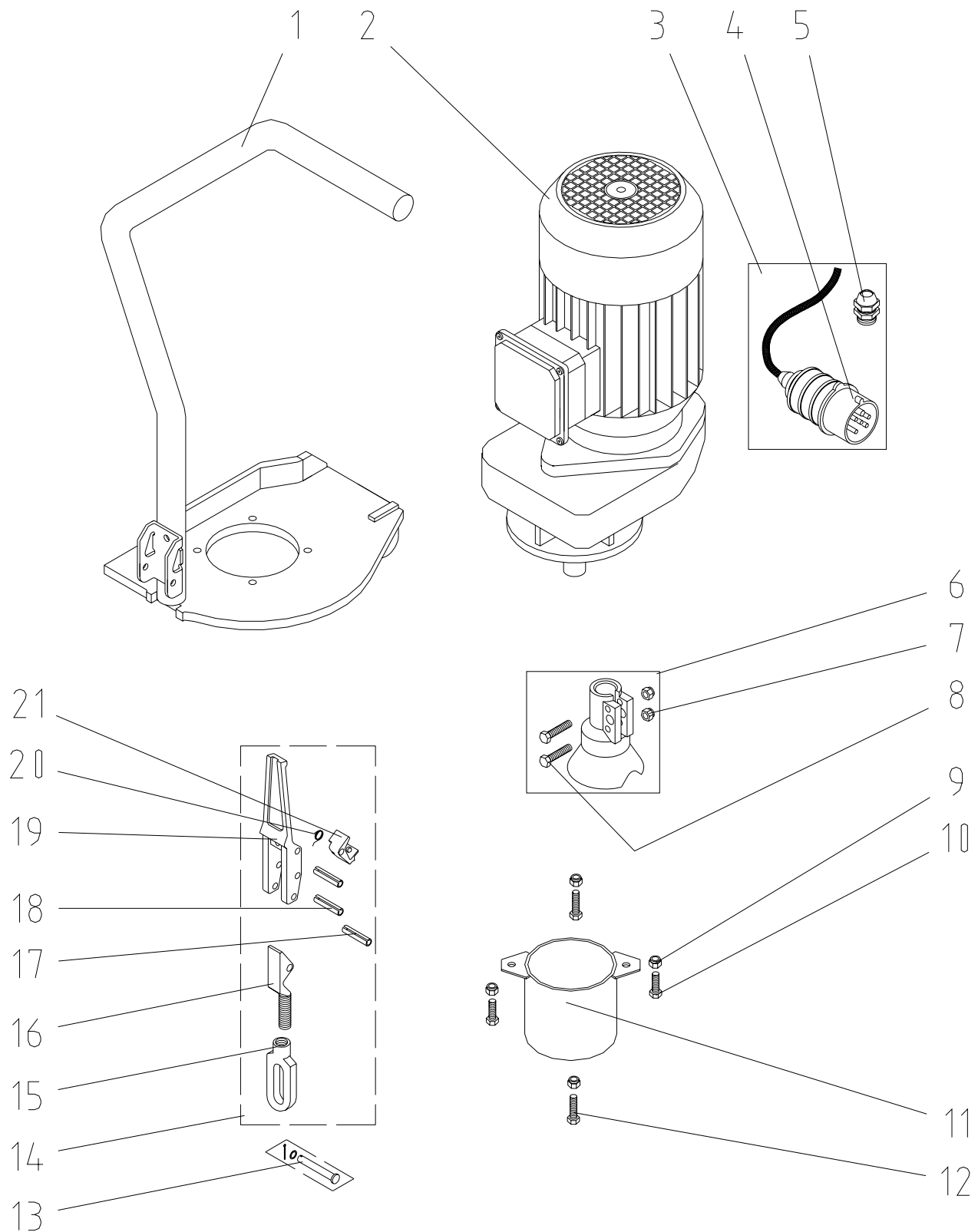
## Star wheel spare parts drawing



## Star wheel spare parts list

Pos.	Qty	Item no.	Description
1	1	00 07 27 90	Star wheel ring nut M24 galv.
2	1	00 04 91 79	Star wheel G 54, deep drawn, RAL 2004
3	1	20 10 18 10	Star wheel fixing plate
4	1	00 04 25 87	Gearbox, 0.75 kW, 28 U/min, ZFQ38 RAL 2004
5	4	20 20 91 10	Spring washer B 12, DIN 127, zinc-plated
6	4	20 20 99 61	Hex screw, M12 x 20, DIN 933, zinc-plated
7	1	20 10 15 02	Star wheel distance disk, 1.5 mm, zinc-plated

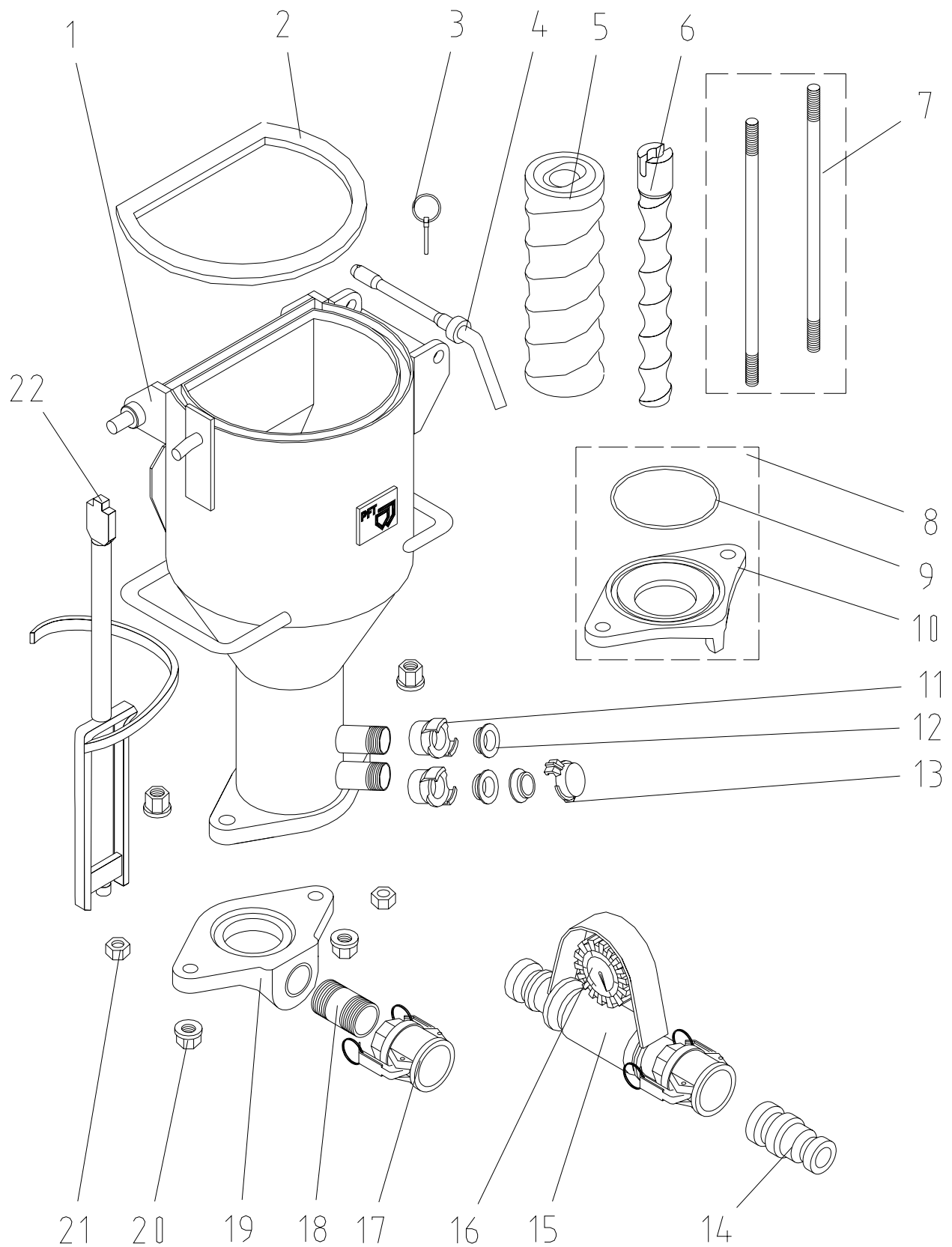
## Gear box spare parts drawing



## Gearbox spare parts list

Pos.	Qty	Item no.	Description
1	1	00 04 76 21	Tilt flange G 54 with tube bail RAL2004
2	1	00 04 67 94	Gearbox EFQ, 5.5 kW, 400 U, inclination switch, RAL2004
3	1	20 42 41 03	Motor connection cable, 1.9 m with CEE plug
4	1	20 42 88 00	CEE plug, 7 x 16 A, 6 h, red, no. 742
5	1	00 04 11 42	Connector skintop, M 25 x 1.5
6	1	00 06 18 58	Cast hauling bracket G 4 with round escape hopper
7	2	20 20 72 00	Nut, M8, DIN 985, zinc-plated
8	2	20 20 78 05	Hex screw, M 8 x 40, DIN 933, zinc-plated
9	4	20 20 72 00	Nut, M8, DIN 985, zinc-plated
10	2	20 20 78 01	Hex screw, M 8 x 35, DIN 933, zinc-plated
11	1	20 10 29 01	Protection tube for hauling bracket G4
12	2	20 20 78 00	Hex screw, M 8 x 30, DIN 933, zinc-plated
13	1	20 20 85 22	Cotter bolt 8 H11 x 58 x 54, with disk and splint, zinc-plated
14	1	20 10 08 01	Snap lock with catch
15	1	20 20 99 71	Nut for snap lock, M14 x 1.5
16	1	20 20 99 74	Screw for snap lock
17	1	20 54 76 02	Dowel pin, 5 x 36, DIN 1481
18	2	20 20 85 19	Dowel pin, 8 x 40, DIN 1481
19	1	20 10 08 03	Snap lock lever
20	1	20 10 08 04	Return spring
21	1	20 10 08 02	Snap lock locking device

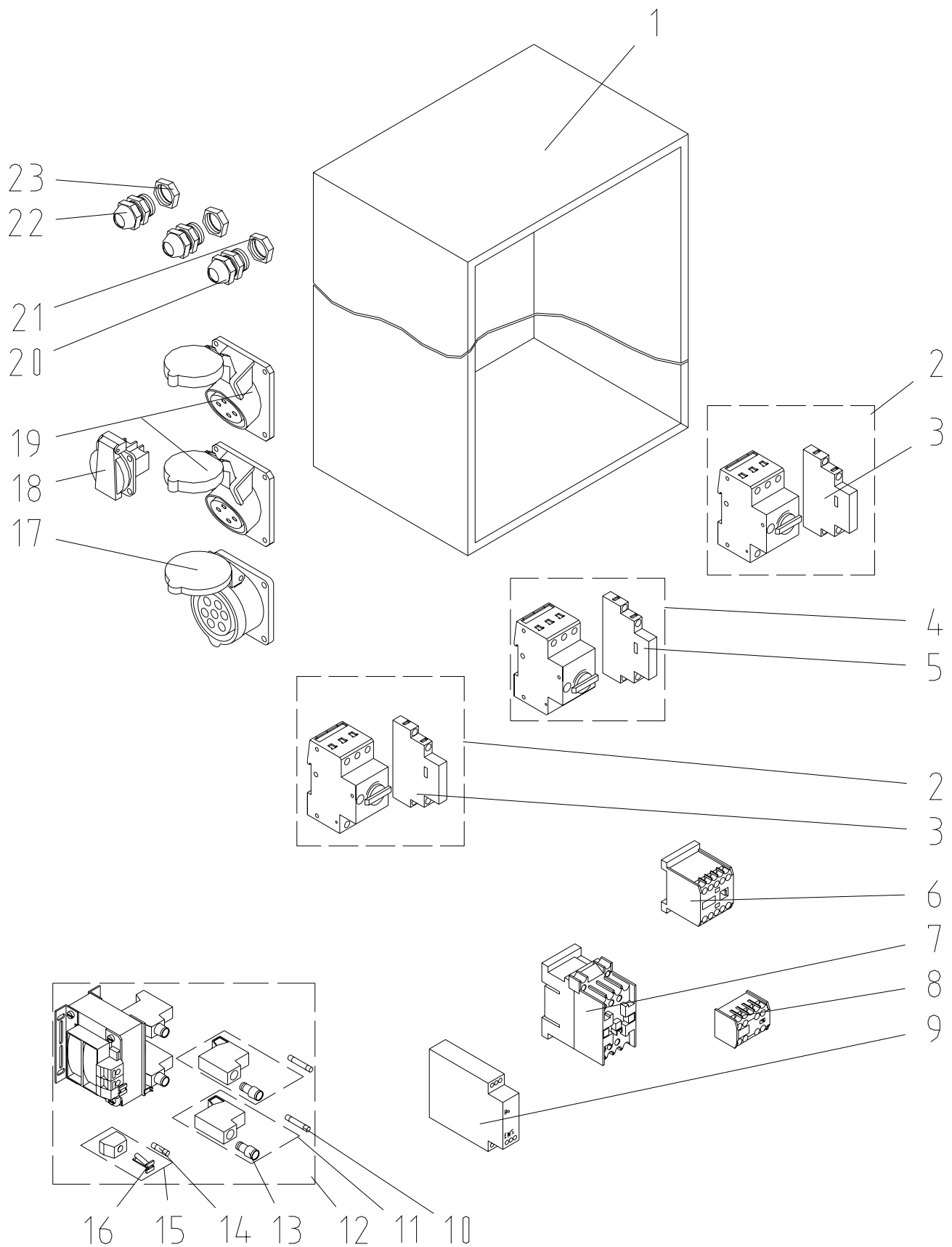
## Mixing tube spare parts drawing



## Mixing tube spare parts list

Pos.	Qty	Item no.	Description
1	1	20 10 06 50	Mixing shaft G 4/G 5 with exchangeable flange RAL 2004
2	1	20 10 09 00	Tilt flange gasket G 4, sponge rubber, 20 x 15 x 750
3	1	20 10 10 10	Splint D 4.5 with ring
4	1	20 10 12 02	Motor flange pin, zinc-plated
5	1	00 01 05 45	TWISTER stator D5-2.5
6	1	00 02 13 99	Rotor D5-2.5 L
7	1	20 11 87 80	Tie rods, M16 x 360, zinc-pl., 1 set = 2 x
8	1	20 10 42 15	Suction flange f. D pump w. O-ring LA 200
9	1	20 10 42 30	O-ring for suction flange D 117 x 5
10	1	20 10 42 14	D pump suction flange (for O-ring) LA = 200 mm
11	2	20 20 11 00	Geka coupling, 1" internal thread
12	3	20 20 17 00	Geka coupling gasket
13	1	20 20 16 50	Geka coupling blind plug
14	1	20 20 03 30	Reducer coupling, 35V-25V part LW24
15	1	00 08 08 58	Mortar pressure gauge G 5 35 mm
16	1	00 08 15 52	Gauge 0-100 bar filled with glycerin 1/2" with attached joint VA
17	1	20 20 07 90	Coupling 35M part 1, 1/4" internal thread with gasket
18	1	00 00 17 92	Double nipple, 1 1/4" x 60, no. 23, zinc-plated
19	1	00 04 16 64	D pump pressure flange G 4, zinc-pl., 1 1/4" internal thread
20	4	20 20 99 21	Nut, M16, DIN 6331, zinc-plated
21	4	20 20 99 20	Hex nut, M16, DIN 934, zinc-plated
22	1	20 10 35 10	Mixing shaft G 4/G 5, armoured, RAL 2004

## Control box spare parts drawing, item number: 00 02 13 43

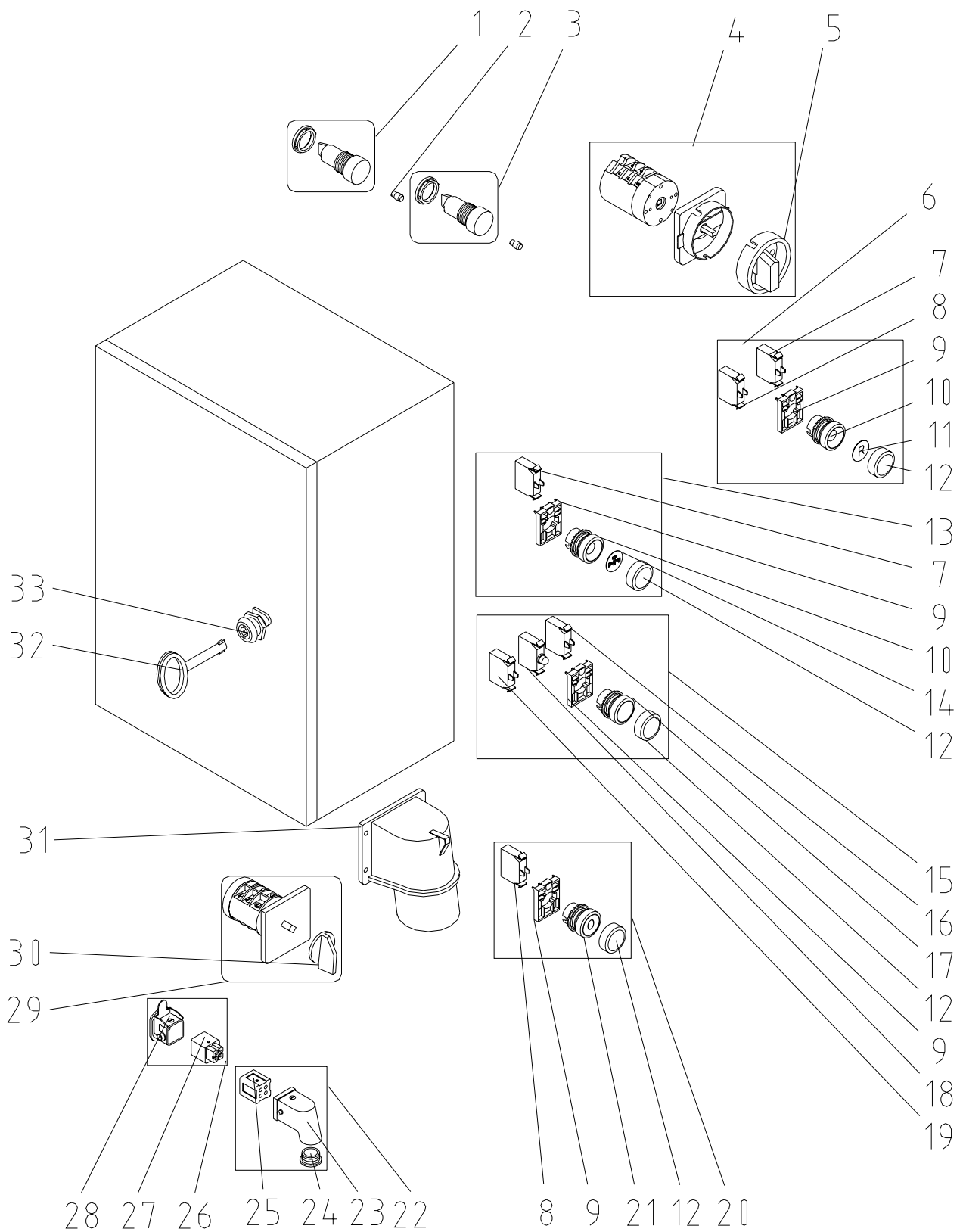




## Control box spare parts list, item number: 00 02 13 43

Pos.	Qty	Item no.	Description
1	1	00 03 52 00	Empty control box housing G 5 c RAL 2004
2	2	00 00 93 71	Motor protection switch 0-16 PKZM, 10-16 A
3	2	00 02 14 01	Auxiliary contact NHI-11-PKZO
4	1	00 00 93 70	Motor protection switch 1.6-2.5 A, PKZM 0-2.5
5	1	00 02 14 01	Auxiliary contact NHI-11-PKZO
6	1	20 44 66 10	Automatic plumb level DIL EM 10, 42 V 50 Hz/48 V 60 Hz
7	1	20 44 71 00	Automatic plumb level DIL OM, 42 V
8	1	20 45 04 20	Auxiliary contact 20 DIL E, assembly
9	1	20 45 27 51	Phase sequence relay, 200-500 V w. 2 chargers
10	2	20 41 90 80	Fine fuse, 5 x 30, 0.315 A
11	2	20 41 92 50	Safety fuse TRKS 4/1-SI (5 x 30)
12	1	00 02 21 38	Transformer unit, 400 V/42 V, 70 VA, NEW
13	1	00 00 73 72	Round fuse insert holder / black
14	1	20 41 90 21	Fine fuse, 5 x 20, 2.0 A, slow-blow
15	1	20 41 92 30	Safety fuse, grey, 20 mm fuse
16	1	00 00 73 73	Angular fuse insert holder/orange
17	1	00 00 85 18	CEE panel mounted socket, 7 x 16 A, 6 h, red, no.13327
18	1	20 42 72 10	Grey panel mounted earthing socket
19	2	20 42 66 10	CEE panel mounted socket, 4 x 16 A, 6 h, red, no.144, flange 71 x 87
20	1	00 04 11 27	Connector skintop, M20 x 1.5
21	1	00 04 11 45	Nut skintop, M20 x 1.5
22	2	00 04 11 41	Connector skintop, M16 x 1.5
23	2	00 04 11 43	Skintop nut, M16 x 1.5

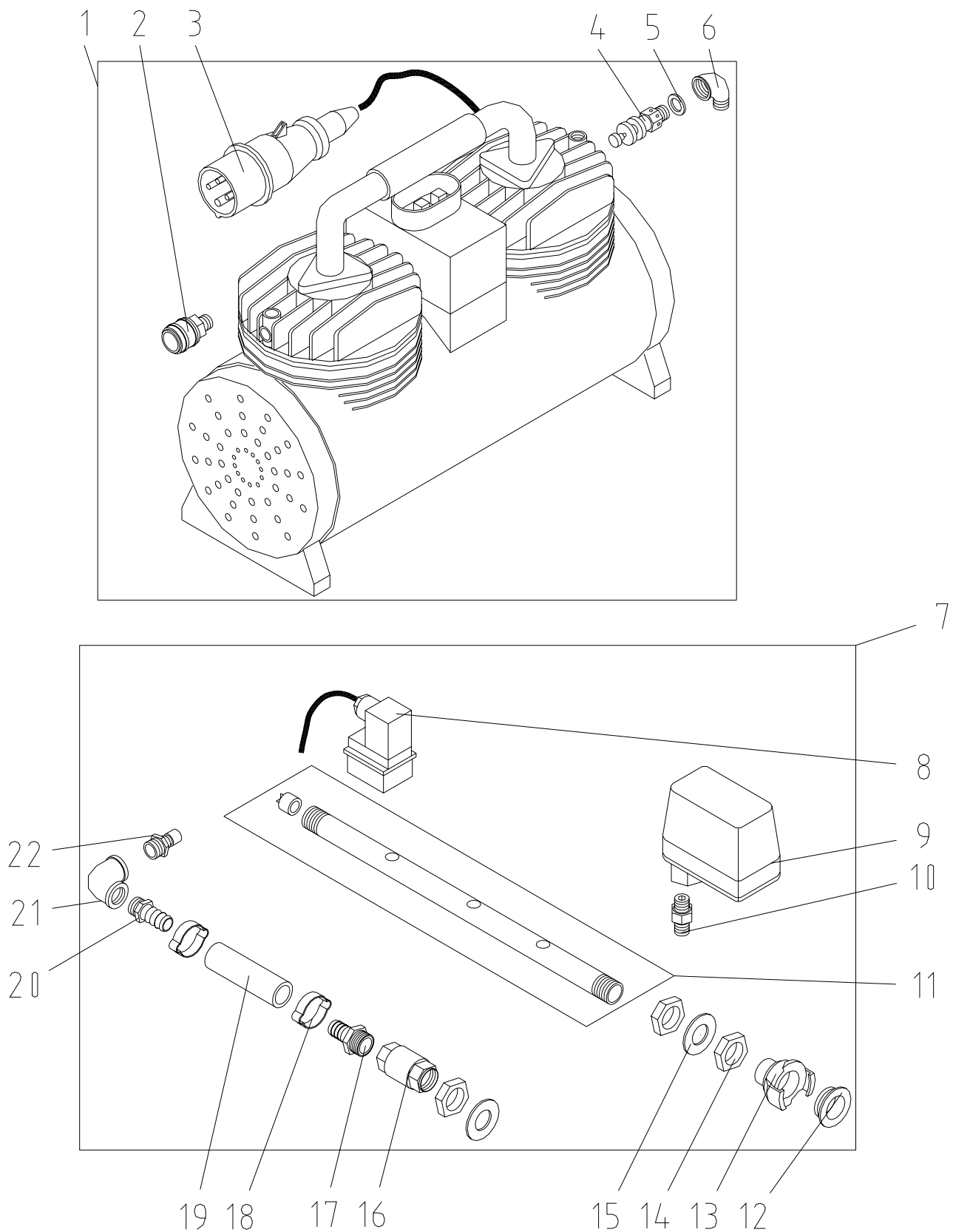
## Control box spare parts drawing, item number: 00 02 13 43



## Control box spare parts list, item number: 00 02 13 43

Pos.	Qty	Item no.	Description
1	1	00 00 22 50	Control lamp, plug-type socket, yellow, without electric bulb, front installation
2	2	20 45 91 01	Light bulb, 42 V 2 W, plug-type socket, BA 9S
3	1	00 00 22 51	Control lamp, plug-type socket, red, without electric bulb, front installation
4	1	20 45 52 00	Main reversing switch
5	1	20 45 52 01	Toggle for main reversing switch, item 20455200
6	1	00 05 59 84	Pressure switch, blue /reset, complete M22
7	2	00 05 38 35	Contact element 1 closer M22
8	2	00 05 38 36	Contact element 1 opener M22
9	4	00 05 38 34	Fixation adapter for switch elements
10	2	00 05 38 39	Pressure switch without sensor plate M22
11	1	00 05 38 43	Sensor plate for pressure switch blue/reset M22
12	4	00 05 38 30	Round membranes for pressure switch IP 67
13	1	00 05 59 56	Water flow pressure switch, cpl. M22
14	1	00 05 38 42	Sensor plate for pressure switch, black, liquid M22
15	1	00 05 59 52	Illuminated button, green, cpl. M22
16	1	00 05 38 35	Contact element 1 closer M22
17	1	00 05 38 33	Illuminated button, green M22
18	1	00 05 38 80	Illuminated element, green, 12-30 V
19	1	00 05 38 86	LED – resistor series element for 42 V
20	1	00 05 59 83	Pressure switch, red, off, complete M22
21	1	00 05 38 37	Pressure switch, red, off M22
22	1	20 42 85 01	Blind plug, 4-pin, HAN 3A
23	1	20 42 86 05	Socket box, 4-pin + 5-pin, angled
24	1	20 43 12 00	Stopper PG 11
25	1	20 42 86 06	Male insert, 4-pin HAN 3A
26	1	20 42 98 00	Coupling, 4-pin HAN 3A with female insert
27	1	20 42 86 07	Female insert, 4-pin, HAN 3A
28	1	20 42 86 04	Housing, 4/5-pin, HAN 3A/HA 4
29	1	20 45 55 00	Hand O automatic switch, 400 V
30	1	20 45 45 10	Toggle with screw for pole changing switch
31	1	20 42 51 00	CEE panel mounted plug, 5 x 32 A, 6 h, red, no.391
32	1	20 44 45 00	Key for control box
33	1	00 03 62 49	Control box lock (two-way key bit)

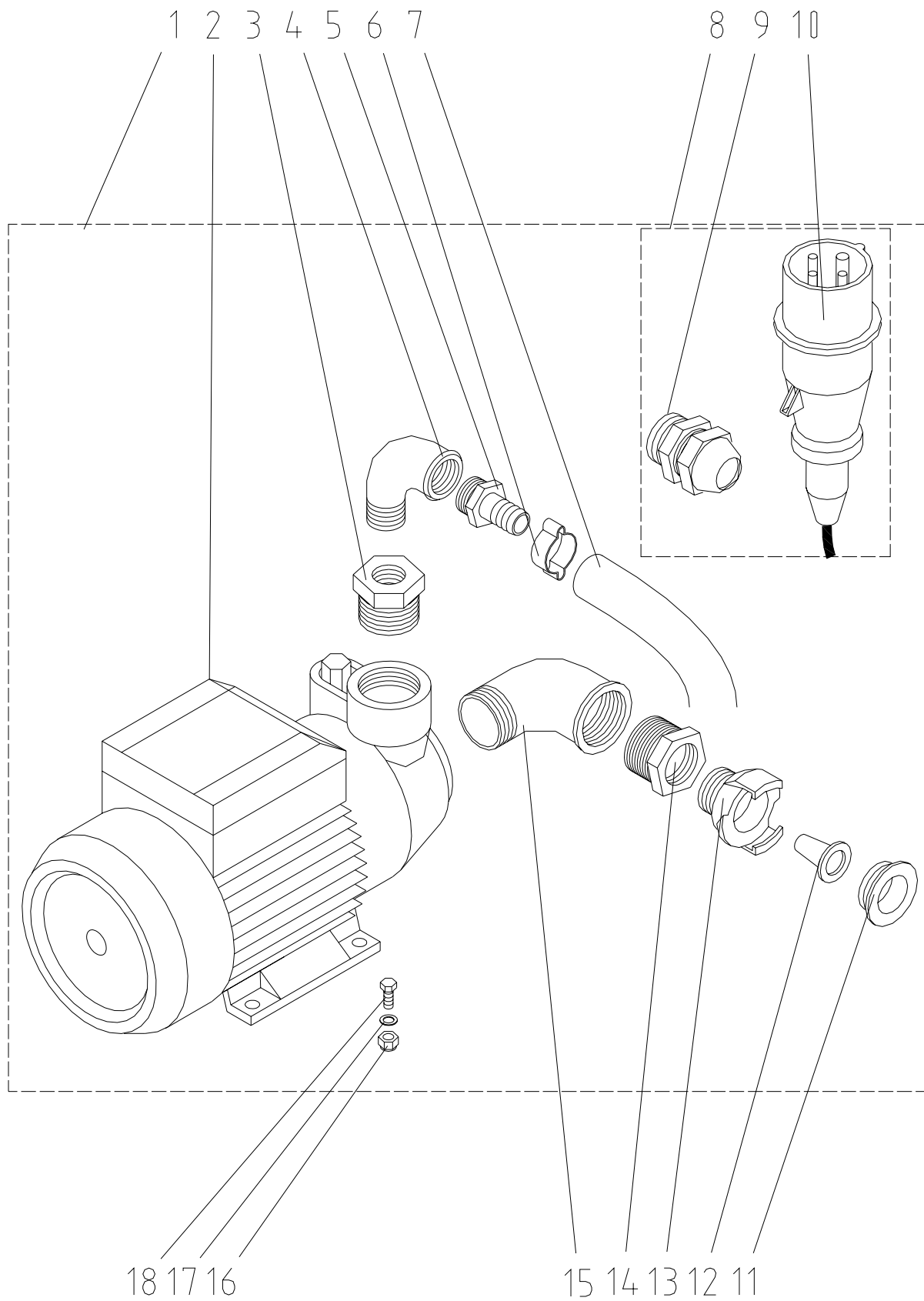
# Spare parts drawing of compressor (item 20130015), air manifold (item 00042262)



## Spare parts list for compressor (item 20130015), air manifold (item 00042262)

Pos.	Qty	Item no.	Description
1	1	20 13 00 15	Compressor K2 N without automatic switch-off device, cpl. with 1.5 m cable and plug, 4 x 16 A, unpacked, RAL 2004
2	1	20 20 20 00	EWO coupling, M component, 1/4" external thread
3	1	20 42 79 00	CEE plug, 4 x 16 A, 6 h, red, no. 252
4	1	20 13 12 00	High pressure valve, 3.5 bar, with gasket
5	1	20 13 47 00	Sealing ring, 13 x 20 x 2
6	1	20 20 36 50	Curved section, 1/4" internal/external thread, no. 92, zinc-plated
7	1	00 04 22 62	Air manifold G 54, cpl.
8	1	20 44 76 60	Safety switch PS3/AF1 HMRS, 1/4", 0.9-1.2 bar opener
9	1	20 13 51 10	Safety switch, PT/5 type, 1/4", 1.5-2.5 bar 3-pin opener
10	1	20 20 37 12	Screwed joint, 1/4" external brass thread for automatic switch-off device
11	1	00 03 75 69	Air manifold, 1/2" G 5 c
12	1	20 20 17 00	Geka coupling gasket (pack of 50 pieces)
13	1	20 20 13 00	Geka coupling, 1/2" internal thread
14	3	00 00 28 11	Tube nut, 1/2" thread
15	2	20 20 93 15	Washer B 21, DIN 125, zinc-plated
16	1	20 21 90 50	Counter flow valve, 1/2" internal thread
17	1	20 19 04 10	Hose screw joint, 1/2" external thread, 1/2" socket
18	2	00 05 91 96	Hose clip 19-21
19	1	20 21 35 02	Water/air hose, 1/2" x 960 mm
20	1	20 19 04 00	Hose screw joint, 3/8" external thread, 1/2" socket
21	1	20 20 36 03	Curved section, 3/8" internal thread, no. 90, zinc-pl.
22	1	20 20 21 01	EWO coupling V component, 3/8" external thread

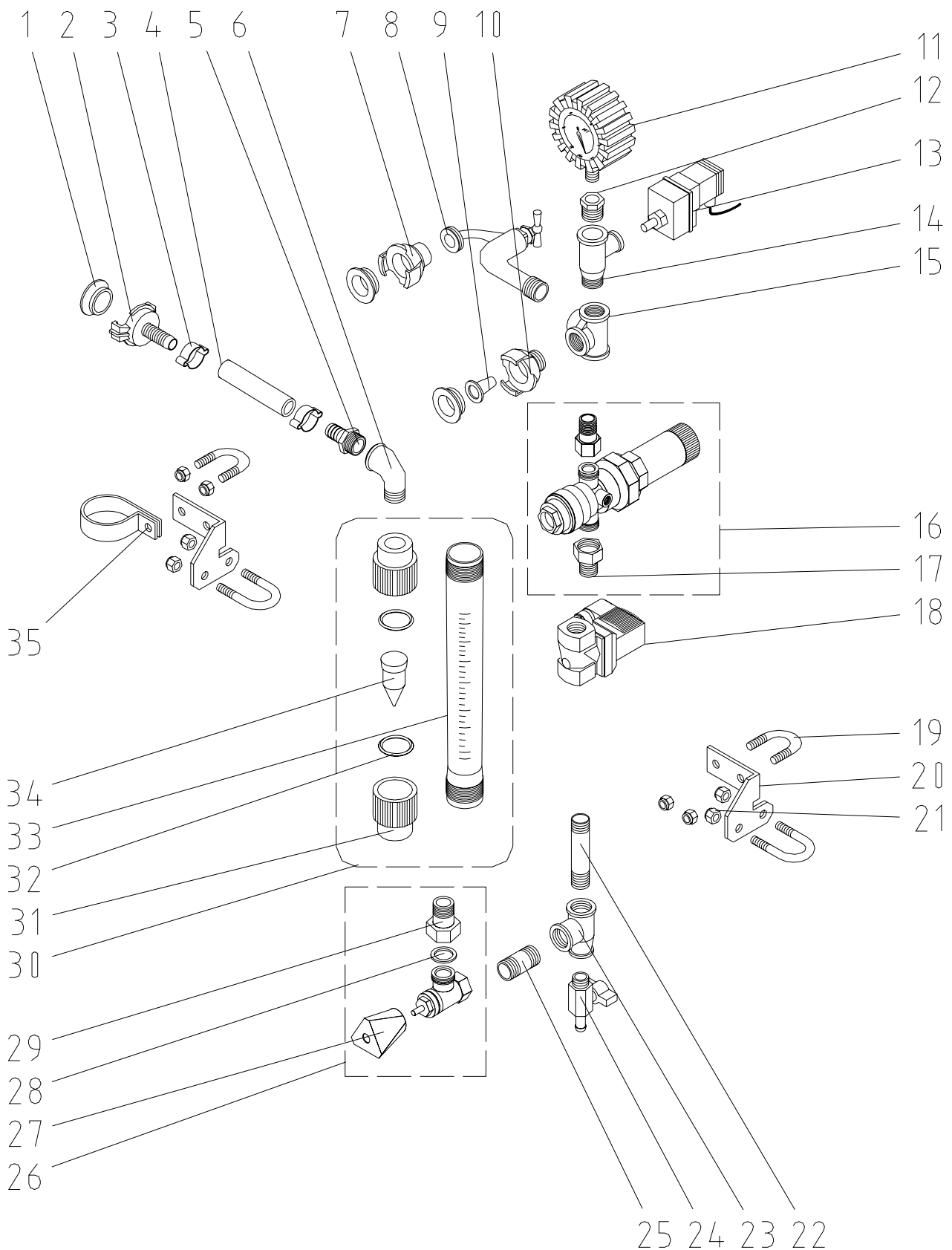
## High pressure pump spare parts drawing, item number: 00 05 67 92



## High pressure pump spare parts list, item number: 00 05 67 92

Pos.	Qty	Item no.	Description
1	1	00 05 67 92	High pressure pump G 54 E 400 V Pk65, crosswise at bottom, cpl.
2	1	00 00 11 30	High pressure pump AV3 PK65N
3	1	20 20 54 00	Reduction nipple, 1" external thread, 1/2" internal thread, no. 241, zinc-plated
4	1	20 20 36 10	Curved section, 1/2" internal/external thread, no. 92, zinc-plated
5	1	20 19 04 10	Hose screw joint, 1/2" external thread, 1/2" socket
6	2	00 05 91 96	Hose clip 19-21
7	1	20 21 36 00	Water/air hose, 1/2" x 1300 mm
8	1	20 42 41 10	Motor connection cable, 0.8 m, CEE plug, 4 x 16 A, 6 h, red, ring eyelet, 4 mm
9	1	00 04 11 27	Connector skintop, M20 x 1.5
10	1	20 42 79 00	CEE plug, 4 x 16 A, 6 h, red, no. 252
11	1	20 20 17 00	Geka coupling gasket (pack of 50 pieces)
12	1	20 15 20 00	Water inlet filter Geka coupling
13	1	20 20 09 10	Geka coupling, 3/4" external thread
14	1	20 20 50 00	Reduction nipple, 1" external thread, 3/4" internal thread, no. 241
15	1	20 20 36 20	Curved section, 1" internal/external thread, no. 92, zinc-plated
16	4	20 20 62 00	Nut, M6, DIN 985, zinc-plated
17	4	20 20 93 10	Washer, 6.4 x 18 x 1.5, DIN 9021, zinc-plated
18	4	20 20 71 03	Hex screw, M6 x 20, DIN 933, zinc-plated

## Water manifold spare parts drawing, item number: 00 04 22 53

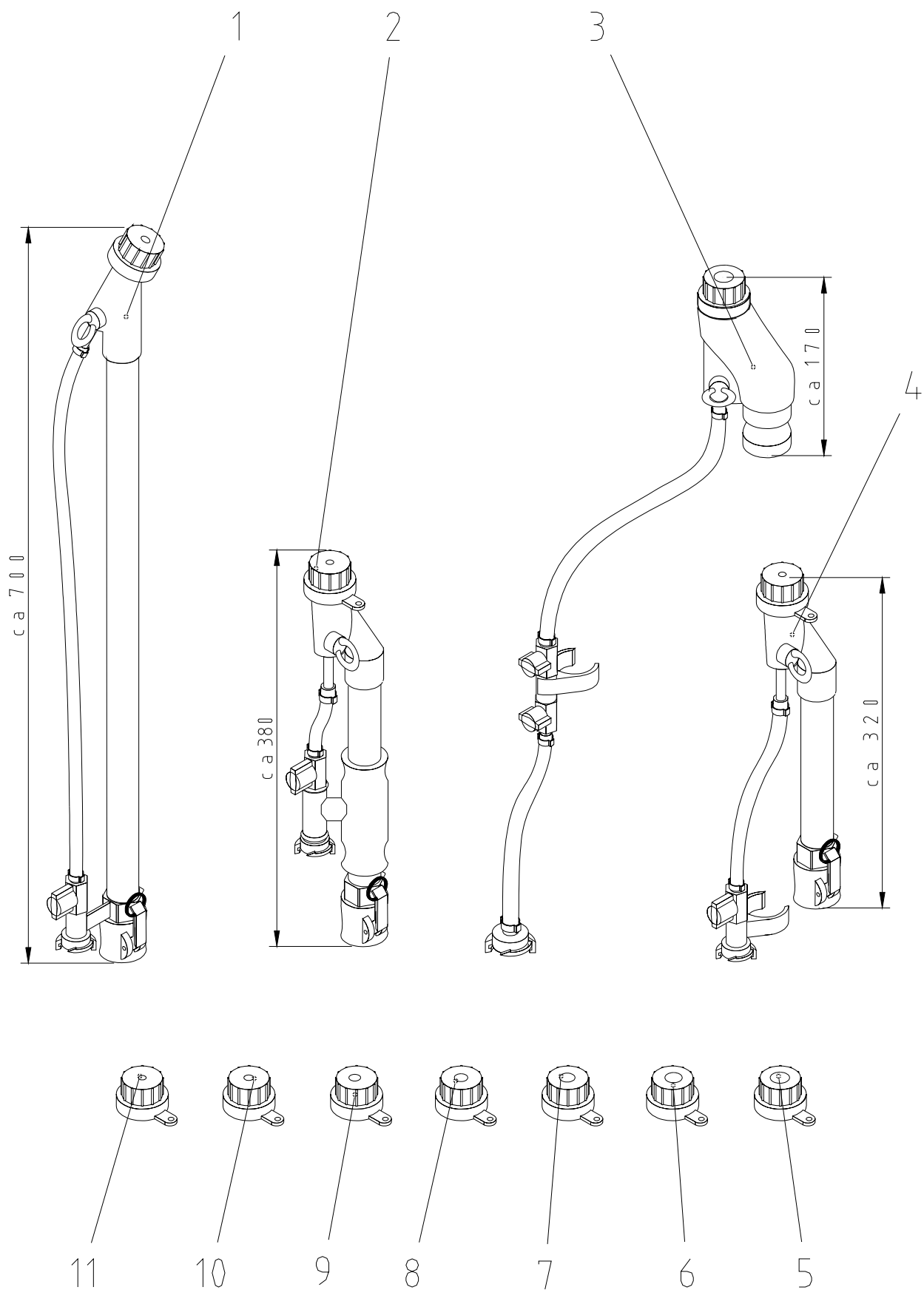




## Water manifold spare parts list, item number: 00 04 22 53

Pos.	Qty	Item no.	Description
1	3	20 20 17 00	Geka coupling gasket (pack of 50 pieces)
2	1	20 20 15 00	Geka coupling, 1/2" socket
3	2	20 20 25 00	Hose clip 20-23
4	1	20 21 36 12	Water/air hose, 1/2" x 500 mm
5	1	20 19 04 10	Hose screw joint, 1/2" external thread, 1/2" socket
6	1	20 20 36 10	Curved section, 1/2" internal/external thread, no. 92, zinc-pl.
7	1	20 20 12 00	Geka coupling, 3/4" internal thread
8	1	20 21 50 00	Hose tap, 1/2"
9	1	20 15 20 00	Geka coupling water inlet filter
10	1	20 20 09 00	Geka coupling, 1/2" external thread
11	1	20 21 60 00	Gauge, 0-10 bar, 1/4" bottom, D = 63 mm
12	1	20 20 52 00	Reduction nipple, 1/2" external thread, 1/4" internal thread, no. 241 ve
13	1	00 04 56 19	Safety switch PS3/AF1 HMRS, 1/4", 1.9 bar
14	1	20 20 43 00	T-piece, 1/2", 1/4" internal threads, 1/2" external thread, no. 24, zinc-pl.
15	1	20 20 46 00	T-piece, 4 x 1/2" internal thread, no. 223, zinc-pl.
16	1	20 15 52 00	Pressure reducer D06FN, 1/2", 1/2" bore
17	2	20 20 31 07	Nipple, 1/2" flat external thread, with reducer nut 3
18	1	20 15 26 13	Solenoid valve, 1/2", 42 V type 6213 A
19	4	20 20 99 85	Bail, M8 x 3/4" x 43, zinc-pl.
20	2	00 05 09 05	Water manifold bracket frame G 5 c RAL 2004
21	8	20 20 72 00	Nut, M8, DIN 985, zinc-pl.
22	1	20 20 33 00	Double nipple, 1/2" x 100, no. 23, zinc-pl.
23	1	20 20 45 21	T-piece, 1/2", 1/2", 3/8", internal threads, no. 130, zinc-pl.
24	1	20 19 03 20	Tap, 3/8" external thread, with 10 mm socket
25	1	20 20 34 00	Double nipple, 1/2" x 40, no. 23, zinc-pl.
26	1	20 15 77 00	Needle valve, 1/2", type 6701
27	1	20 15 78 00	Handle needle valve, 1/2"
28	1	20 15 60 10	Fibre sealing ring, 24 x 18 x 2
29	1	20 20 31 05	Nipple, 1/2", conical, with reducer nut 3
30	1	20 18 50 04	Water flow meter, 150-1500 l/h, cpl.
31	2	20 18 33 10	Reduction piece, 1" external thread - 1/2" internal thread, plastic
32	2	20 18 32 00	O-ring, 28 x 3.5, DIN 3771-NBR 70
33	1	00 07 59 55	Plastic tube, 75-750 l/h, 150-1500 l/h
34	1	20 18 34 00	Cone (WDFM type 1500)
35	1	00 04 91 35	Water flow meter clamp G 54

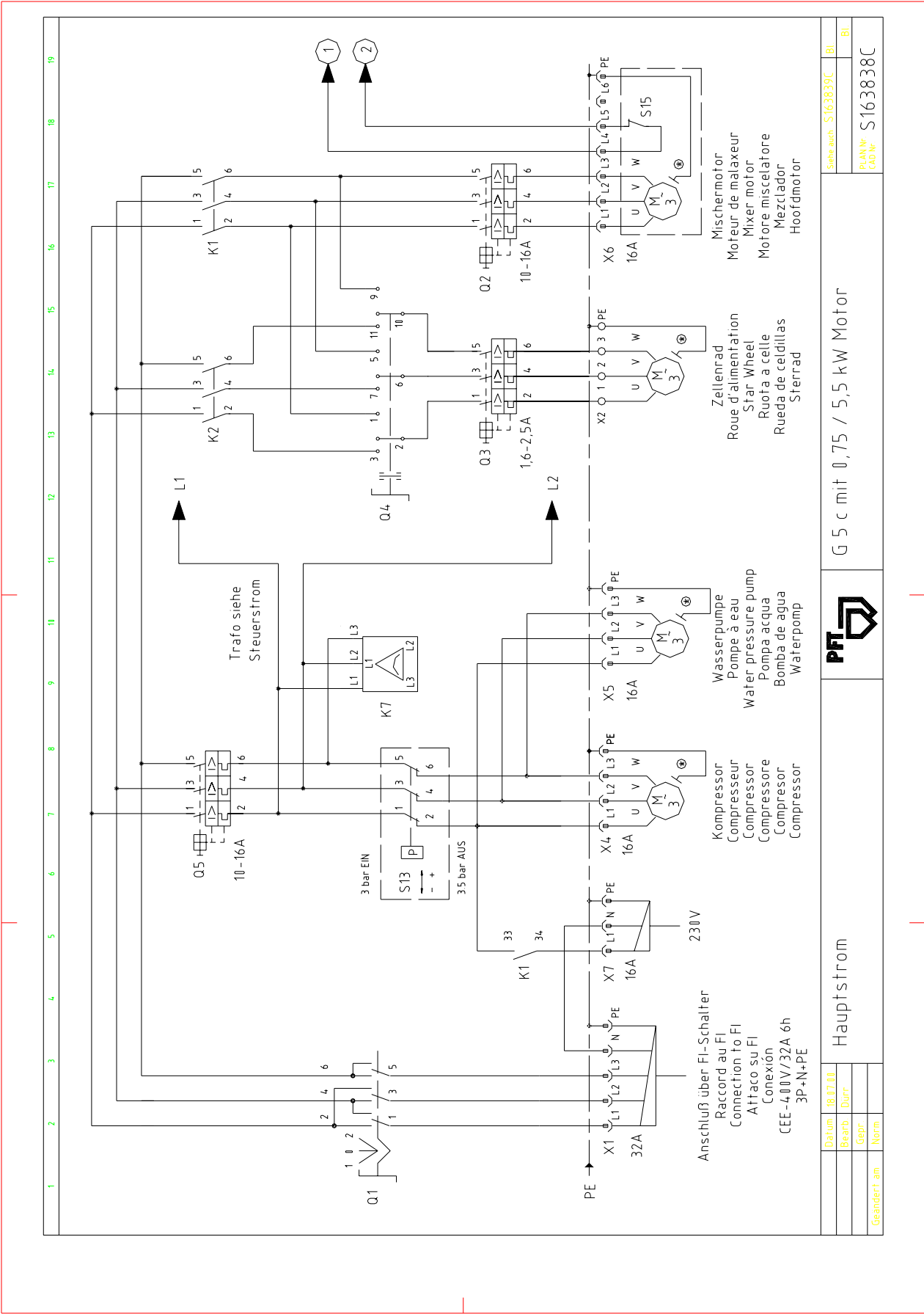
Spraying gun spare parts drawing



## Spraying gun spare parts list

1	1	20 19 00 11	Spraying gun, 25 mm, LW24, nozzle 14 mm, 30° long
2	1	00 04 62 26	Spraying gun crimp valve, 25 mm, plastic
3	1	20 19 60 00	Spraying gun, 35 mm
4	1	20 19 00 02	Spraying gun, 25 mm, LW24, nozzle 14 mm
5	1	20 19 12 00	Spray cap, 20 mm
6	1	20 19 11 00	Spray cap, 18 mm, pack = 10 pieces
7	1	20 19 10 00	Spray cap, 16 mm, pack = 10 pieces
8	1	20 19 09 00	Spray cap, 14 mm, pack = 10 pieces
9	1	20 19 08 00	Spray cap, 12 mm, pack = 10 pieces
10	1	20 19 07 00	Spray cap, 10 mm, pack = 10 pieces
11	1	20 19 07 01	Spray cap, 8 mm, pack = 10 pieces

Main power circuit diagram S1079



The diagram shows a complex electrical control system for a 5.5 kW motor. It includes a main power supply section with fuses (F2, F3, F4) and a transformer (T1). The control section features several interlocking switches (S1, S2, S3, S4, S5, S10, S11, S12) and relays (K1, K2, K7, K8, K9). The motor is represented by a circle with 'H3' and 'X1, X2' terminals. The diagram is annotated with 19 numbered callouts (1-19) pointing to various components. A detailed legend at the bottom provides translations for the components in multiple languages.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Wasservorlauf	Arrivée d'eau	Flow of water	Arrivo acqua	Corriente de agua														
Rückwärts	Marche arrière	Reverse	Rotazione inversa	Hacia atrás														
Fernsteuerung	Télécommande	Remote Control	Comando a distanza	Mando a distancia														
Druckschalter Luft	Appareil de pression Air	Air pressure switch	Pressostato aria	Presostato de aire														
Druckschalter Wasser	Appareil de pression eau	Water pressure switch	Pressostato acqua	Presostato de agua														
Mischpumpe	Moteur de malaxeur	Motor Mixer	Motore miscelatore	Mezclador														
Betrieb	Travail	Operation service	Funzionamento	Marcha														
Störung	Dérangement	Fault	Guasto	Interrupción														
Magnetventil	Vanne magnétique	Magnetic valve	Elettrovalvola	Válvula magnética														
Drehrichtung	Sens de rotation	Direction of rotation	Senso di rotazione	Sentido de rotación														
<p>See also: S163838C BI</p> <p>PLAN-Nr. S163839C</p> <p>CAD Nr.</p>																		

## Check list for annual inspection by specialist (master copy)

This inspection must be carried out once a year by a specialist in accordance with ZH1/575. The machine and control box are awarded an inspection label as verification of this inspection. The inspection protocol is to be presented on demand.

Date of inspection:	Inspector:	Signed:	Machine number:

Component	Inspection feature	OK	Rework/ Replace
Material hopper	Check all welded seams		
Material hopper	Destroyed by corrosion or deformation?		
Mixing area	Check wall of tube for wear (minimum wall thickness of 1.5 mm)		
Mixing shaft	Check wedge profile in mixing area for wear		
Mixing shaft	Check pump coupling for wear		
Protection grille	Is protective grille still even?		
Frame	Check all welded seams		
Frame	Check whether all screwed joints are fitted tightly		
Frame	Check for distortions. Stability must be ensured		
Rollers	Do rollers turn easily?		
Water flow meter	Is the inspection glass still clearly transparent and sealed?		
Solenoid valve	Functional check		
Pressure reducing valve	Functional check (check 1.9 bar setting)		
Control box	Visual inspection for defects		
Control box	Functional check		
Control box	Are all labels in a good readable condition?		
Control box	High voltage check with 1000 V		
Control box	Functional check of all safety switches		
Control box	Functional check of all control lamps		
Control box	Check whether all cable connections are fitted tightly		
Type plate	Available and legible		
Operating instructions	Available		
Mortar pressure gauge	Functional check		

## Technical specifications

Machine designation		G 54 E 00 05 69 13	
Machine type	Mixer pump		
Application of the machine	Masonry mortar, reinforcing mortar, scratchwork, cement plaster, insulating plaster, screed mortar, filling compounds, reconstruction mortar, levelling compounds, liquid filler, bounding mortar, lime plaster, reconstruction plaster, patent plaster, floor mortar and jointing mortar		

1. Dimensions		Unit
Length	1250	mm
Width	730	mm
Height	1520	mm
Filling/Connection height	930	mm
Water supply	3/4"	inches

2. Weights		
Weight of motor unit	37.8	kg
Weight of pump unit / mixing tube	81	kg
Weight of compressor	23	kg
Weight of material hopper		kg
Total weight	273	kg

3. Electrical specifications*		
Connected load	5.5 / 400	KW rpm
Fuse protection	32	A
Connection cable:		mm²
Supply voltage	400 V, 3 phases, 50 Hz	V
Control voltage		V
Nominal current of machine		A
Fuse supply		A

4. Pump* D 5 – 2.5		
Rotor/Stator pump capacity	6-22	l/min
Pumping distance / Height	15-25	m
Max. operating pressure	25	bar

5. Compressor*		
Compressor output	0.900	KW
Max. operating pressure	6	bar
Voltage	380 V, 3-phase, 50 Hz	KW
Air capacity of compressor	250	l/min

6. Important machine numbers		
Circuit diagram number	S 163838C / S 163839C	
Control box number	00 07 04 97	
Parts list number	00 05 24 74	
BAL no.	00 07 37 86	
Pump motor item number	00 05 35 27	
Star wheel motor item number	00 05 85 78	
Compressor item number	00 04 77 30	

\* Recommended value, depending on conveying height, pump condition and version and mortar quality, composition and consistency

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