

**OPERATING MANUAL**

(Item number of operating manual: 00 01 19 27)

(Item number of machine – parts list: 00 00 79 40)

**Mixer Pump**

# PFT G 5 SUPER



WE KEEP THINGS MOVING



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## Dear PFT customer

Congratulations on your purchase. You have made a wise choice as you clearly value the quality that comes with a brand name product from a reputable company.

The **PFT G 5 SUPER** mixer pump uses state-of-the-art technology. It was functionally designed to be a reliable aid under rough construction site conditions.

This operating manual should always be stored and kept at hand at the site where the machine is used. It contains information on the various functions of the machine. Study the operating manual thoroughly before starting the machine, as we accept no liability for accidents or damage to the machine caused by incorrect operation.

The **PFT G 5 SUPER** mixer pump will prove to be a trustworthy aid providing it is operated correctly and handled with care.

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Initial inspection after delivery:

An important task of all technicians delivering the **PFT G 5 SUPER** is the inspection of the machine settings at the end of the first work phase. The factory settings may change during the initial cycle. If these changes are not corrected in time, immediately after run-in, problems may arise during operation.

Following receipt of the **PFT G 5 SUPER** mixer pump and training in regard to it, i.e. after about two hours of operation, the technician must always carry out the following checks / make the following settings:

- Water safety switch
- Pump pressure, back pressure
- Pressure relief valve on compressor
- Air nozzle tube (Spraying pattern)
- Air safety switch
- Compressor pressure switch
- Remote control switch
- Pressure reducing valve
- Motor safety switch

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## Applications:

For pumpable, ready-mixed dry mortars, such as:

- Machine-applied gypsum plasters
- Gypsum-lime plasters
- Cement renders
- Lime plasters
- Cement-lime renders
- Masonry mortars
- Insulating plasters
- Slot mortars
- Reinforcing and bonding mortars
- Self-levelling floor screeds
- Fango materials
- ... and many more



## Proper use of the machine

The **PFT G 5 SUPER** is a continuously operating mixing pump for pre-mixed machinable mortar with a particle size of up to 3 mm.

Please observe the processing guidelines of the material manufacturer!

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

The following points should be observed during operation:

- 1) Connection for worksite distribution board – control box
- 2) Connection for control box – pump motor
- 3) Connection for control box – compressor
- 4) Connection for compressor – air manifold
- 5) Connection for water supply – water manifold / booster pump
- 6) Connection for air manifold – air hose
- 7) Connection for air hose – finishing plaster device
- 8) Connection for mixing tube – mortar pressure gauge
- 9) Connection for mortar pressure gauge – mortar hose
- 10) Connection for mortar hose – finishing plaster device

## Description of functions

The PFT G 5 SUPER can be loaded with bagged materials or by means of a delivery hood or injection hood. The mixing shaft and the pump are driven by a geared motor. The pump motor speed is approximately 400 rpm. Water is added and mixed into the dry material in the mixing area. The water flow rate needs to be set manually at the needle valve. The water flow rate may be checked using the water flow meter. A pressure switch monitors the water flow pressure. If it falls below 1.9 bar, the machine shuts down automatically. This problem is prevented by installing a booster pump upstream. The mixed mortar is pumped away by a screw pump installed downstream from the mixing shaft. A spraying gun can be mounted at the end of the conveying hose. The compressed air required for spraying is supplied by a compressor.

## Dangers and warning symbols

The following terms and symbols are used in this manual for particularly important information:

In order to make the operation of our machines as easy as possible for you, we would like to briefly inform you of the most important safety instructions. If you comply with these instructions, you will be able to use our machine in a safe and quality-assuring manner for a long time to come.



Warning – hot surface!

Proper handling:

Hot surfaces should not be touched without protective gloves.



Waste oil!

Proper handling:

Only pour waste oil in the disposal container if it consists purely of oil.  
(Do not pour in any mixtures, such as mixed benzine and oil!)



Warning – dangerous area!

Proper handling:

Observe the danger warning and exercise the appropriate caution  
(e.g. protective clothing) and prudence.



Warning – dangerously high voltage!

Proper handling:

In work areas with this designation, work may be performed only by those persons who possess the required expertise (e.g. electricians or persons with authorisation for electrical work) and who have been assigned this work by the contractor.

Unauthorised individuals may not enter such designated work areas or open cabinets with this designation.

## Basic safety instructions

1. Follow all safety instructions and danger warnings on the machine. Ensure that all instructions are kept legible.
2. Inspect the machine for visible damage and defects at least once every shift. If you notice any safety-threatening alterations to the machine or its operating behaviour, stop the machine immediately and notify your supervisor.
3. Do not attempt to modify the machine in any way which may impair its safety without first consulting your machine dealer. This also applies to the installation of unchecked "safety devices".
4. Spare parts must comply with the technical requirements of the manufacturer. This is guaranteed for all original PFT parts.
5. Only trained or instructed personnel should be employed. Clearly define the responsibilities of the personnel for operation, setup, maintenance and repairs.
6. Personnel undergoing training should only be allowed to operate the machine under the supervision of experienced persons.
7. All electrical work should be carried out by a qualified electrician or by trained personnel under the supervision of a qualified electrician and should comply with the respective regulations.
8. Observe the operating instructions when turning the machine on and off. Watch control indicators for signals.
9. When the machine is completely switched off for maintenance and repair work, measures must be taken to ensure that it cannot be switched back on accidentally (for example, lock the main switch and remove the key, or attach a warning sign to the main switch).
10. Before cleaning the machine with a water jet, seal all openings through which water could enter and thereby impair the safety and proper functioning of the machine (electric motors and control boxes). Remove all covers after cleaning.
11. Only use original fuses of the prescribed amperage.
12. 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.
13. Disconnect the machine from all external power sources before you relocate it, even if you are only moving it a short distance. The machine should be connected properly to the mains before being put back into operation.
14. Set up the machine on stable ground and secure it against unintentional movements.
15. Lay out the conveying lines safely. Do not bend them over sharp edges.
16. Depressurise all conveying systems before opening conveying lines.



17. When unblocking hoses, stand away from the machine to avoid injury through high-pressure discharges of mortar. Safety goggles should also be worn. No other persons may be within the immediate vicinity of the machine during this work.
18. Appropriate noise insulation devices must be provided if the continuous noise level exceeds 85 dB(A).



19. If required, wear the following protective clothing while spraying: safety goggles, safety shoes, safety clothing, gloves, protective skin cream and respirator mask

Have the machine inspected as required – but at least once a year – by a specialist.



## Basic safety instructions

**NOTE:**

Special information for running the machine efficiently.

**WARNING!**

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

**WARNING!**

The machine should only be used if it is in flawless technical condition and in compliance with the regulations. Pay attention to safety and the operating instructions. It is especially important to immediately correct any faults that could impair safety.

In order to make the operation of our machines as easy as possible for you, we would like to briefly inform you of the most important safety instructions. If you comply with these instructions, you will be able to use our machine in a safe and quality-assuring manner for a long time to come.

**WARNING!**

The following terms and symbols are used in this manual for particularly important information:

**WARNING!**

The machine should only be used if it is in flawless technical condition and in compliance with the regulations. Pay attention to safety and the operating instructions. It is especially important to immediately rectify all faults which could impair safety.

In order to make the operation of our machines as easy as possible for you, we would like to briefly inform you of the most important safety instructions. If you comply with these instructions, you will be able to use our machine in a safe and quality-assuring manner for a long time to come.

**WARNING!**

If additional parts that are not specified in these operating instructions are installed for special procedures, it is necessary to adhere to the utilisation, safety and maintenance regulations.

**WARNING!**

It is prohibited to use the machine for purposes other than those for which it is intended.

**WARNING!**

It is prohibited to use the machine in environments at risk of explosion.

**WARNING!**

The machine must always be in perfect condition and used in accordance with these instructions and under observation of the safety instructions and danger warnings. Any damage that could impair operational reliability must be repaired immediately.

**WARNING!**

The user must be aware of the risks of catching clothing or long hair in moving 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 freedom of movement.

**WARNING!**

The workplace must be appropriately lit for the respective tasks. Insufficient or excess lighting can be dangerous.

**WARNING!**

Special instructions, 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 correct any faults that could impair safety.

**WARNING!**

Please observe the accident prevention regulations for compressors (VBG 16), in particular sections IIIc "Installation" and IV "Operation", as well as VBG 4 "Electrical equipment and tools".

Modifications to the pumps can only be carried out with factory consent.

## Signs

The following symbols and notices are located in the work area. They refer to the immediate vicinity in which they are attached.



### **WARNING!**

#### **Danger of injury due to illegible symbols!**

Over the course of time, stickers and signs can become dirty or through other means unreadable.

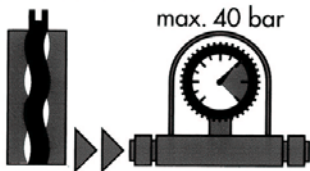
Therefore:

- Always maintain all safety, warning and operating notices in legible condition.
- Replace damaged signs or stickers at once.



### **Running machine**

Do not reach into the machine while it is running.



### **Maximum pressure**

Do not exceed the maximum pressure.



### **Hand injury**

Keep hands away from areas displaying this warning symbol.

There is a risk of hands becoming crushed, drawn in or otherwise injured.



### **Automatic startup**

Machine starts up automatically.



### **Electrical voltage**

Only electricians may work in areas with this designation.

Unauthorised individuals may not enter such designated work areas or open cabinets with this designation.



### **Moving machine parts**

Maintenance work on opened machines may only be performed by specially trained technicians. There is a risk of injury while the machine is moving.



### **Compressed air**

Warning of the presence of compressed air.

**Danger point**

Warning of a danger point in work areas.

**Protective gloves**

for protecting hands from friction, scraping, punctures or deep injuries as well as from contact with hot surfaces.

**Observe the operating manual**

Only use the designated object after having read the operating manual.

**Face guard**

for protecting eyes and face from flames, sparks or embers as well as from hot particles or exhaust gases.

**Running machine**

Do not reach into the machine while it is running.

**Safety devices**

Use safety devices.

**Rotating parts**

Do not reach into rotating parts.

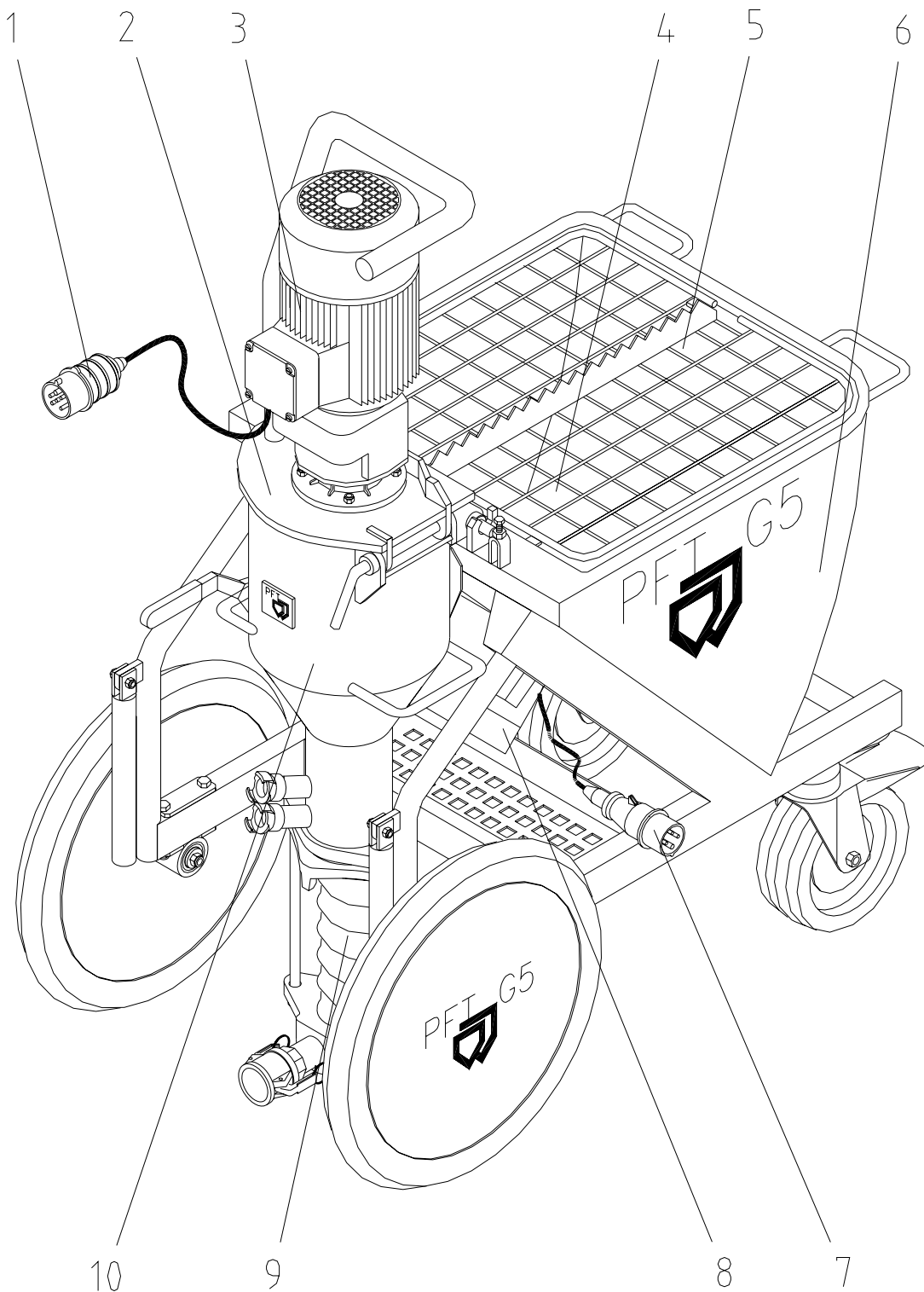
**No maintenance work**

Do not perform any maintenance while the machine is running.

**Touching prohibited**

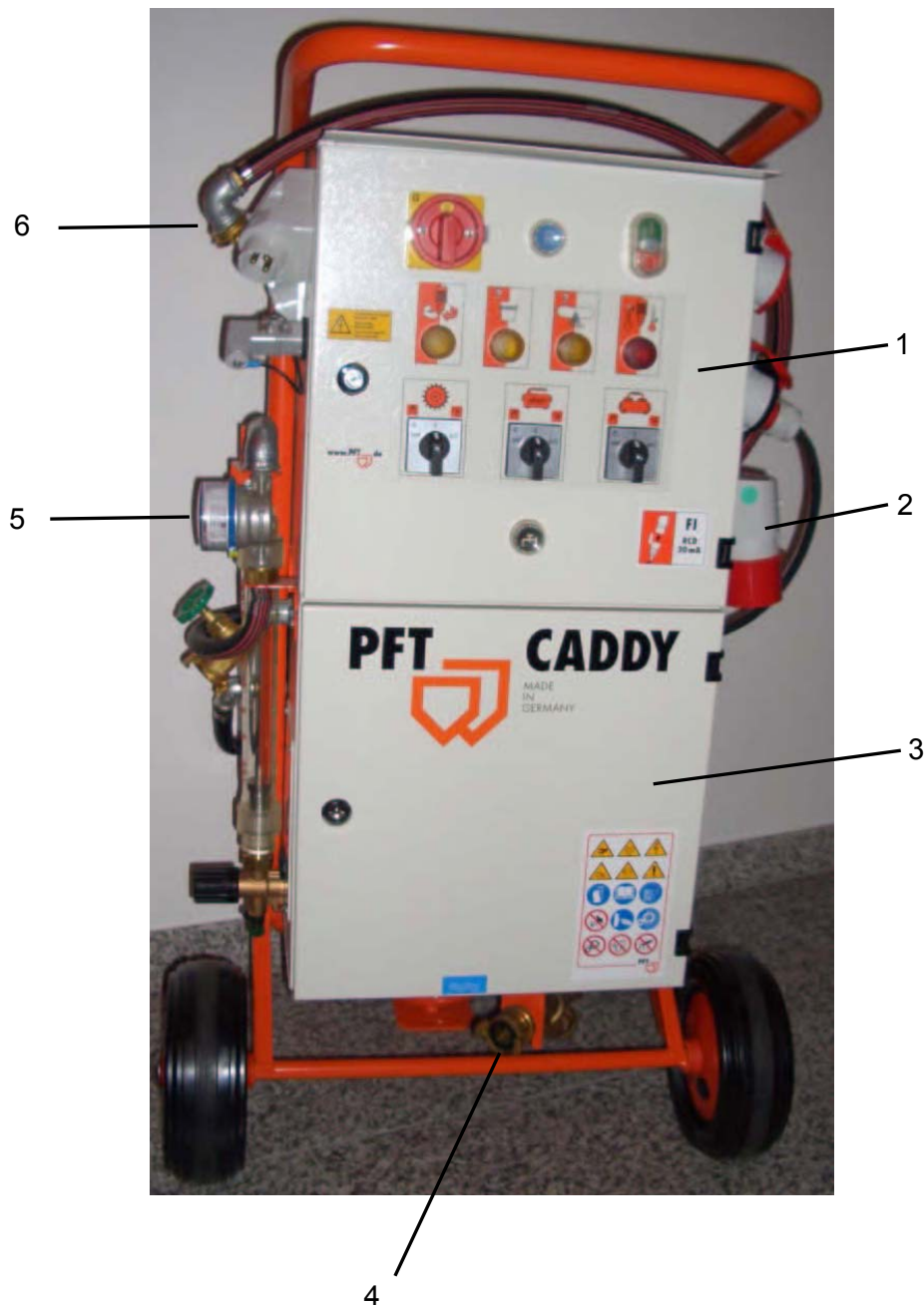
Touching may destroy containers or parts.

## Overview of G 5 SUPER: Item number 00 00 84 05



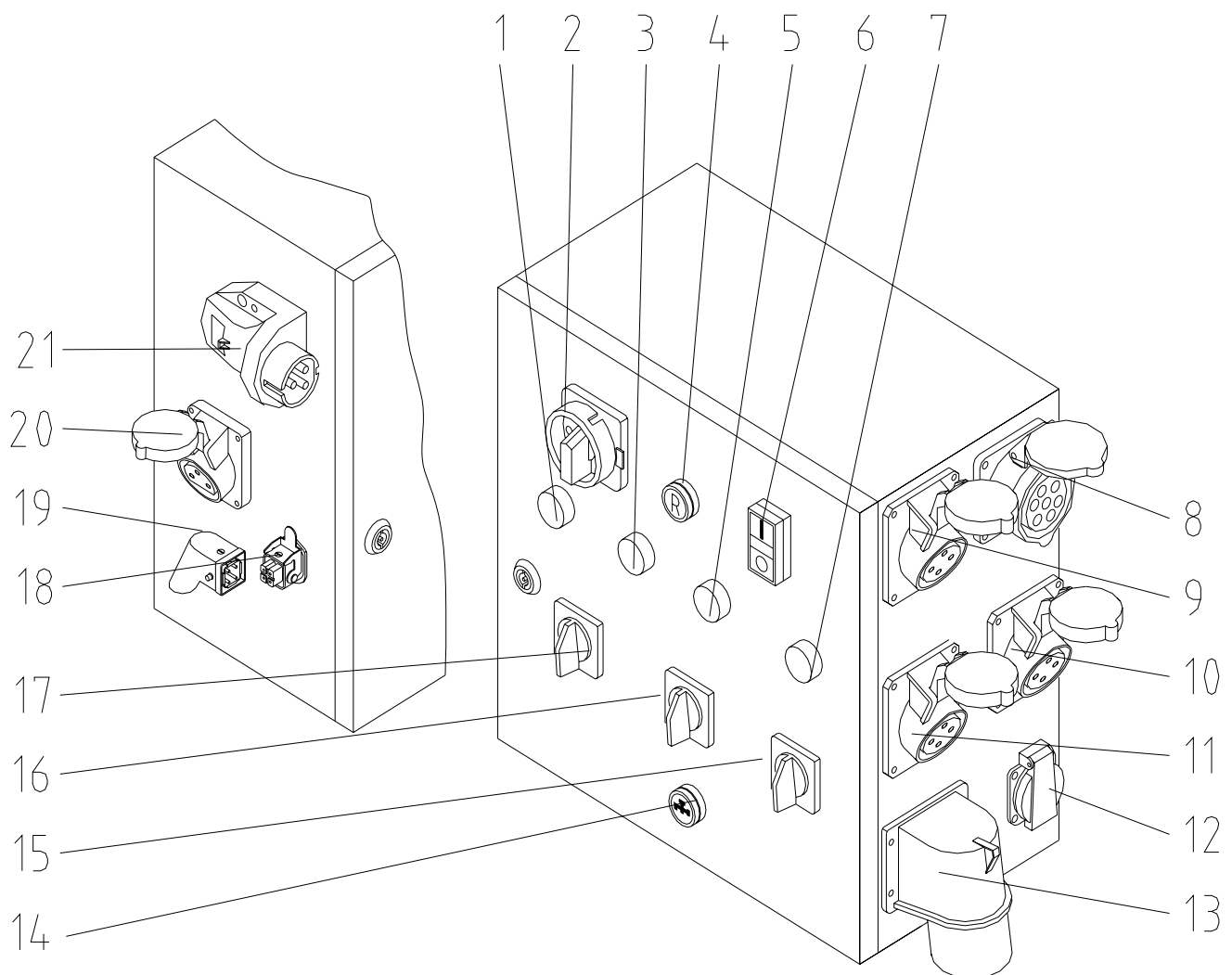
- |                                     |                                            |
|-------------------------------------|--------------------------------------------|
| 1. Motor Connection Cable           | 2. Motor Flange                            |
| 3. Pump Motor ZF 38 5,5KW 400U/min. | 4. Star Wheel                              |
| 5. Protection Grill + Sack Opener   | 6. Material Hopper                         |
| 7. Star Wheel Cable                 | 8. Star Wheel Motor ZFQ 38 0,75KW 28U/min. |
| 9. Pumping System TWISTER           | 10. Mixing Tube with Suction Flange        |

## Overview of CADDY G 5 SUPER: Item number 00 00 82 15



- |                                   |                                        |
|-----------------------------------|----------------------------------------|
| 1. Controll Box G 5 SUPER         | 2. Socket for Mains 32A                |
| 3. Housing for manifold G 5 SUPER | 4. Water Connection from Mains or Tank |
| 5. Water counter                  | 6. Water to Mixing Tube                |

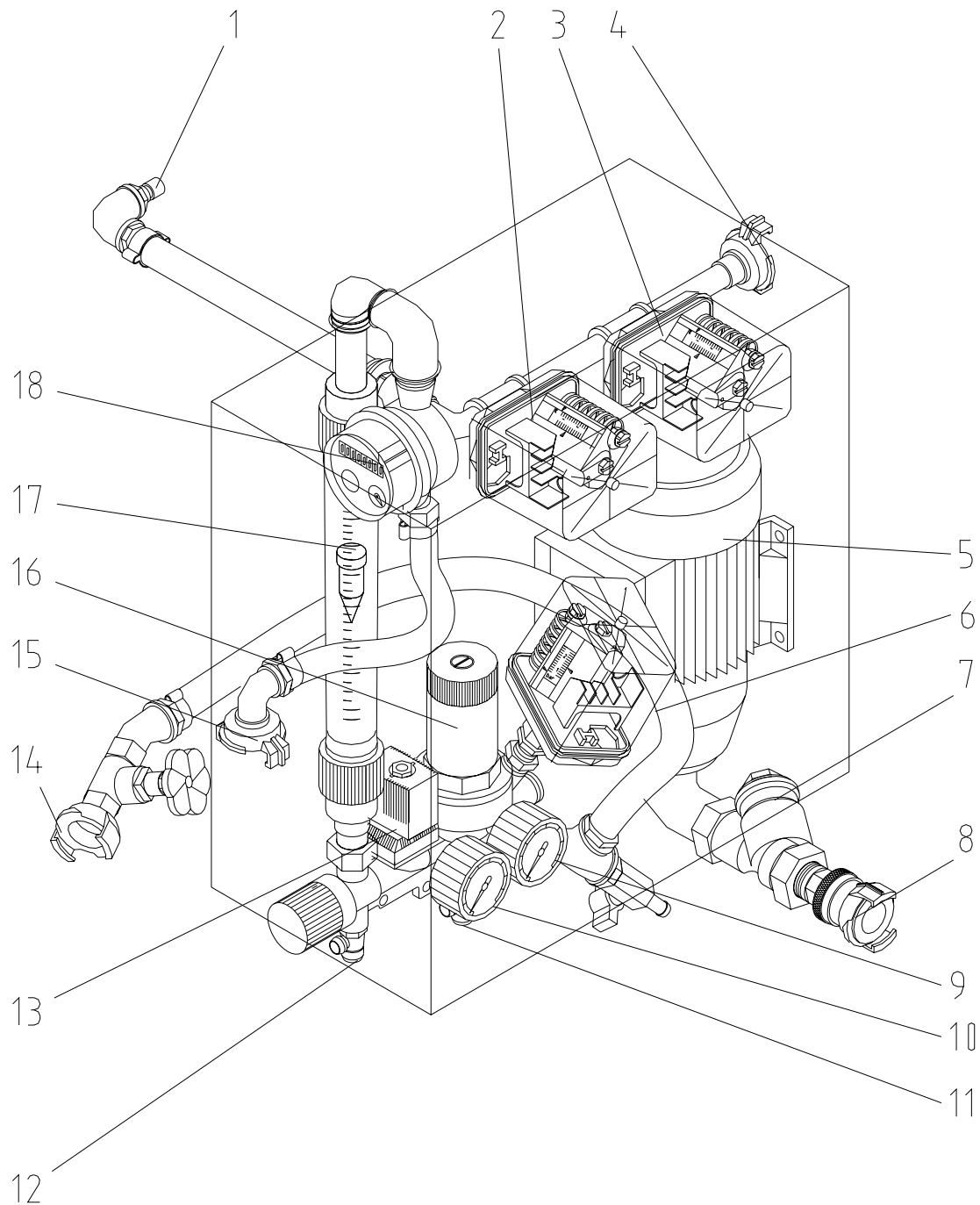
## Overview of control box G 5 SUPER: Item number 00 00 71 34



1. Display Lamp: Direction of Rotation
3. Display Lamp: Water Pressure
5. Empty: No Material
7. Display Lamp: Fault in System
9. Socket: Vibrator 16A
11. Socket: Star Wheel 16A
13. Socket for Mains 32A
15. Compressor selector switch
17. Star wheel selector switch
19. Blind-Plug 4-pin
21. Socket: Star Wheel 16A black

2. Main Reversing Switch
4. Blue Switch: Pump Motor:Reverse
6. Display Lamp: On / Off
8. Socket: Mixing Pump
10. Socket: Compressor 16A
12. Schuko-Socket 230V, 16A fuse
14. Water Flow Button
16. Water pump selector switch
18. Remote Control Socket 42V
20. Socket 42V white for Level Sensor

## Overview of water / air manifold



- |                            |                                        |
|----------------------------|----------------------------------------|
| 1. Air from Compressor     | 2. Air-Pressure Safety Switch          |
| 3. Compressor Switch       | 4. Air to Spraying Gun                 |
| 5. High Pressure Pump AV 3 | 6. Water Safety Switch                 |
| 7. Water Inlet Filter      | 8. Water Connection form Mains or Tank |
| 9. Pre-valve Pressure      | 10. Pre-valve Pressure                 |
| 11. Water Outlet           | 12. Water Outlet                       |
| 13. Solenoid Valve         | 14. Water Outlet Valve                 |
| 15. Water to Mixing Tube   | 16. Pressure Reducing Valve            |
| 17. Water Flow Meter       | 18. Water counter max. 10bar           |



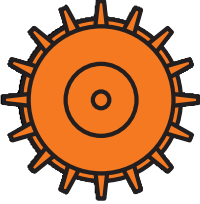
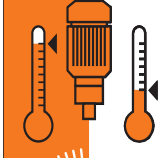




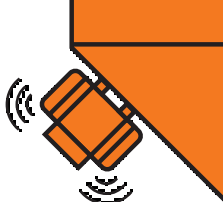




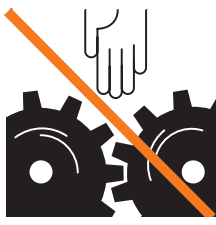

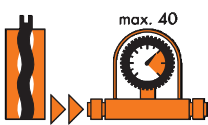

## Technical Specifications

Description	PFT G 5 SUPER	Ltem number 00 00 79 40
<b>Drive</b>		400V
		50Hz
	Pump motor	5,5 kW
	Star wheel motor	0,75 kW
<b>Rpm</b>	Pump motor	Ca.400 rpm
	Star wheel motor	Ca. 28 rpmn
<b>Current input</b>	Pump motor	11,5 A for 400 V
	Star wheel motor	2,2 A for 400 V
<b>Power supply</b>		400 V / 3-phase
		32 A
<b>Main fuse</b>		3 x 25 A
<b>Generator</b>		min. 25 kVA
<b>Water connection</b>		3/4" mind. 2,5 bar
<b>Pump throughput</b>	TWISTER D6-3 Z	approx. 22 l/min
	Variabel	6-85 l/min
<b>Conveying distance</b>	max. with 25 mm Ø	30 m
	max. with 35 mm Ø	50 m
<b>Conveying pressure</b>		max. 30 bar
<b>Compressor output</b>		0,25 Nm³/min
<b>Dimensions and weight</b>	Filling height	880 mm
	Hopper capacity	110 Liter
	Hopper capacity with extension	240 Liter
	Total length	1150 mm
	Total width	650 mm
	Total height	1520 mm
	Motor module	49 kg
	Mixing pump module	81 kg
	Hopper module	117 kg
	CADDY	85 kg
	Total weight	283 kg
Sound power level LWA		77±1 dB(A)

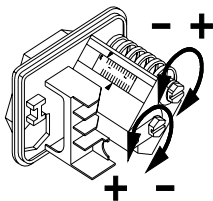
Weighted effective acceleration value to which the upper limbs are exposed = < 2.5 m/s²

\* Approximate value depending on conveying height, pump status and design, mortar quality, composition and consistency.

## Caddy Icons

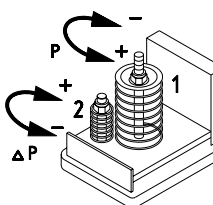
	<b>Drives</b>		<b>Faults</b>
	Star Wheelr		Motor Saftey Switch off
			
	Water Pump		No Material
			
	Compressor		No Water Pressure
			
	Vibrator		Wrong Direction
	<b>Instructions</b>		
	Manual Operation		At Subzero Temperatures empty all water
			
	Automatic Operation		Do not insert hand into operating machine
			
	Water		Maximum Operating Pressure 40 bar
			
	Air		

## Settings



### Safety switch

	Machine on	Machine off
Water	2,2 bar	1,9 bar
Air	1,5 bar	1,9 bar
Compressor	2,5 bar	3,1 bar

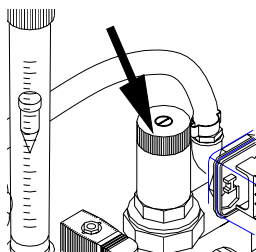


### Compressor Safety Valve

	Compressor on	Compressor off
Compressor	2,5 bar	3,1 bar

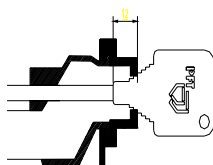
### Compressor Safety Valve

4,0 bar against completely closed air pipe (factory setting and secured with knurled screw)



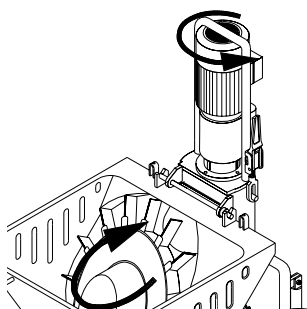
### Pressure reducing valve:

1,9 bar at max. throughput



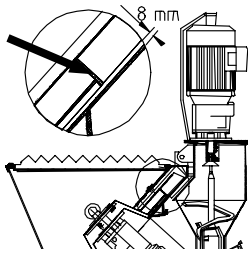
### Gap : Air Nozzle Pipe

The gap between the air nozzle tube and spraying cap should correspond to the diameter of the spraying cap.  
e.g.: 14 mm spraying cap = 14 mm gap.



### Direction of rotation of the star wheel motor

The star wheel usually works independently of the direction of rotation. If a SILOMAT conveying system is being used, we recommend a clockwise direction of rotation (factory setting). This ensures that the pump motor also runs in the correct direction.



### Star wheel

Gap, star wheel to hopper floor: factory setting approx. 8 mm

Rule of thumb:

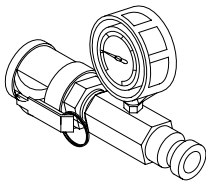
1.5 x diameter of largest dry mortar particle. If required, star wheel spacer disc (item no. 20 10 19 00) can be installed for coarse plaster.

## Mortar pressure



### Warning!

The use of a mortar pressure gauge is absolutely imperative according to the safety regulations of the Builder's Guild.



PFT mortar pressure gauges monitor the mortar consistency efficiently and easily.

#### Some benefits of the mortar pressure gauge:

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

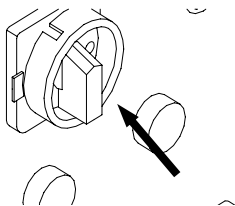
## PFT pump components



### Warning!

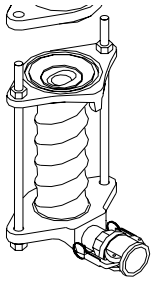
During installation/removal of the mortar pump, the following must be observed:

The main switch must be switched off during assembly!



### NOTE:

- New pump components with a conveying hose of 10 m should attain a conveying pressure of approx. 30 bar and maintain a back pressure of approx. 2/3, before and after the first spraying. We recommend using the PFT pressure tester with coupling and outlet tap to monitor the backpressure:
- A new rotor and new stator need to be run in; actual pressure values can only be determined after the first spraying cycle.
- Pump components which neither attain the required conveying pressure nor maintain the required backpressure are worn out and must be replaced.



The mixer pump **PFT G 5 c FU** is standardly equipped with the pump system TWISTER D6-3.

**The rotor and stator are subject to wear and must be checked regularly.**

## Checking the conveying pressure and back pressure

Connect a 10 m conveying hose.

- Couple the pressure tester with outlet tap to the end of hose.
- Open valve.
- Switch on machine and let water run through it until water emerges from the outlet tap (deaerate hose).
- Shut valve.
- Run the pump under pressure until pressure no longer increases.
- Switch off machine.
- If you do not have the required pressure, replace maintenance-free pump.
- The adjustable pump can either be tightened with a clamp or replaced.
- Check back pressure.

Maintain a back pressure of approx 14 bar through the rotor/stator pump (TWISTER D6-3) in the hose.

### NOTE:

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

Example:

20 m conveying hose (25 mm Ø) with gypsum mortar requires the pump to be operated at approx. 25 - 30 bar.

If the rotor is placed improperly in the stator, a gurgling sound will occur and water will flow back into the mixing chamber. Find the proper position in which the rotor seals with the stator by repeatedly switching the machine on and off.

### Note!

Stator TWISTER D6-3 can be used up to 30 bar operating pressure.

The maximum pumping distance depends on the viscosity of the mortar. Coarse- grained heavy mortar does not flow easily whereas fluid mortars, filling compounds and floor screed flow easily.

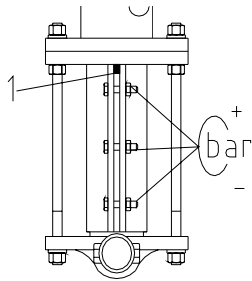
Use thick mortar hoses if you exceed an operating pressure of 30 bar.

To avoid machine breakdowns and excessive wear and tear of the pump motor, mixing shaft and pump always use **ORIGINAL PFT parts** such as:

- PFT-Rotore
- PFT-Stators
- PFT-Mixing Shafts
- PFT-Mortar Pressure Hoses
- PFT-Clamps

All these components are compatible with each other and form a single construction unit. If you do not adhere to these recommendations, you stand to forfeit your warranty rights. The quality of the mortar you are producing will also suffer.

## Pump System adjustable



While using adjustable pumps, see to it that :  
the main switch is switched off during assembly  
the stator protrudes evenly at the ends.

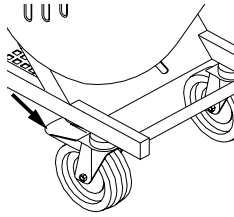
the pin [1] is between the clamping jaws so that the stator cannot move.  
all screws on the clamp are tightened evenly.

the tie rods are not too tight, and the stator ends in the flanges are firm and centrally placed.

a new stator and rotor require a run-in time. Reliable pressure readings can only be made after one spraying operation.

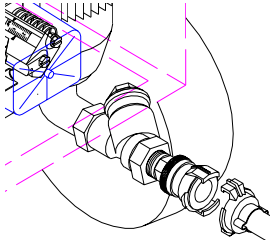
Pump components that neither attain the necessary conveying pressure or maintain the necessary back pressure are worn out.

## Start-up



Transport assemblies as near as possible to the object to work with (for the assembly, see Transport).

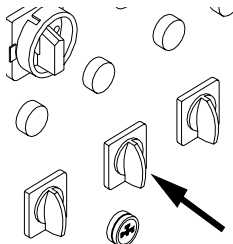
Lock the rollers before starting the machine.  
Remove CADDY from G 5 SUPER material container and place near pumping unit. Ensure that it can be operated well from all sides.



Connect the water system with a  $\frac{3}{4}$ " hose. Open water supply to deaerate and clean hose. Close water supply.  
Connect water hose to water pump.

Shut deaeration valves on water manifold.

The fitted water (booster) pump can be used if water pressure falls below 2,5 bar



### „Hand“

Water pump runs continuously (cleaning of hose).

### „0“

Water pump is switched off.

### „Automatic“

Water pump runs simultaneously with mixing pump (if you are using stored water from a tank).



### WARNING!

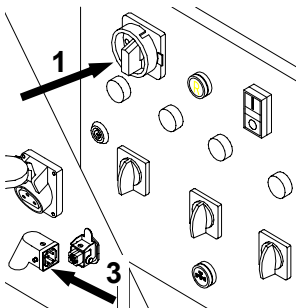
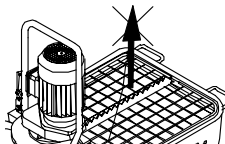
While working with water from a tank fit the suction inlet with a water filter (Item No. 20 47 50 00 ) (deaeration).

The machine should only be connected to an electrical panel with 32 A and a FI safety switch that conforms to regulations. The connection cable should conform to the version H07 RN-F 5x4,0 mm<sup>2</sup>. For 5-pin connection use the Schuko socket for all 230V gadgets (e.g portable lamps).



### WARNING!

The protective grille should not be removed during operation or while preparing the machine.



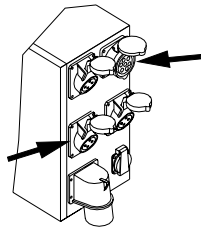
We recommend the use of PFT power cable 5x4,0 mm<sup>2</sup>, 50m with CEE plug and coupling (Item No. 20 42 39 00).

Before the CADDY has power supply, see to it that :

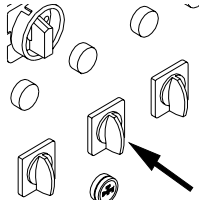
Main reversing switch (1) is switched off (Position "0", lockable).

Water pump switch, star wheel switch and compressor switch are switched to "0".

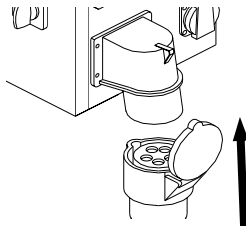
Deactivate blind plug (3).



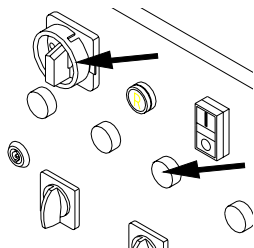
Connect pump motor (7-pin plug) and star wheel (black plug) to CADDY



Switch off compressor at Hand-O-Automatic switch.



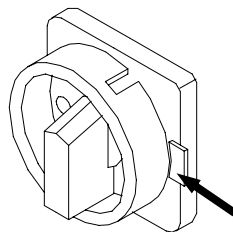
Connect CADDY with electrical mains.



Follow these instructions:

Main reversing switch should be on position I

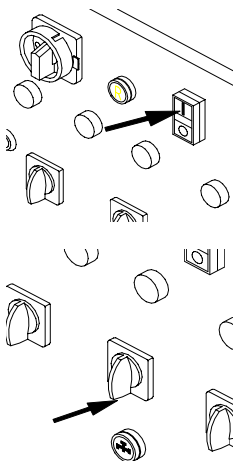
If red lamp lights up (change direction of rotation), PFT G 5 SUPER will not turn on. Change direction of rotation at main reversing switch.



**If the direction of rotation is wrong, follow these instructions:**

You can lock the main reversing switch by pushing the direction plate either to the right or to the left. With that you have chosen the direction of rotation. If the switch is turned to the left, it can be turned back to O, but not to the right side. The figure printed on the plate shows you in what position the switch is locked.

Never let the pump run dry (remove blind plug).

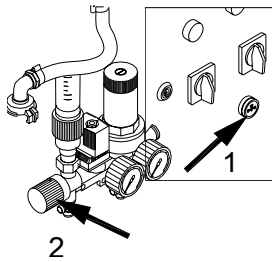


If red lamp („change of direction“) does not turn off, see *Faults and Solutions*

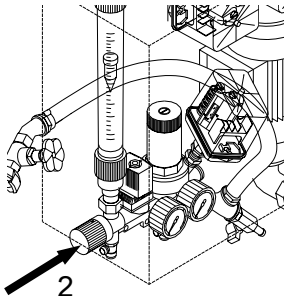
Press green pressure button (on).

Turn water pump switch to Automatic.





Press water flow button (1) (water pump should be running). Set approximate amount of water with needle valve (2).



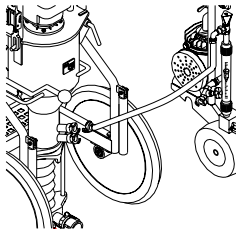
### Setting the water factor

Adjust the expected water volume on the needle valve (2).

Observe the specifications of the material manufacturer.

#### During operation:

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

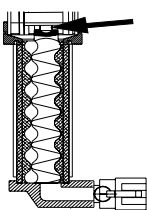


Connect the water hose of the water flow meter to the top water inlet of the mixing tube.



### WARNING!

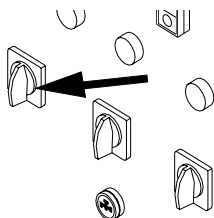
By removing the 7-pin plug of the mixing pump you can interrupt power supply (safety measure). To restart machine press green button (on).



Press water flow button briefly. The mixing chamber should contain enough water so that the top of the rotor is covered. Watch out for loss of water. If you lose water, the rotor may not be working properly.

Check water level (can be done with tilted pump motor).

The TWISTER D 6-3 pump should always be pre-wetted!



Set star wheel switch on "Hand". You can set the star wheel on:

**"HAND" (Manual Operation)**

**"0"**

**"AUTOMATIC"**

**“HAND” (Manual Operation)**

The star wheel always runs when the machine is connected and switched on. Material can be added to the mixing chamber in this position when the pump is not running. This is called pre-wetting. It is advisable to pre-wet in the case of heavy materials or materials bonded with dispersion agents. While doing so open the lower water inlet in the mixing chamber so that excess water can run off. Interrupt power supply by removing blind plug.

**„0“**

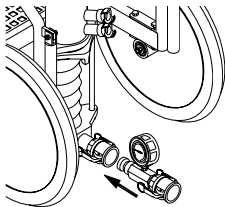
The star wheel is switched off and the material supply to the mixing chamber is interrupted (e.g. to clean mixing zone with mixing tube cleaner, or to adjust pump).

**„AUTOMATIC“**

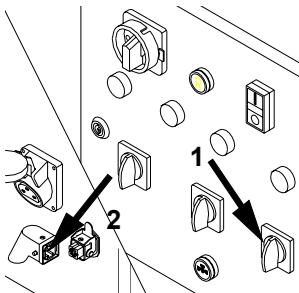
The star wheel runs simultaneously with the mixing pump and is switched on and off with the air pressure control or remote control.

**WARNING!**

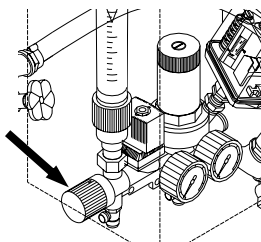
Do not remove protection grill when the machine is ready for operation!



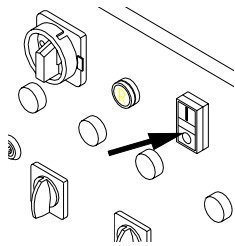
Couple the mortar pressure gauge to the pressure flange.

**Fill the material hopper with dry mortar:**

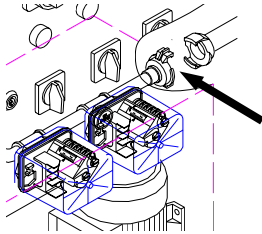
Turn star wheel switch (1) to Automatic. Connect blind plug (2). The machine is now in operation. Test the consistency of the mortar at the mortar outlet flange. **Do not connect** a mortar hose yet. While the motor is running, regulate the water quantity to approx. 10% higher than the rated setting. The rated setting is the water setting at which the mortar has the right flowing consistency. (e.g. Knauf-MP 75 – rated setting approx. 650 to 750 l/h).



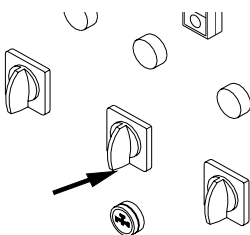
Optimize mortar consistency by increasing or decreasing water. Adjust the water quantity with the needle valve. Watch this at the cone of the water flow meter. Turn hand wheel clockwise to decrease amount of water, and anti-clockwise to increase amount of water.



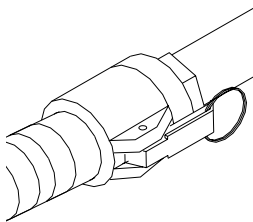
Press red pressure button (off). Machine stops.



Connect air hose to air manifold and spraying gun.



Switch on compressor.

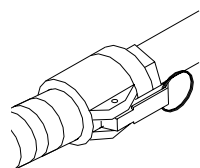


Connect all necessary mortar hoses with each other. Flush with water to prevent clogging. Do not allow water to remain in the hoses. Use transition adaptor (in tool kit): see page 413 for more information. In case of unknown mortar quality add approx. 3 liters of smooth-flowing lime or gypsum sludge to the first hose after the machine.



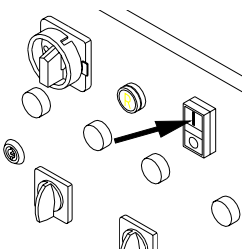
### **WARNING!**

Ensure right and clean connections of couplings.



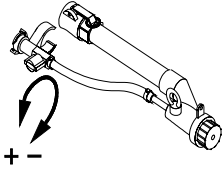
Connect hoses with the mortar pressure gauge and check all mortar hose seals.

Connect spraying gun (fine plaster gun or crimp valve gun) to mortar hose.

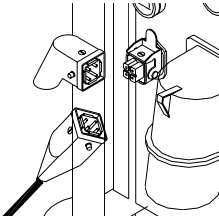


Press green button (on). Open the air tap on the spraying gun. The machine will start to run. You can now start the plastering operation.

At first a thin mixture will come out of the spraying gun. Shortly afterwards the mortar will achieve the right consistency. Adjust the flow if necessary with the needle valve.



You can switch the machine on or off by either opening or shutting the air tap on the spraying gun.



#### NOTE:

While working without air supply (e.g. pumping floor screed), the machine is switched on and off by a 42 V remote control. To do this, remove the blind plug on the control coupling and connect control plug of the remote control.

### Mortar Consistency

The mortar consistency is right when the material on the surface being sprayed flows into itself forming a consistent coat. Apply material on wall surfaces from top to bottom. If the water quantity is not enough, even mixing and spraying cannot take place. There may be clogging in the hose. Pumping components are thus subject to greater wear and tear.

### Spraying Guns and Caps

Use spraying caps of 10, 12, 14, 16 oder 18 mm depending on the mortar consistency. Larger caps reduce the projection speed and the rebound effect. Smaller caps create better atomization. Note that the gap between the air nozzle tube and the spraying cap should correspond to the diameter of the spraying cap.

### Interruption of Spraying Operation

Follow all instructions of mortar manufacturer while interrupting spraying operations.

Clean the pump before long interruptions.:

See Procedures at the End of Work and Cleaning, page 21 for more information.



Every interruption of the spraying operation causes a slight irregularity in the mortar consistency. This generally normalizes itself once the machine is restarted. Do not keep on changing the water quantity at every irregularity. Wait till the mortar consistency at the spraying gun has regulated itself again.

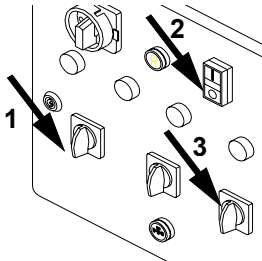
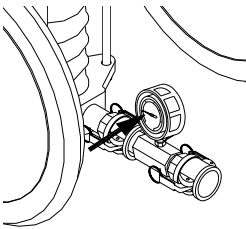
## Procedures at the End of Work and Cleaning



### WARNING!

Before dismantling the rotor/stator pump or opening the motor flange make sure the pump and hoses are depressurized.

Watch the reading on the mortar pressure gauge.

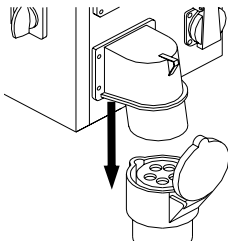


At the end of the spraying operation switch off material supply (star wheel) and turn star wheel switch to O (1).

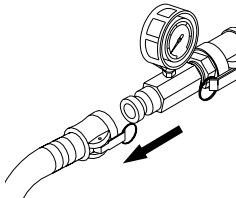
Empty mixing tube.

Press red button (off) (2).

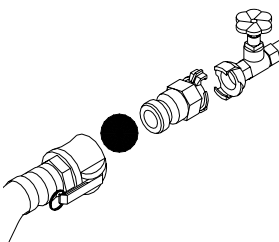
Switch off compressor (3) and the tap on spraying gun.



Remove plug on CADDY!



Disconnect mortar hose (only when depressurized).



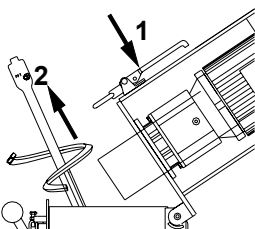
To clean, connect the hoses (including the mortar pressure gauge) to the water inlet valve with the help of the transition adaptor (in tool kit). This reduces wear and tear on the pump. A water-soaked sponge should first be pressed into the hose inlet.

Open the water valve until the sponge ball comes out of the hose.

To clean hoses with varying diameters, use sponge balls of appropriate sizes.

If hoses are heavily soiled, repeat this process until hoses are clean.

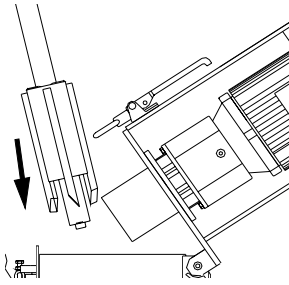
Clean the spraying gun with running water.



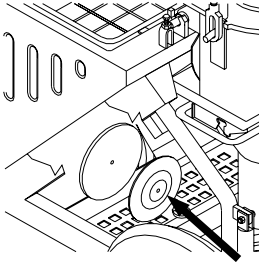
Undo snaps on motor flange (1) and tilt motor.

Remove mixing shaft (2) and clean it.

Clean mixing zone with trowel.



Insert cleaning shaft and mixing tube cleaner with scrapers facing down.  
Shut motor flange and lock snaps, connect 5-pin plug on CADDY.  
Press green button (on), run for approx. 5 - 10 secs. until mixing tube is clean.  
Press red button (off), remove cleaner.  
Fit in clean mixing shaft.  
Shut motor flange and lock snaps.

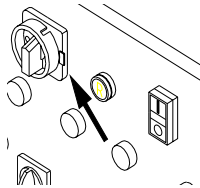


Empty the material hopper if the machine is unlikely to be used for some days. Open the hopper-cleaning flap and remove the star wheel if necessary.



#### **WARNING!**

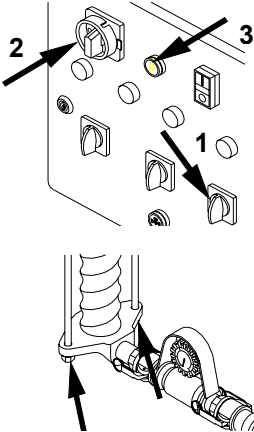
**Before opening the hopper-cleaning flap, switch off electricity mains and all power supply**



## Getting Rid of Hose Blocks

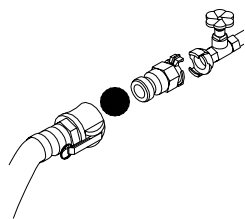


In accordance with safety regulations of the Builder's Guild, all personnel that clear hose blocks should wear safety goggles. Take proper precautions to stand far away from the machine to avoid injury through discharged mortar.



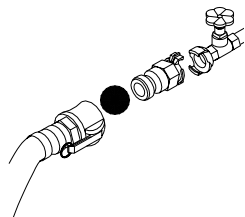
Switch off star wheel motor (1).  
Run pump motor in reverse briefly.  
Change main reversing switch (direction of rotation lamp will light up) (2).  
Cover outlet of pump tube with foil.  
Press blue pressure button (reverse button) (3) till reading on mortar pressure gauge is at 0 bar (water supply is automatically interrupted).  
Loosen nuts on pressure flange slightly so that residual pressure can escape.

To remove residual mortar: see *Cleaning Procedures*



Remove hose connection and clean hose.

## Measures for Power Failure and Water Supply Failure



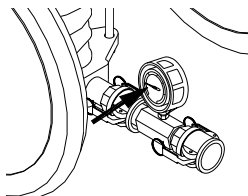
### Measures for Power Failure

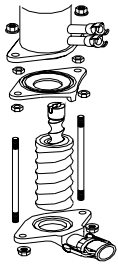
Clean mortar hoses immediately. Do this at the water outlet valve. Connect the transition adaptor (tool kit) first to the mortar hose and then to the water outlet valve. Open water valve to press out mortar. Clean with sponge balls soaked in water.



### WARNING!

Depressurize hoses before opening couplings and connections.  
Watch the reading on the mortar pressure gauge!





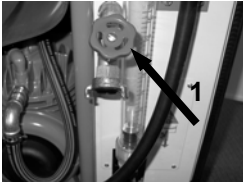
Release tie rods, remove pump. Press the rotor out of the stator and clean it thoroughly. Clean pressure flange or after mixer (ROTOMIX or ROTOQUIRL). Clean mixing zone and mixing shaft with water and a trowel. Assemble the pump fully and prepare it for operation again.

## Measures for Water Supply Failure

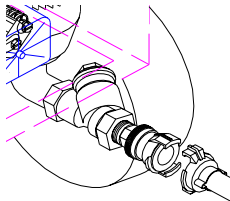
Use suction inlet (Item No. 00 00 69 06) to supply the machine with clean water.

## Measures for Suzero Temperatures

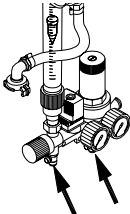
After cleaning machine:  
Cut off water supply.  
Remove mixing shaft.



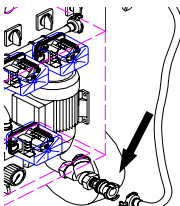
Open water outlet valve (1), release water pressure in hose.



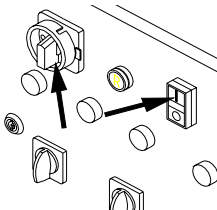
Turn off water connection, remove water hose, empty it.



Open outlet taps on water manifold.

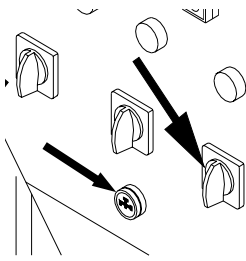


Remove air hose from spraying gun and fit it to water inlet.



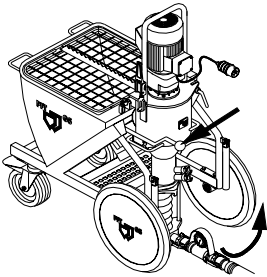
Switch on main switch and press green button (on).





Switch on compressor.

Press water flow button. Compressed air will now blow water out of the manifold! (at 1,5 bar approx. for 1 minute).

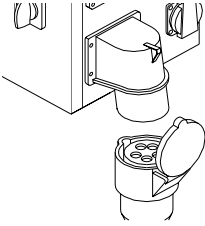


Swivel the entire pumping unit upwards and empty the mixing pump.

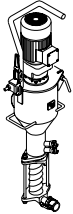
Disconnect mortar hoses and empty them.

Apart from a small residue within the rotor/stator pump, the machine is completely empty. Despite this, start the machine carefully the next day.

## Transport



First disconnect mains, then all other power connections.



Remove water connections.

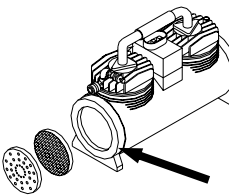
The PFT G 5 SUPER consists of three modules (CADDY, mixing tube and material hopper) that can be transported individually. Disassemble mixing tube, if necessary.



### **WARNING!**

Depressurize all hoses before disconnecting them. Watch the readings on the mortar pressure gauge.

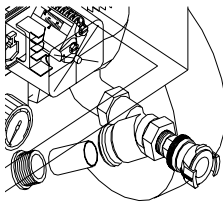
## Maintenance



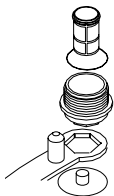
Clean compressor filter after every operation, if necessary, by knocking out dirt. Replace filter if it is heavily soiled.

### **NOTE!**

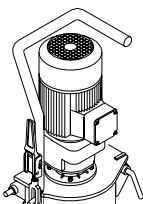
The coarse side of the filter should be on the inside!



Check the water inlet filter every day.



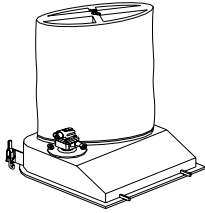
The dirt trap in the pressure reducer should be taken out and cleaned at least once every two weeks or replaced if necessary.



Bei jedem Motorenservice sollte das Getriebeöl kontrolliert werden, notfalls das Getriebeöl erneuern.

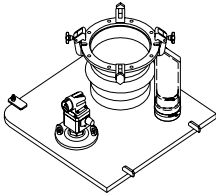
Die Füllmenge siehe Typenschild.

## Accessories



### **PFT Injection Hood for the G 5 (Item No. 00 04 43 34)**

The PFT injection hood fills dry mortar in the PFT G 5 SUPER with the help of the SILOMAT. When the G 5 SUPER hopper is empty, the machine stops working.



### **PFT Delivery Hood for G 5 SUPER cpl. (Item No. 00 07 17 48)**

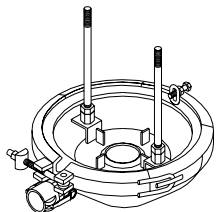
The PFT delivery hood fills dry mortar in the PFT G 5 SUPER directly from the silo or dry mortar container. When the PFT G 5 SUPER hopper is empty, the mixing pump stops working.



### **ROTOMIX D-Pump with 35 coupling (Item No. 20 11 80 00)**

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

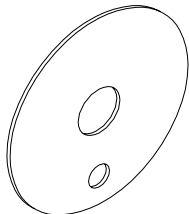
**All guidelines of the material manufacturer must be observed!**



### **ROTOQUIRL II, cpl. with size 35 coupling (item no. 20 11 84 00)**

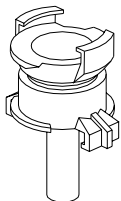
Agitator for the improved solubilisation and mixing of the material. Direct drive via the rotor tenons. Volume of approx. 4.2 l

**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.

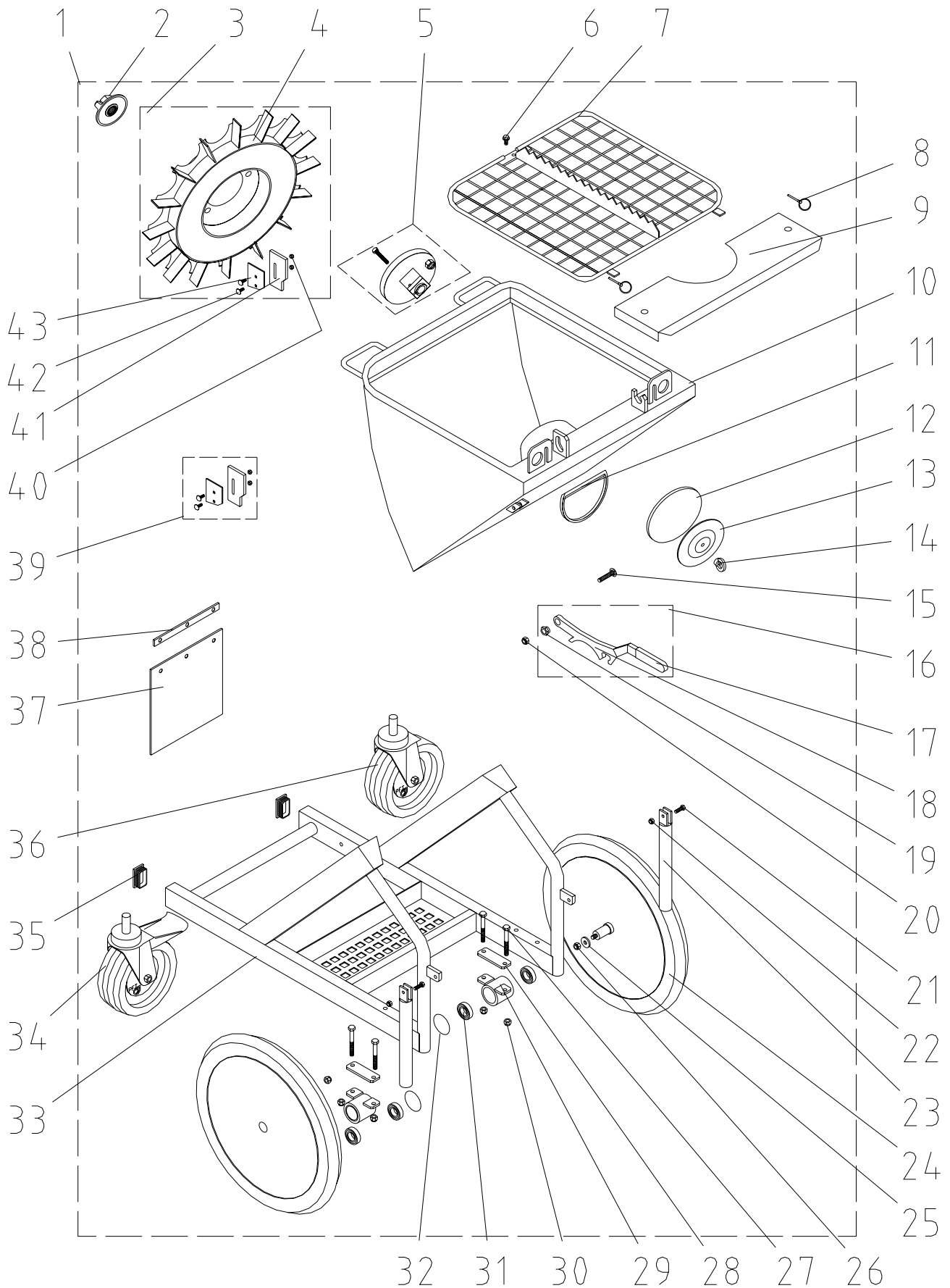
Further accessories can be found on the Internet under [www.pft.de](http://www.pft.de) or at your local PFT machinery dealer.

## Fault – Cause – Remedy

<b>Fault</b>	<b>Cause</b>	<b>Remedy</b>
Machine does not start!	Water	Check water supply
	Water pressure too low	Clean dirt filters
	Gauge shows less than 2,2 bar	Switch on water pump
Machine does not start!	Power	
	- Power supply okay?	
	- FI safety switch activated?	
	- Mains on ?	
	- Display lamp lights up?	
	- Motor safety switch activated?	
	- Self-latching device not activated?	
	- Protector faulty?	
	- Fuses faulty?	
	- Water safety switch not adjusted?	
	- Pump blocked?	
Machine does not start!	Air	
	- Insufficient pressure gradient in remote control due to blocked air pipe or air nozzle tube?	Clean blocked air pipe or air nozzle tube.
Machine does not start!	- Air safety switch not adjusted?	
	- Compressor connected and switched on?	
Machine does not start! (Flow meter not working)	Material	
	- Too much thick material in hopper or mixing zone?	Empty hopper by half and start up again.
	- Material in pumping zone too dry?	CAUTION!
Water does not flow!	- Solenoid valve : Hole in membrane blocked?	
	- Magnetic coil faulty?	
	- Pressure reducing valve shut?	
	- Water inlet on pump tube blocked?	
	- Needle valve shut?	
	- Cable to solenoid valve faulty?	
Pump motor does not	- Pump motor faulty?	
	- Connection cable faulty?	
	- Plug or fitted socket faulty?	
	- Motor safety switch faulty or off?	
Machine stops after short	- Dirt filter clogged?	Clean or replace filters.
	- Pressure reducer filter dirty?	
	- Hose connection or water pipe too small?	Increase size of water connection.
	- Water suction pipe too weak or too long?	Connect additional water pressure booster pump.
Machine does not switch off!	- Air pressure safety switch not adjusted or faulty?	Adjust air pressure safety switch.
	- Air hose faulty or gasket faulty?	Replace air hose or check compressor
	- Air tap on spraying gun faulty?	
	- Compressor not powerful enough?	
	- Air pipe on compressor not connected?	

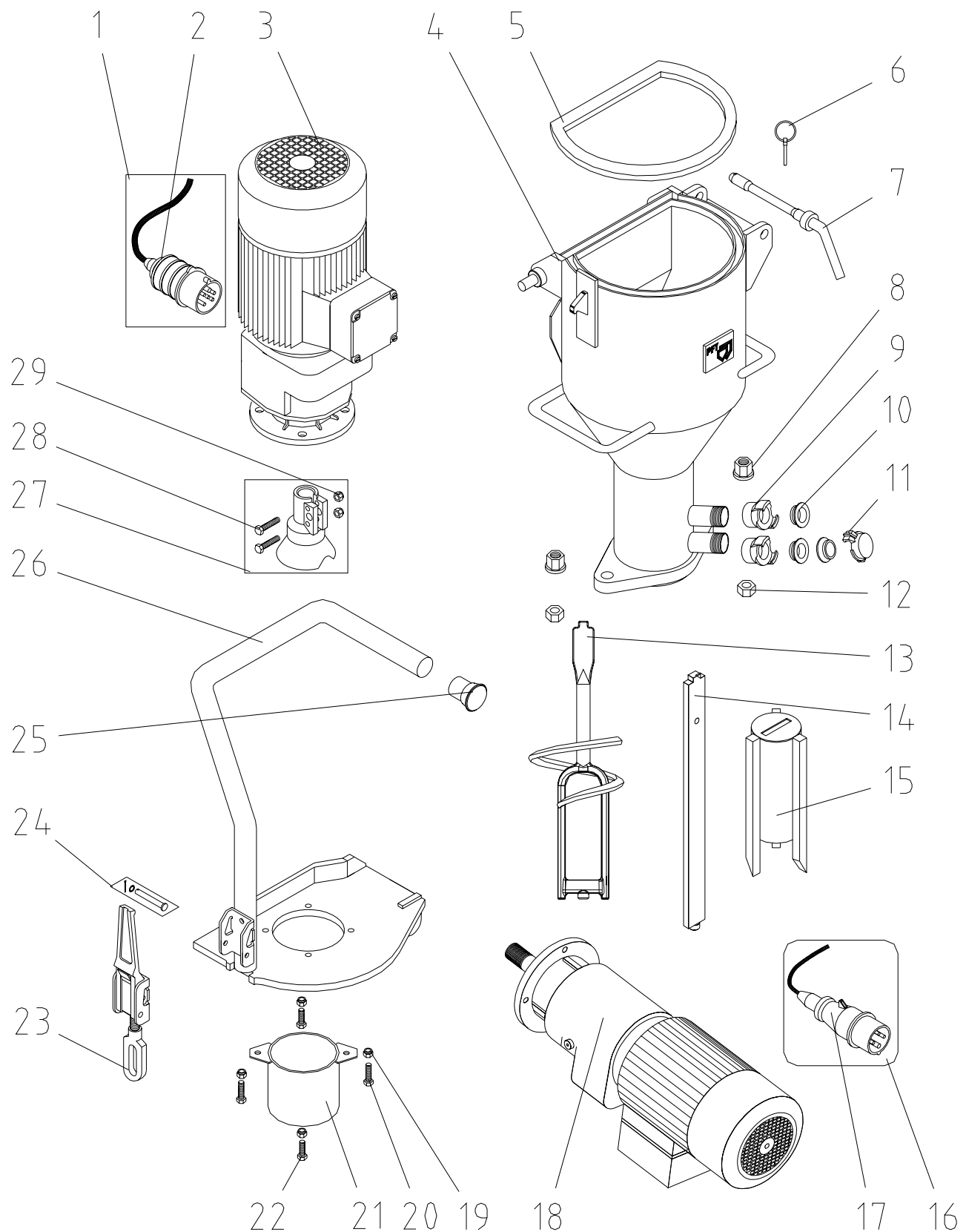
Mortar flow stops! (air bubbles)	- Poor mixture in mixing tube? - Mixing shaft faulty?	Add water. When this does not help, clean or replace mixing shaft.
	- Motor hauling bracket faulty?	
	- Input hopper on mixing tube wet?	Dry mixing tube inlet and start again.
	- Material is lumpy and clogging mixing tube	Replace hauling bracket.
Mortar flow inconsistent!	- Too little water?	If too little water, increase water quantity by 10 % for approx. half a
"Thick/thin"	- Water safety switch not adjusted or faulty?	minute. Return slowly to normal setting.
	- Mixing shaft faulty, not an original PFT mixing shaft?	Readjust or replace pump components with original parts.
	- Pressure reducing valve not adjusted or	
	- Rotor worn out, faulty?	
	- Stator worn out or clamp faulty?	
	- Clamp faulty (oval)?	
	- Inner side of mortar hose faulty?	Replace mortar hose.
	- Rotor too deep in pressure flange?	Check mixing shaft and hauling bracket.
	- not original PFT parts?	
Water rises in mixing tube	- Back pressure in mortar hose higher than	
	- Rotor or stator worn out?	Tighten or replace stator; if necessary also replace rotor.
	- Hose blocked by too thick mortar? (high pressure caused by too little water)?	Clear hose block.
Fault lamp lights up!	- Overloading?	
	- Motor safety switch (16 A) activated (pump motor)?	Turn on safety switch, clean mixing tube and increase water supply when restarting machine.
	- Pump blocked with dry material?	
	- Insufficient water?	
	- Motor safety switch (2,5 A) activated (star wheel motor)?	Clean hopper and star wheel.
	- Clogged material in hopper?	
	- Motor safety switch activated?	
Red lamp lights up!	- Power cable too thin 5x4mm²?	
"direction of rotation"	- Power connection too long 50m cable?	
	- 1 phase missing?	
	- Voltage too low?	
	- Wrong direction of rotation?	Change direction of rotation at reversing switch.

## Spare parts list for chassis G 5 SUPER: part no. 00008223



<b>Ltem.</b>	<b>Qty.</b>	<b>Part no.</b>	<b>Description</b>
1	1	00 00 82 23	Chassis G 5 cpl. RAL2004
2	1	00 07 27 90	Star wheel ring nut M 24 galv.
3	1	00 04 89 43	Star wheel G 5 pressed cpl. RAL 2004
4	1	00 04 64 73	Star wheel G 5 pressed RAL2004
5	1	20 10 18 10	Star wheel fixing disc galv.
6	1	20 20 78 19	Hex. screw M 8 x 16 with collar
7	1	00 00 73 61	Protection grill G 5 RAL9002
8	1	20 10 10 10	Splint D 4.5 with ring
9	1	00 04 56 47	Anti dust plate G 5 c RAL 9002
10	1	00 04 58 48	Material hopper G 5 pressed RAL9002
11	1	20 10 11 00	Gasket cleaning cover G 4 20 x 15 x 670
12	1	00 00 23 58	Seal disc cleaning cover D = 173 mm
13	1	00 00 82 35	Cleaning hole cover G 5 RAL9002
14	1	20 20 79 50	Ring nut M8 DIN 582 galv.
15	1	20 20 96 01	Hex. screw M 10 x 45 DIN 931 galv.
16	1	00 01 13 86	Locking lever for mixing tube G 4 with knob
17	1	00 01 04 62	Handle plastic 25 x 12 locking lever
18	1	00 00 25 84	Locking lever for mixing tube G 4 with one notch RAL2004
19	1	00 08 80 29	Eccentric bush MS for G 4 locking lever
20	1	20 20 72 10	Safety nut M 10 DIN 985 galv.
21	2	20 20 78 00	Hex. screw M 8 x 30 DIN 933 galv.
22	2	20 20 72 00	Safety nut M 8 DIN 985 galv.
23	2	20 56 66 15	Folding handle 250mm RAL2004
24	2	00 00 69 47	Wheel with hub D=500mm
25	2	00 00 82 65	Washer 10.5 x 30 x 4
26	2	20 20 72 10	Safety nut M10 DIN 985 galv.
27	4	00 00 85 85	Hex. screw M10 x 85 DIN 931 galv.
28	2	00 00 83 89	Holding plate for support G 5 RAL2004
29	2	00 00 83 91	Wheel bearing support G 5 RAL2004
30	4	20 20 72 10	Safety nut M 10 DIN 985 galv.
31	4	20 48 33 08	Grooved ball bearing 6005 2RS
32	2	00 00 86 37	Dummy cover GL 55 x 3-5
33	1	00 00 82 34	Chassis G 5 RAL2004
34	1	00 00 90 89	Double lockable castor 230 mm bearing ratio 300 kg
35	2	00 00 83 58	Cover cap (PVC) 60 x 35
36	1	00 00 90 88	Castor 230 mm collapse load 300 kg
37	1	00 03 73 54	Dust protection for star wheel motor G 5 c RAL 2004
38	1	00 01 99 64	Clamp stripe rubber guard G 5 RAL2004
39	1	00 03 91 79	Supplementary-equipment kit for scraper at star wheel G 5
40	2	20 20 62 00	Safety nut M 6 DIN 985 galv.
41	1	00 02 26 02	Scraper for star wheel G 5
42	2	00 02 26 01	Flat screw M6 x 20 DIN 603 galv.
43	1	00 02 26 04	Clamp plate for scraper rubber RAL 2004

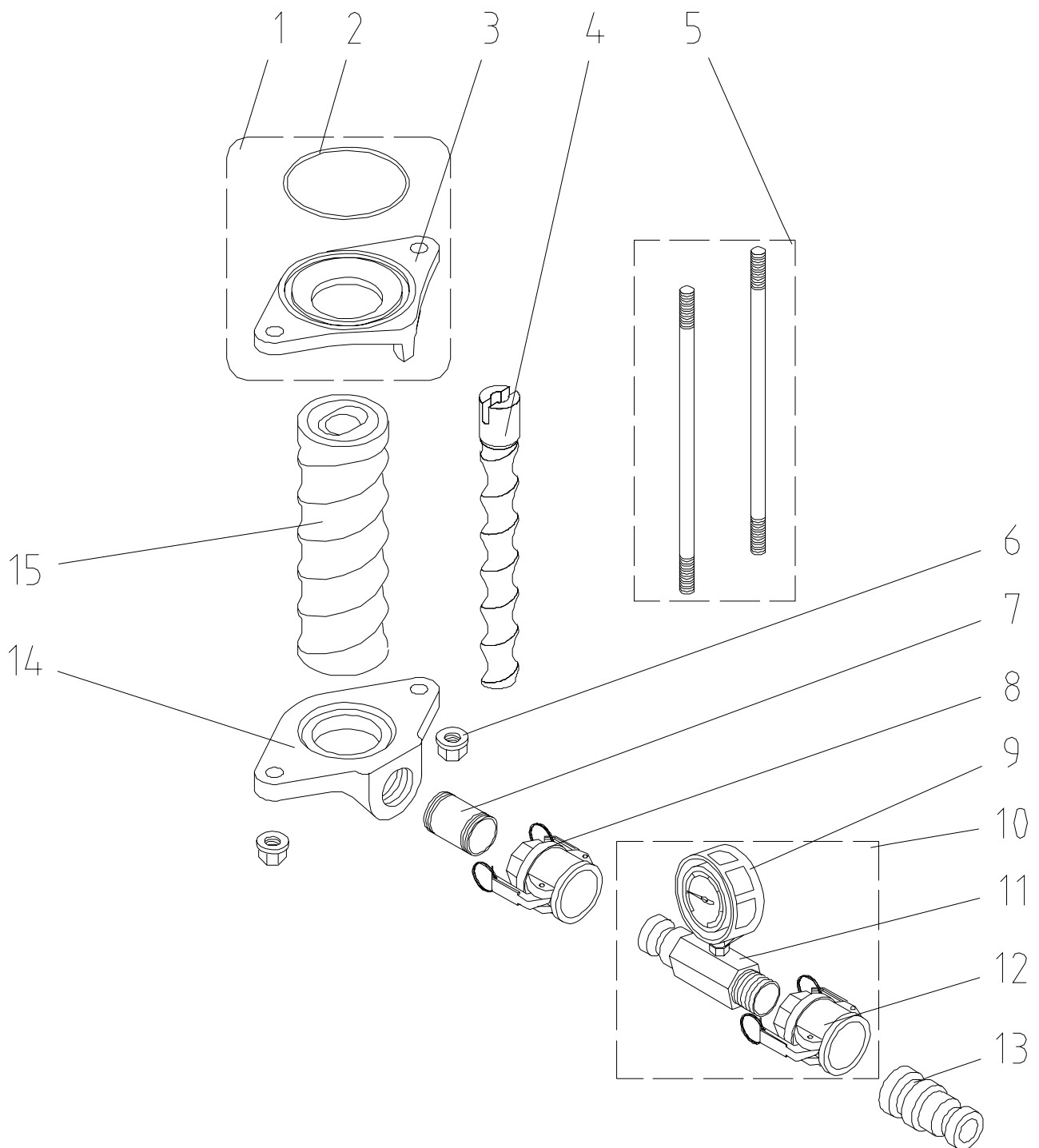
## Spare parts list geard motor / mixing tube





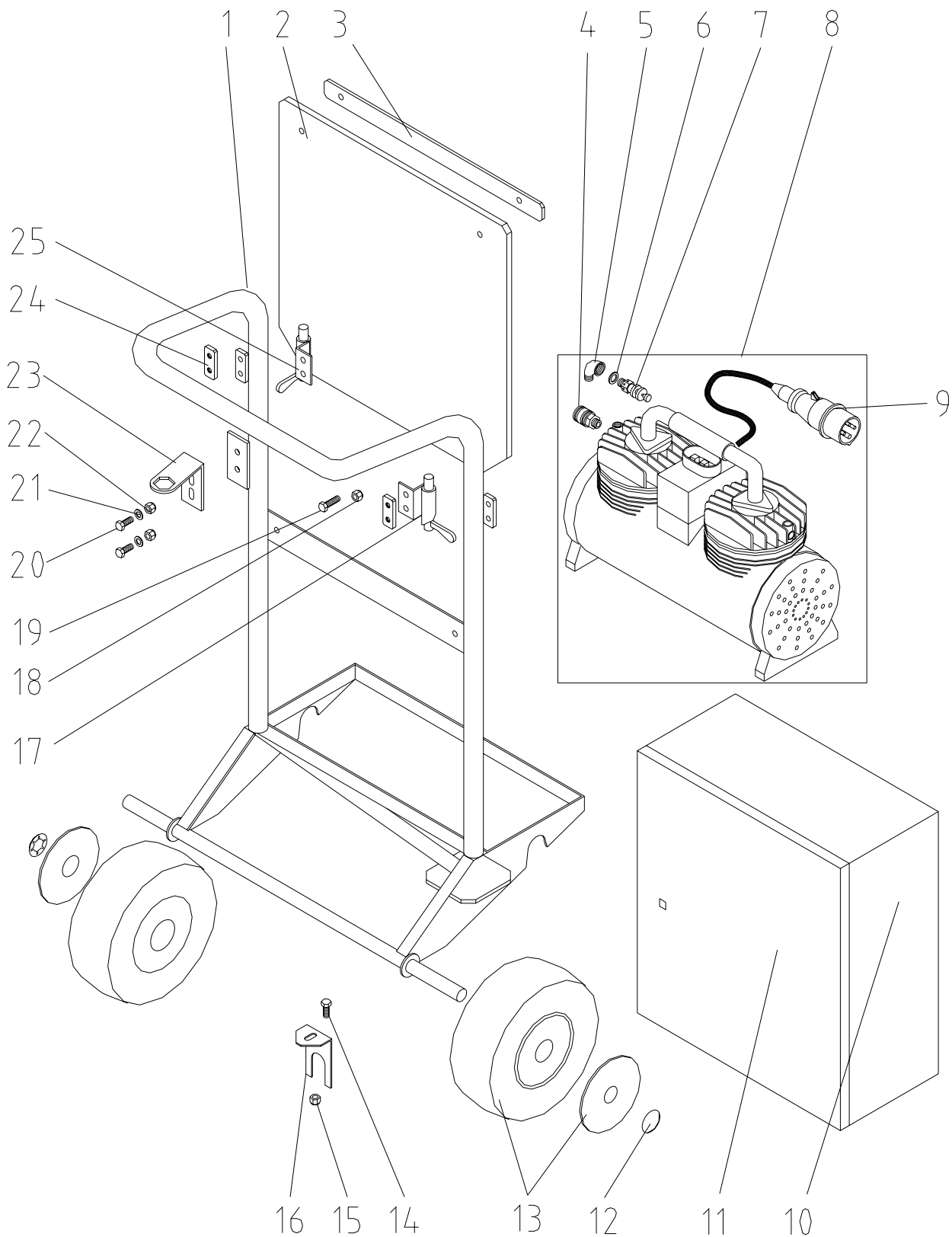
<b>Ltem.</b>	<b>Qty</b>	<b>Part no.</b>	<b>Description</b>
1	1	00 00 83 63	Motor connection cable 2.5m CEE plug 7 x 16 A 6 h red loop 5 mm
2	1	20 42 88 00	Plug CEE 7 x 16 A 6 h red no. 742
3	1	00 04 67 95	Geared motor ZF 38 5.5 kW 400 rpm with inclination switch RAL 2004
4	1	20 10 06 50	Mixing tube G 4/G 5 with adaptable suction flange RAL2004
5	1	20 10 09 00	Gasket motor hinge flange G 4 20 x 15 x 750
6	1	20 10 10 10	Splint D 4.5 with ring
7	1	20 10 12 02	Hinged bolt pin for motor hinged flange galv.
8	2	20 20 99 21	Collar nut M16 DIN 6331 galv.
9	2	20 20 11 00	Geka coupling 1" int. thread (packing unit = 10 pcs.)
10	3	20 20 17 00	Gasket Geka-coupling (packing unit = 50 pcs.)
11	1	20 20 16 50	Geka coupling dummy cover
12	4	20 20 99 20	Hex. nut M16 DIN 934 galv.
13	1	20 10 35 10	Mixing shaft reinforced for G 4/G 5 RAL2004
14	1	00 09 12 89	Cleaning shaft galv.
15	1	20 10 23 20	Mixing tube cleaner for D- and R-pumps
16	1	00 00 83 61	Motor connection cable 2.4m CEE plug 4 x 16 A 7 h black loop 4 mm
17	1	20 42 87 00	Plug CEE 4 x 16 A 7 h black no. 253
18	1	00 04 25 87	Geared motor 0.75 kW 28 rpm ZFQ38 RAL 2004
19	4	20 20 72 00	Safety nut M 8 DIN 985 galv.
20	2	20 20 78 05	Hex. screw M 8 x 40 DIN 933 galv. (packing unit = 10 pcs.)
21	1	20 10 29 01	Protection tube for hauling bracket G 4 RAL2004
22	2	20 20 78 01	Hex. screw M 8 x 35 DIN 933 galv. (packing unit = 10 pcs.)
23	1	20 10 08 01	Snap lock with safety device M14
24	1	20 20 85 22	Pin 8 H11 x 58 x 54 with washer and spline galv.
25	1	00 04 80 15	Cap PVC 1" (round, black)
26	1	00 04 76 21	Hinged flange with tube bar for G 54 RAL 2004
27	1	00 06 18 58	Hauling bracket cast G 4 with round funnel
28	2	00 02 32 71	Hex. screw M 8 x 40 DIN 931 galv.
29	2	20 20 72 00	Safety nut M 8 DIN 985 galv.

## Spare parts list pump unit / mortar pressure gauge



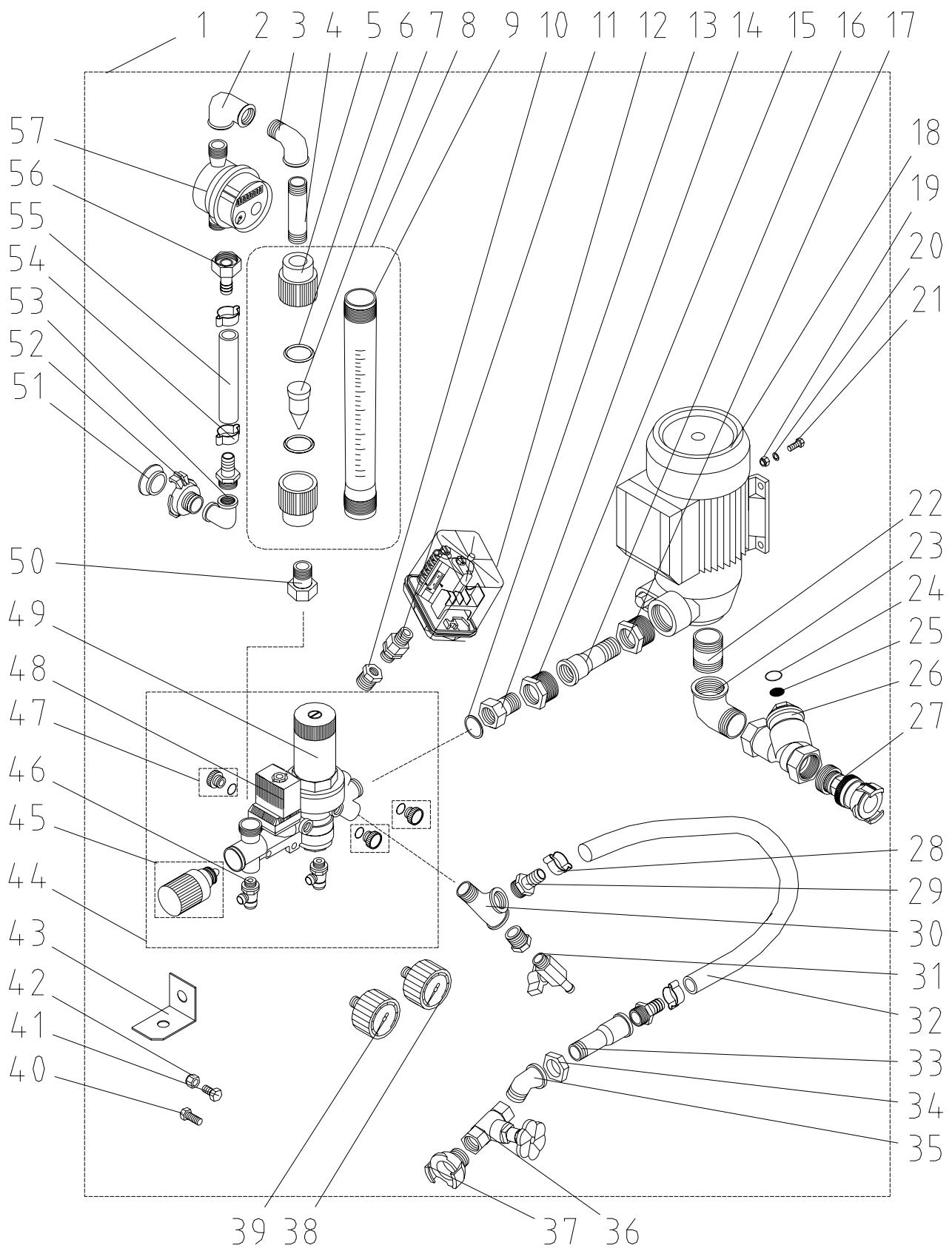
<b>Ltem.</b>	<b>Qty</b>	<b>Part no.</b>	<b>Description</b>
1	1	00 08 94 32	Suction flange D-pumps with O-Ring L 200 galv.
2	1	20 10 42 30	O-ring 117 x 5 for suction flange
3	1	00 08 94 31	Suction flange D-pump for o-ring L=200 galvanic yellow galv.
4	1	20 11 30 00	Rotor D 6-3
5	1	20 11 87 80	Tie rods M 16 x 370 mm (1 set = 2 pieces)
6	2	20 20 99 21	Collar nut M 16 DIN 6331 galv.
7	1	00 00 17 92	Double nipple 1 1/4" x 60 no. 23 galv.
8	1	20 20 07 90	Coupling 35 female 1 1/4" int. thread with gasket
9	1	00 09 90 88	Gauge with plastic inlet housing 0-100 bar 1/2" pressure reducer VA
10	1	00 10 22 28	Mortar pressure gauge 35 mm galv. cpl.
11	1	00 09 94 52	Coupling 35 M-part 1 1/4" ext. thread with 1/2" boring
12	1	20 20 07 90	Coupling 35 female 1 1/4" int. thread with gasket
13	1	20 20 03 30	Coupling reduction 35/25 male ID 24
14	1	00 04 16 64	Pressure flange for D-Pumps G 4 galv. 1 1/4" inner thread
15	1	00 00 88 62	Stator TWISTER D 6-3

## Spare parts list chassis caddy, compressor K2N and manifold box

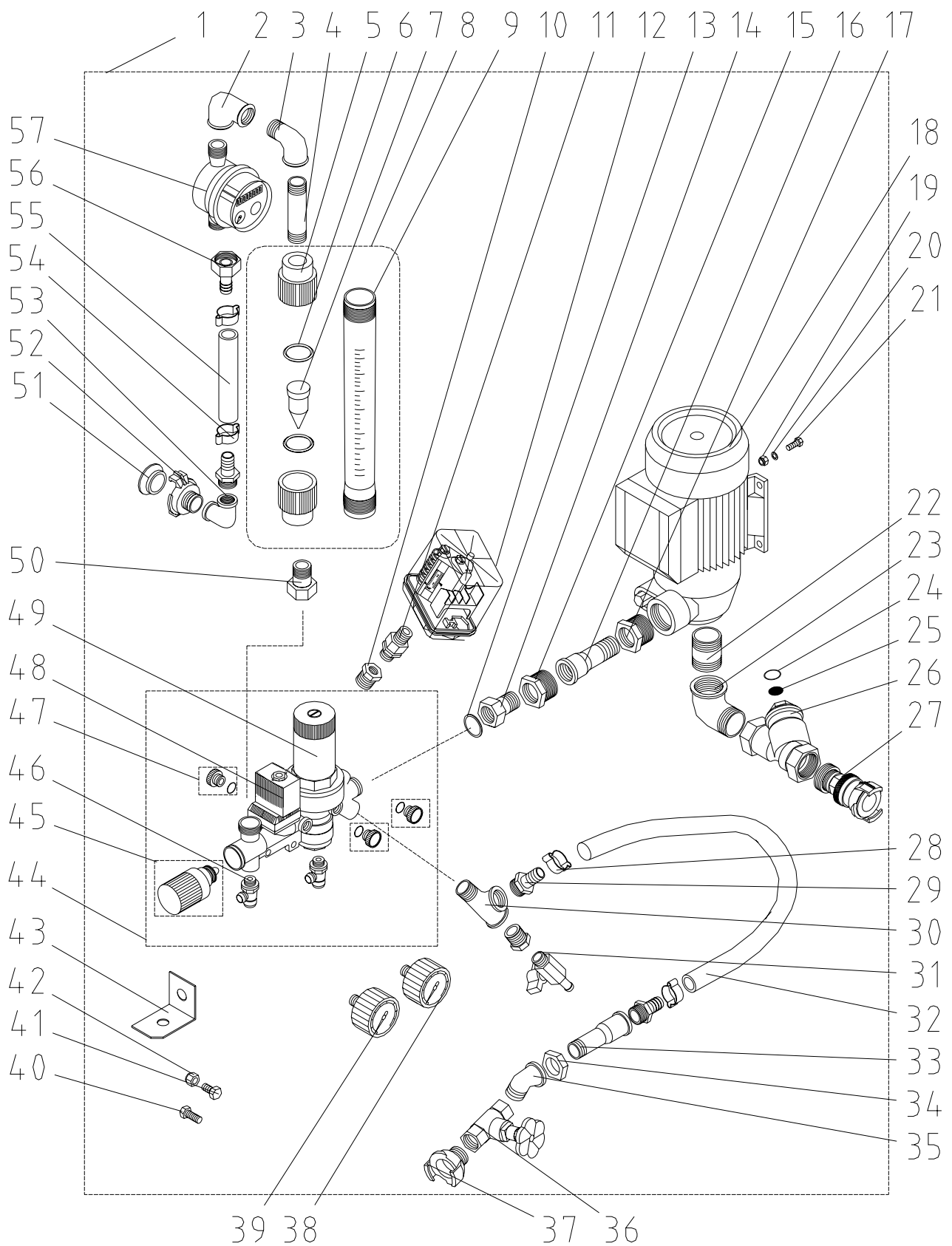


Ltem.	Qty	Part no.	Description
1	1	00 00 82 18	Chassis CADDY G 5 RAL2004
2	1	00 00 83 87	Rubber guard for CADDY G 5
3	1	00 00 83 88	Clamping strip for rubber guard CADDY G5 RAL2004
4	1	20 20 20 00	EWO coupling female 1/4" ext. Thread non-blocking
5	1	20 20 36 50	Angle 1/4" int. thread - ext. thread no. 92 galv.
6	1	20 13 47 00	Sealing ring 13 x 20 x 2
7	1	20 13 12 00	Safety valve 1/4" 3.5bar with washer
8	1	00 00 85 64	Air compressor K2 cable 750mm long with CEE-plug
9	1	20 42 79 00	Plug CEE 4 x 16A 6h red no. 252
10	1	00 00 82 17	Housing for manifold G 5 RAL9002
11	1	00 02 21 21	Door manifold box G 5 RAL9002 structure
12	2	20 20 86 03	Fastener with cap 20s x N 2 7
13	2	00 00 82 54	Replacement wheel 230x85 cover RAL2004
14	2	20 20 61 00	Hex. screw M8 x 20 DIN 933 galv.
15	2	20 20 72 00	Safety nut M 8 DIN 985 galv.
16	1	00 00 82 20	Support for water coupling G 5 RAL2004
17	1	00 00 88 69	Support with grip on right for CADDY G 5 RAL2004
18	6	20 20 72 00	Safety nut M 8 DIN 985 galv.
19	6	20 20 78 10	Hex. screw M8 x 25 DIN 933 galv.
20	2	20 20 61 00	Hex. screw M8 x 20 DIN 933 galv.
21	2	20 20 93 13	Hex. screw M8 x 20 DIN 933 galv.
22	2	20 20 72 00	Safety nut M 8 DIN 985 galv.
23	1	00 00 82 19	Support for water flow meter G 5 RAL2004
24	2	00 00 93 12	Clamping plate M 8 LA = 25mm
25	1	00 00 88 68	Support with grip on left CADDY G 5 RAL2004

## Spare parts list water manifold G 5 SUPER: part no. 00008260



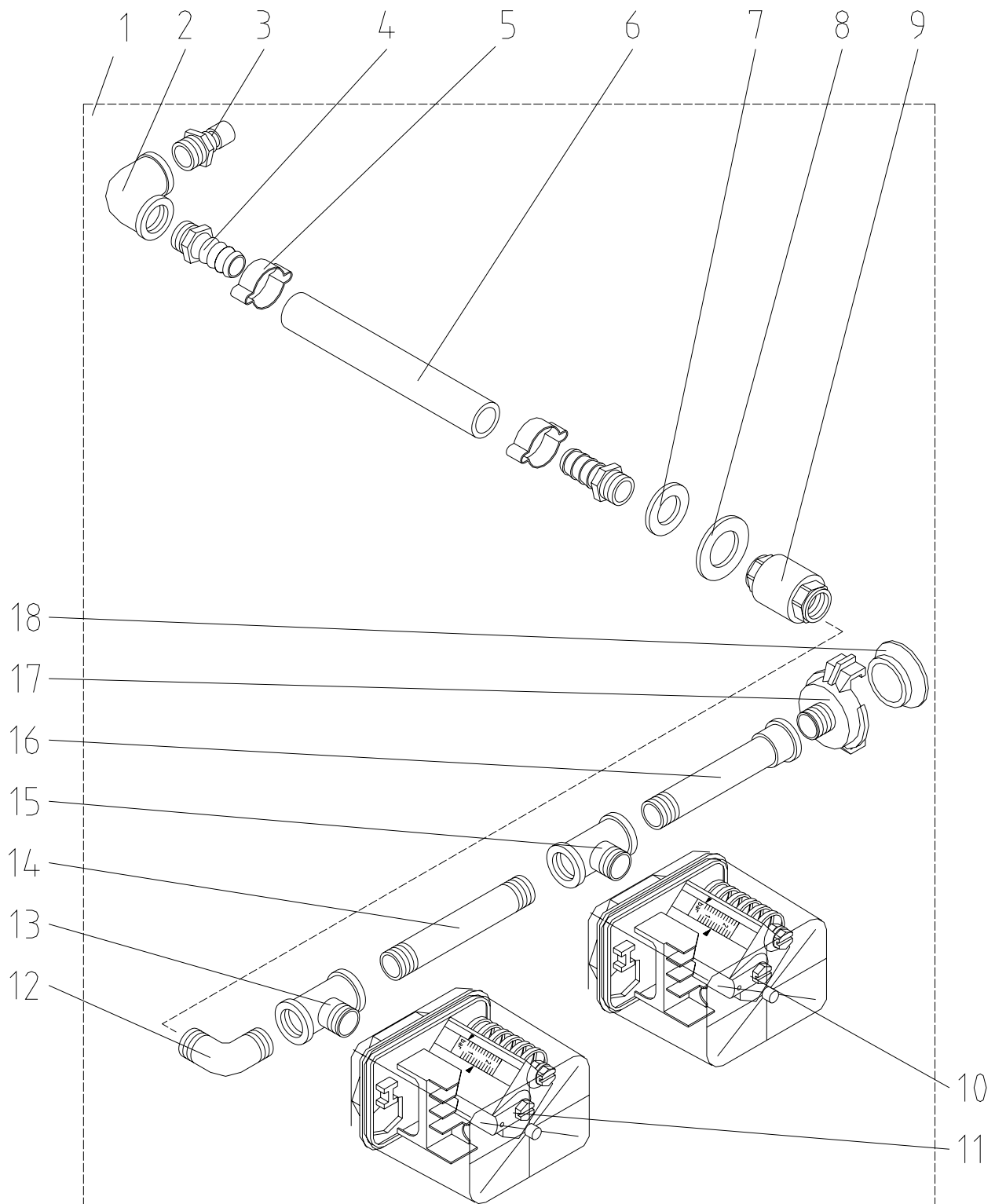
Ltem.	Qty	Part no.	Description
1	1	00 00 82 60	Water manifold G 5 kpl. RAL2004
2	1	20 20 36 21	Angle 3/4" int. thread 1/2"int. thread no. 90 galv.
3	1	20 20 36 10	Angle 1/2" int. thread - ext. thread no. 92 galv.
4	1	20 20 34 10	Double nipple 1/2" x 80 no. 23 galv.
5	2	20 18 33 10	Reduction nipple 1" ext thread - 1/2"int. thread plastic
6	2	20 18 32 00	O-ring 28.17 x 3.53 DIN 3771-NBR 70
7	1	20 18 34 00	Cone for water flow meter 1500
8	1	20 18 50 04	Water flow meter 150 - 1500 l/h cpl.
9	1	00 07 59 55	Plastic tube 75 - 750 l/h; 150 - 1500 l/h
10	2	20 20 53 00	Reducing nipple 1/2" ext. thread 3/8"int. thread no.241 galv.
11	1	00 02 36 95	Screwing 3/8" AG-AG brass conical
12	1	20 44 76 01	Pressure switch Typ FF4-4 0,22-4bar
13	1	20 15 60 10	Sealing ring 24 x 18 x 2
14	1	20 20 31 07	Nipple 1/2" ext. thread flat with nut3/4" int. thread
15	1	20 20 51 10	Reducing nipple 3/4" ext. thread 1/2"int. thread no.241 galv.
16	1	00 06 21 26	Long threaded socket 3/4" x 90 galv.
17	1	20 20 50 00	Reducing nipple 1" ext. thread-3/4" int. thread no. 241 galv.
18	1	00 09 93 11	Water pressure booster pump AV 3 0.5 kW PK65 400 V 3 ph. suction pipe at front, pump head in bronze
19	4	20 20 62 00	Safety nut M 6 DIN 985 galv.
20	4	20 20 93 00	Washer B 6.4 DIN 127 galv.
21	4	20 20 71 03	Hex. screw M 6 x 20 DIN 933 galv.
22	1	20 20 32 54	Double nipple 1" x 60 no. 23 galv.
23	1	20 20 36 20	Angle 1" int. thread-ext.thread no. 92 galv.
24	1	00 01 09 61	Gasket 1" for dirt collector Fy 30
25	1	20 15 20 11	Filter for dirt collector ES 30-1" A
26	1	20 15 20 10	Dirt collector Fy 30-1" with filter
27	1	20 20 16 91	High pressure coupling 1" ext. thread with seal
28	2	00 05 91 96	Hose clamp 19-21
29	2	20 19 04 10	Hose screw joint 1/2" ext. thread socket 1/2"
30	1	20 20 40 00	T-piece 1/2" int. thread 1/2" int. thread 1/2" ext. thread no.134





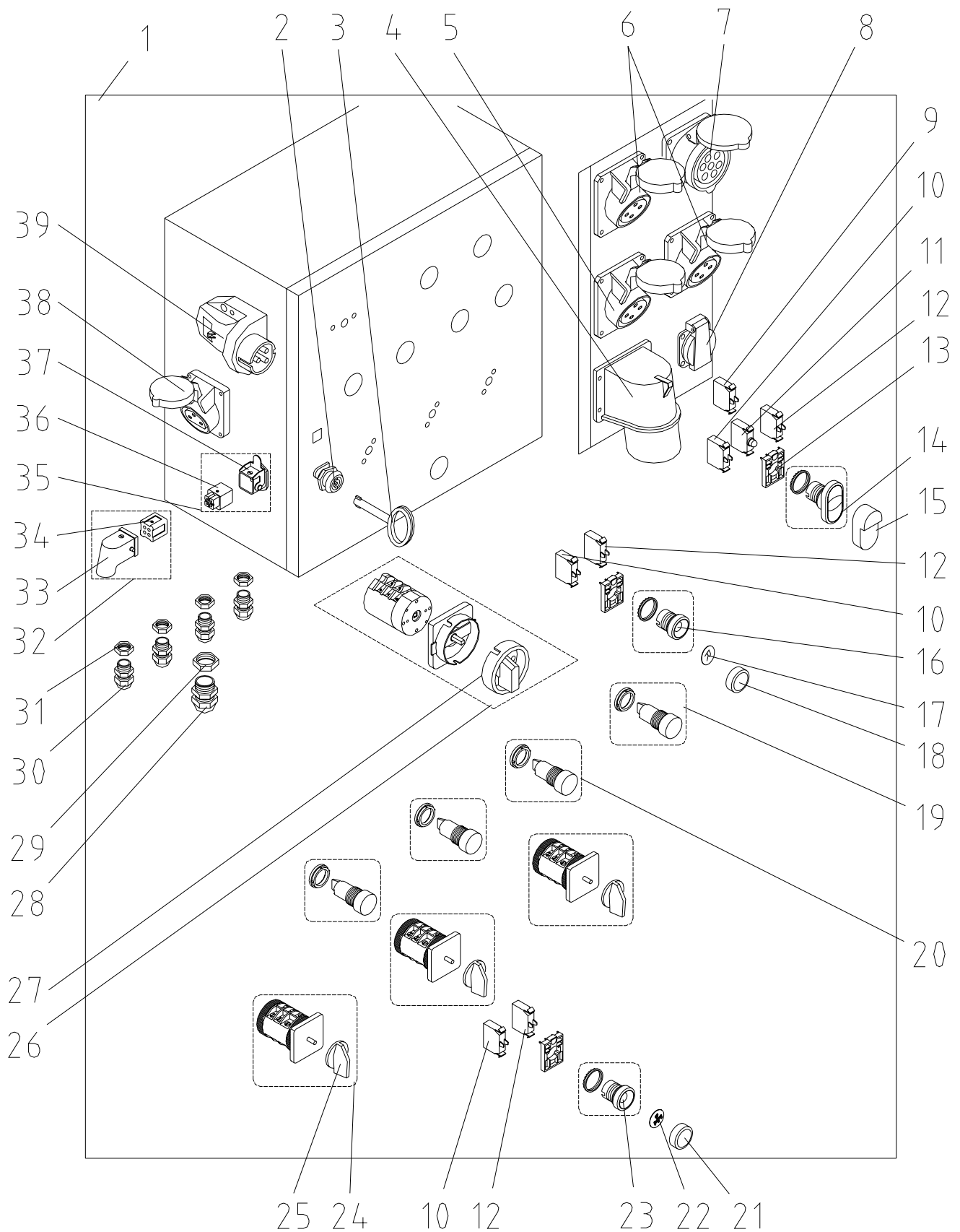
<b>Ltem.</b>	<b>Qty</b>	<b>Part no.</b>	<b>Description</b>
31	1	20 19 03 20	Tap 3/8" ext. thread with socket 10 mm
32	1	20 21 36 12	Water-/air hose 1/2" x 500 mm
33	1	00 01 14 92	Socket 1/2" x 80 no. 536 galv.
34	1	00 00 28 11	Nut 1/2" int. thread
35	1	20 20 38 00	Angle 1/2" int. thread-ext. thread 45 ° no. 121 galv.
36	1	20 21 52 00	Tap 1/2" without drainer
37	1	20 20 09 00	Geka coupling 1/2" ext. thread (packing unit = 10 pcs.)
38	1	00 01 99 13	Gauge 0-16 bar 1/4" at rear, D = 50 mm
39	1	00 00 93 67	Gauge 0-4bar 1/4" at rear, D = 50 mm
40	1	20 20 61 00	Hex. screw M 8 x 20 DIN 933 galv.
41	1	20 20 87 01	Hex. screw M 8 x 16 DIN 933 galv.
42	2	20 20 72 00	Safety nut M 8 DIN 985 galv.
43	1	00 04 80 16	Support red bronze manifold block CADDY G 5 RAL2004
44	1	00 03 92 86	Manifold block red bronze DK 06 FN-1/2" E
45	1	00 04 04 26	Inlet for control valve cpl. for manifold block red bronze
46	1	00 04 04 28	Bleed valve, manifold block, red bronze
47	1	20 15 61 00	Seal screw (plastic) with O-ring R 1/4" for pressure reducer
48	1	20 15 28 01	Magnet coil 42 V type 6213 A
49	1	00 01 96 07	Pressure reducing valve manifold block red bronze G 5
50	1	20 20 31 05	Nipple with conical socket 1/2" ext. thread with reducer nut 3/4" int. thread for item no.20 15 77 00
51	1	20 20 17 00	Gasket Geka-coupling (packing unit = 50 pcs.)
52	1	20 20 09 00	Geka coupling 1/2" ext. thread (packing unit = 10 pcs.)
53	1	20 20 36 11	Angle 1/2" int. thread no. 90 galv.
54	2	00 05 91 96	Hose clamp 19-21
55	1	20 21 36 14	Water-/air hose 1/2" x 1800 mm
56	1	00 06 88 93	Hose socket 1/2" flat with nut 3/4"
57	1	00 07 27 86	Water counter for 1/2" tube max. 10 bar

## Spare parts list air manifold G 5 SUPER: part no. 00008261



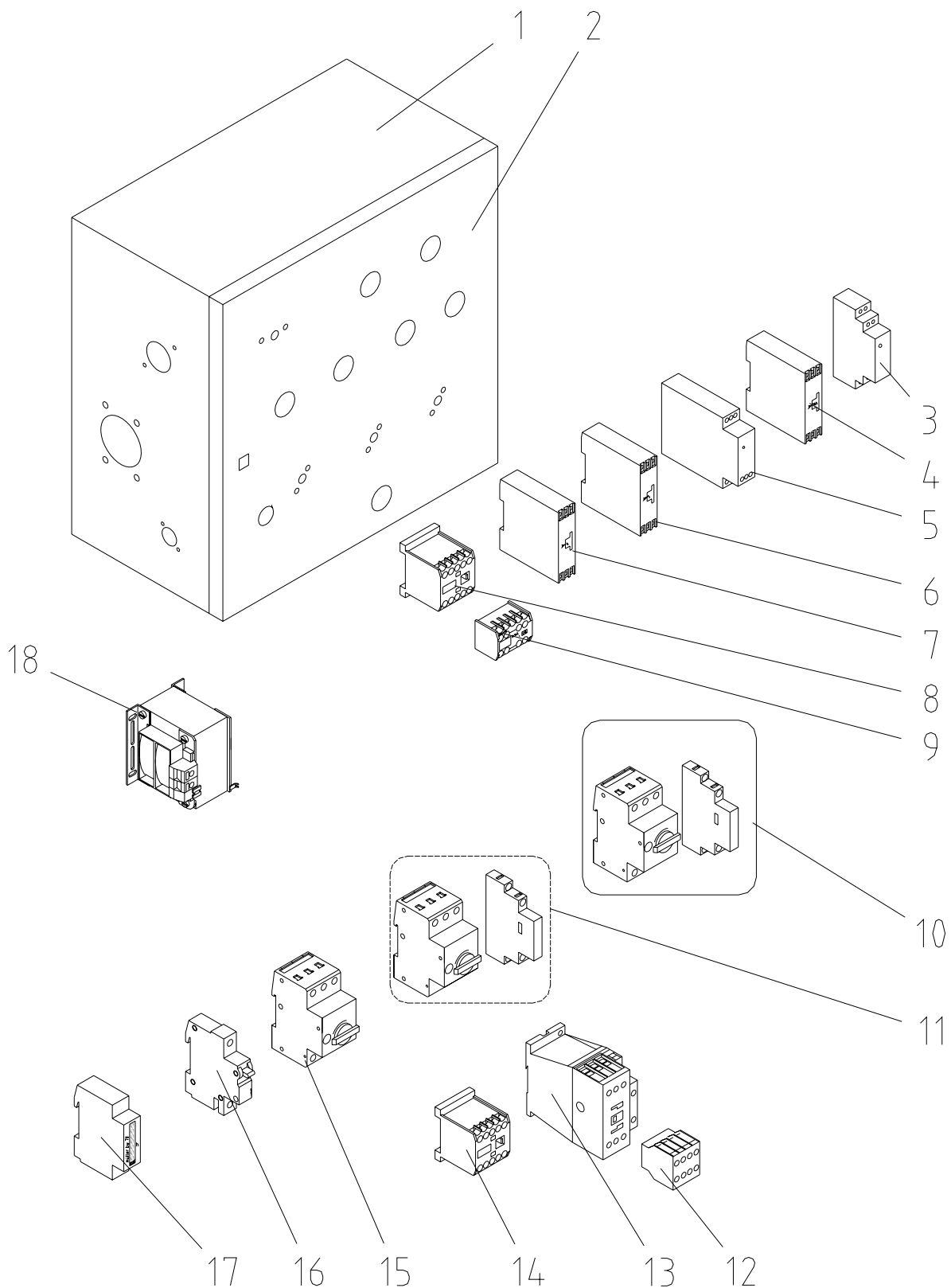
<b>Ltem.</b>	<b>Qty</b>	<b>Part no.</b>	<b>Description</b>
1	1	00 00 82 61	Air manifold for G 5
2	1	20 20 36 03	Angle 3/8" int. thread no. 90 galv.
3	1	20 20 21 01	EWO coupling male 3/8" ext. thread
4	2	20 19 04 00	Hose screw joint 3/8" ext. thread socket 1/2"
5	2	00 05 91 96	Hose clamp 19-21
6	1	20 21 36 12	Water-/air hose 1/2" x 500mm
7	1	20 20 67 00	Washer B 17 DIN 125 galv.
8	1	20 20 93 15	Washer B 21 DIN 125 galv.
9	1	00 00 82 59	Counter flow valve 3/8" int. thread
10	1	20 44 76 00	Pressure switch type FF4-4 0.22-4bar
11	1	20 44 76 00	Pressure switch type FF4-4 0.22-4bar
12	1	00 00 82 57	Angle 3/8" ext. thread no. 94 galv.
13	1	00 00 82 58	T-piece 3/8"int. thread 3/8"ext. thread 3/8"int. thread no.133
14	1	00 00 86 01	Double nipple 3/8" x 100 no. 23 galv.
15	1	00 00 82 58	T-piece 3/8"int. thread 3/8" ext. thread 3/8" int. thread no.133
16	1	00 00 82 56	Extension 3/8" x 100 no.526 galv.
17	1	20 20 10 00	Geka coupling 3/8" ext. thread (packing unit = 10 pcs.)
18	1	20 20 17 00	Gasket Geka-coupling (packing unit = 50 pcs.)

## Spare parts list control box external: part no. 00007134



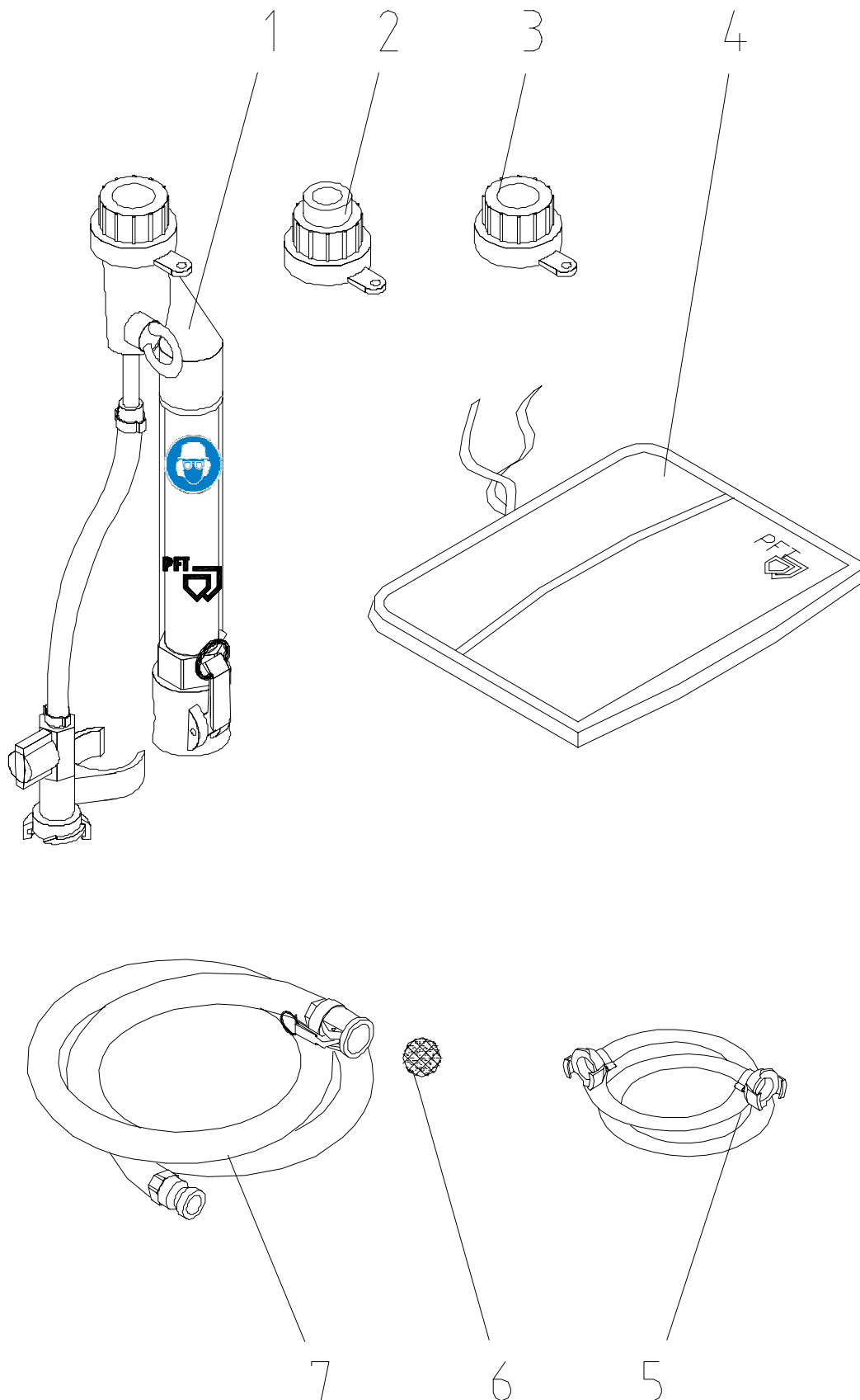
Ltem.	Qty	Part no.	Description
1	1	00 00 71 34	Control box G 5 SUPER
2	1	00 03 62 49	Lock for control box (double bit)
3	1	20 44 45 00	Key for control box
4	1	20 42 51 00	Panel mounted housing with plug CEE 5 x 32 A 6 h red no. 391
5	1	00 02 20 66	Panel mounted socket CEE 4 x 16 A 7 h black 500 V dimension of flange 87 x 71mm inclination 20° type: 123/B
6	2	20 42 66 10	Panel mounted socket CEE 4 x 16A 6h red no.144, flange 71 x 87
7	1	00 00 85 18	Panel mounted socket CEE 7 x 16 A 6 h red
8	1	20 42 72 00	Panel mounted socket Schuko 16 A blue no. 10436
9	1	00 05 38 86	LED - resistor - additional series resistor 42 V
10	4	00 05 38 35	Contact-element 1 make contact M 22
11	1	00 05 38 81	Luminous element white 12-30 V
12	4	00 05 38 36	Contact-element 1 break contact M 22
13	3	00 05 38 34	Fastening adapter M 22
14	1	00 05 38 32	Luminous push-button key on/off M 22
15	1	00 05 38 31	Membranes angular for double pressure switch M 22-TDD
16	1	00 05 38 39	Press button without front unit
17	1	00 05 38 43	Front unit for press button blue/reset M 22
18	1	00 05 38 30	Membrane round for pressure switch
19	1	00 10 21 36	Indicator lamp LED 48 V AC/DC red
20	3	00 10 21 37	Control lamp yellow LED 48V AC/DC
21	1	00 05 38 30	Membrane round for pressure switch
22	1	00 05 38 42	Front unit for press button liquid M 22
23	1	00 05 38 39	Press button without front unit
24	3	20 45 55 00	Hand-O-automatic switch 400 V
25	3	20 45 56 00	Knob for hand-O-automatic switch
26	1	20 45 52 00	Main reversing switch, cpl.
27	1	20 45 52 01	Knob for main reversing switch, part no.20 45 52 00
28	1	00 04 11 27	Skintop screw connection M 20 x 1,5
29	1	00 04 11 45	Counternut Skintop M 20 x 1.5
30	4	00 04 11 41	Connector skintop with nut M16 x 1.5
31	4	00 04 11 43	Counternut Skintop Skintop M 16 x 1,5
32	1	20 42 85 01	Dummy plug 4 poles, HAN 3 A
33	1	20 42 86 05	Socket housing 4 and 5 pins, angled
34	1	20 42 86 06	Male insert 4 pins HAN 3 A
35	1	20 42 98 00	Coupling 4-pin HAN 3 A with female insert
36	1	20 42 86 07	Female insert 4 pin, HAN 3 A
37	1	20 42 86 04	Socket housing 4/5-pin, HAN 3A/HA 4
38	1	20 42 64 00	Panel mounted socket CEE 3 x 16 A 12 h white no. 1272
39	1	20 42 59 00	Panel mounted housing with plug CEE 3 x 16 A 12 h white no. 2516

## Spare parts list control box internal: part no. 00007134



<b>Ltem.</b>	<b>Qty</b>	<b>Part no.</b>	<b>Description</b>
1	1	00 02 21 14	Housing for control box G 5 SUPER RAL9002 STRUKTUR
2	1	00 04 31 12	Door G 5 SUPER RAL9002 STRUKTUR
3	1	20 44 81 20	Contact relay 42 V 2 dispensers
4	1	00 06 33 44	Time relay 42 V 1.8-180 sec. 1 closer/1opener 1 closer (immediate contact) 1 opener (delayed)
5	1	20 45 27 51	Phase sequence relay 200-500 V type FPF 2
6	1	20 45 27 40	Time lag relay 42 V, 0,5-10 sec.
7	1	00 00 17 58	Impulse relay 42 V 10 sec.
8	1	20 44 73 10	Contactors DIL ER 31, 42 V
9	1	00 01 20 40	Auxillary contact 11 DIL E
10	2	00 00 93 71	Motor protection switch 10-16 A PKZM 0-16
11	2	00 00 93 70	Motor protection switch 1.6-2.5 A PKZM 0-2.5
12	1	00 08 52 94	Auxillary switch DILM 32 XHI22 2S / 2Ö
13	1	00 08 42 25	Contactors DIL M17-10 42 V
14	4	20 44 66 10	Contactors DIL EM 10 42 V 50 Hz/48 V 60 Hz
15	1	00 04 25 99	Motor protection switch 0.63 - 1 A PKZM 0-1
16	1	20 41 93 10	Automatic circuit breaker 16 A 1-pole
17	1	20 45 31 01	Time indicator 42 V
18	1	00 00 93 60	Transformer 400 V 42 V (100 VA) without fuse

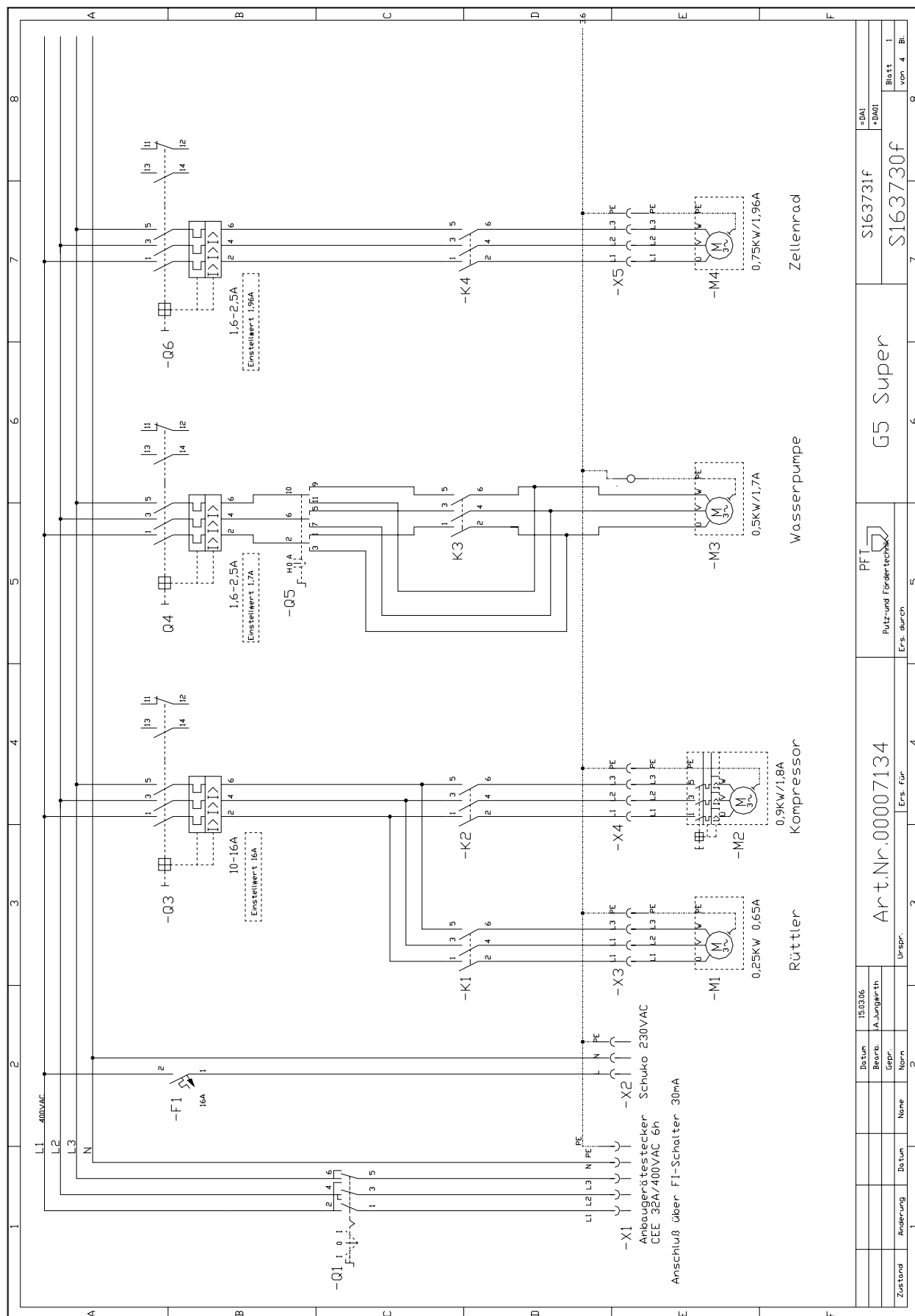
## List of spraying guns, hoses, tool kits and spraying caps





<b>Ltem.</b>	<b>Qty</b>	<b>Part no.</b>	<b>Description</b>
1	1	20 19 00 02	Spraying gun 25mm ID 24, cap 14 mm
2	1	00 06 23 83	Spraying cap S 14 mm black
3	1	20 19 10 00	Spraying cap 16 mm (packing unit = 10 pieces)
4	1	00 02 16 66	Tool kit mixing pump / conveying pump
5	1	20 21 10 03	Water-/air hose 1/2" , 16 m with Geka couplings
6	1	20 21 05 00	Sponge ball 30 mm diam.
7	1	00 02 11 17	RONDO mortar pressure hose 25 mm 15 m with turnable coupling, hydraulic, colour: orange

## Circuit Diagramm



Technical drawing of a 400V AC power distribution system for a mixed pump (Mischpumpe).

The drawing shows a three-phase supply (L1, L2, L3) and neutral (N) entering a main switch (-Q7) and a main fuse (-K5). The main switch is set to 10-16A. The main fuse is set to 0.6-1A. The system branches into two main lines: one for a 42V supply and another for a 0V supply.

The 42V line passes through a transformer (-T1) and a switch (-Q2) before reaching a switch (-K9). The 0V line passes through a switch (-K5) and a switch (-Q2) before reaching a switch (-K9).

The 42V line also passes through a switch (-K9) and a switch (-Q2) before reaching a switch (-K9). The 0V line also passes through a switch (-K9) and a switch (-Q2) before reaching a switch (-K9).

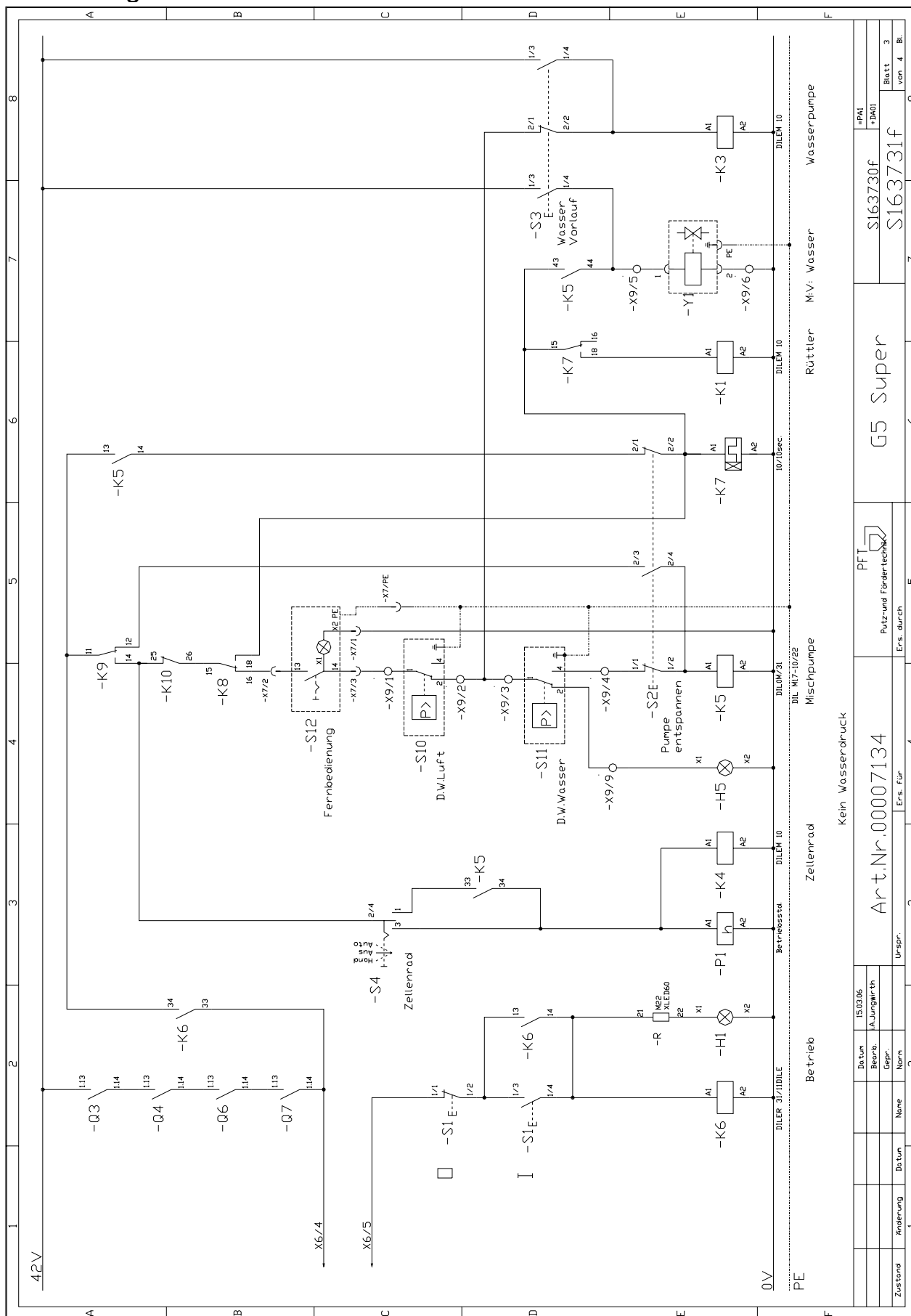
The system is connected to a mixed pump (Mischpumpe) with a motor (M5) and a switch (-X6). The motor is rated at 5.5kW/11A.

The drawing includes a title block with the following information:

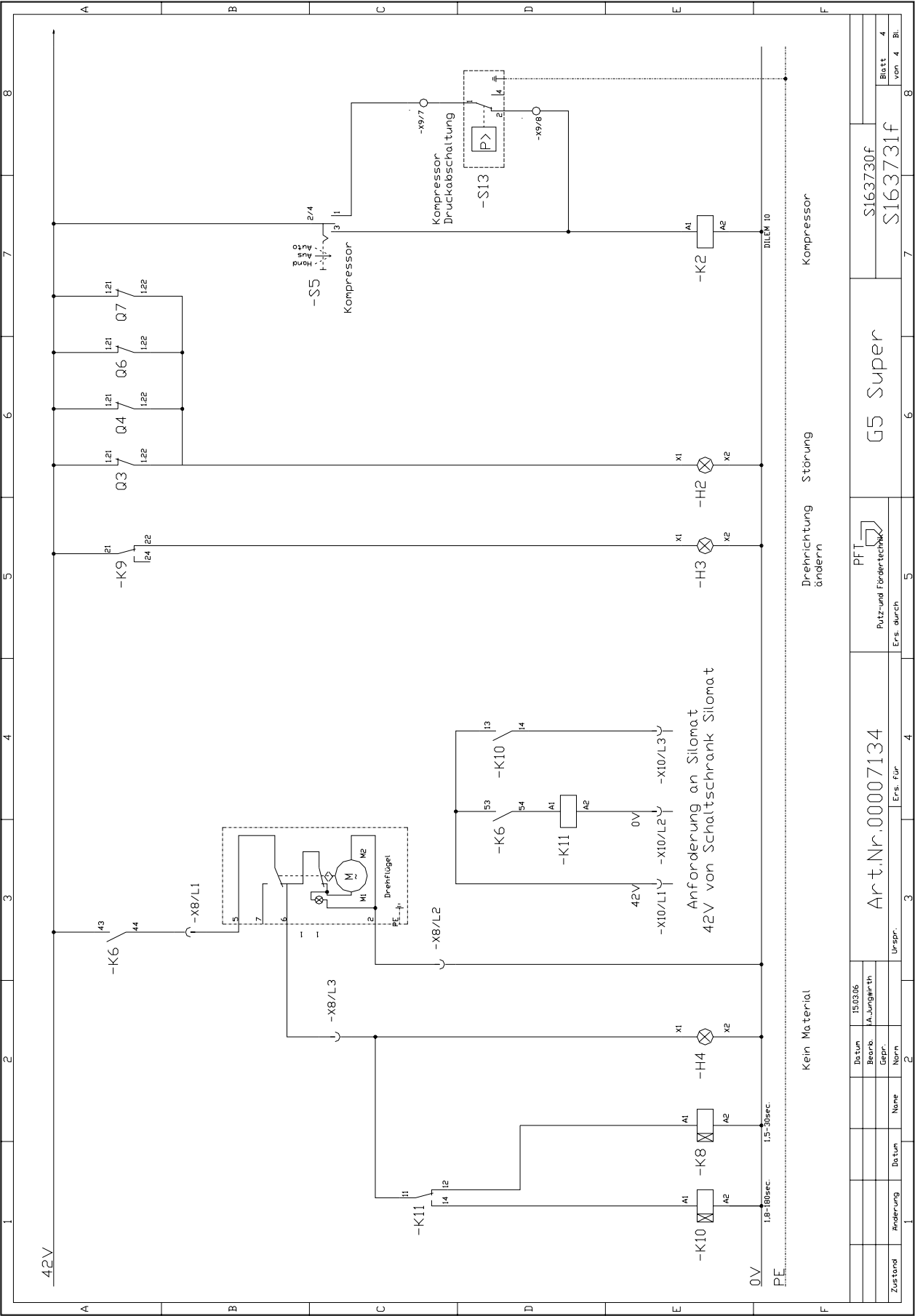
- Art.Nr. 00007134
- PFT
- G5 Super
- S163731F
- S163730F
- Blatt 2 von 4 Bl.

Zustand	Änderung	Datum	Name	Datum

## Circuit Diagramm



Circuit Diagramm



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

This inspection must be carried out once a year by a specialist in accordance with BGR 183 (German Association for Health and Safety at Work). The machine and control box receive 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 item	OK 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		
Hauling bracket	Check hauling bracket for wear		
Protective grille	Is protective grille still evenly flat?		
Frame	Check all welded seams		
Frame	Check whether all screwed joints are firmly seated.		
Frame	Check for deformation. Stability must be ensured.		
Castors	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 (at 1.9 bar setting).		
Control box	Visual inspection for defects.		
Control box	Functional check		
Control box	Are all labels in legible condition?		
Control box	High voltage test with 1,000V		
Control box	Functional check of all safety switches.		
Control box	Functional check of all control lamps.		
Control box	Check whether all cable connections are firmly seated.		
Type plate	Available and legible		
Operating instructions	Available		
Mortar pressure gauge	Functional check		

Notes:

WE KEEP THINGS MOVING



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