

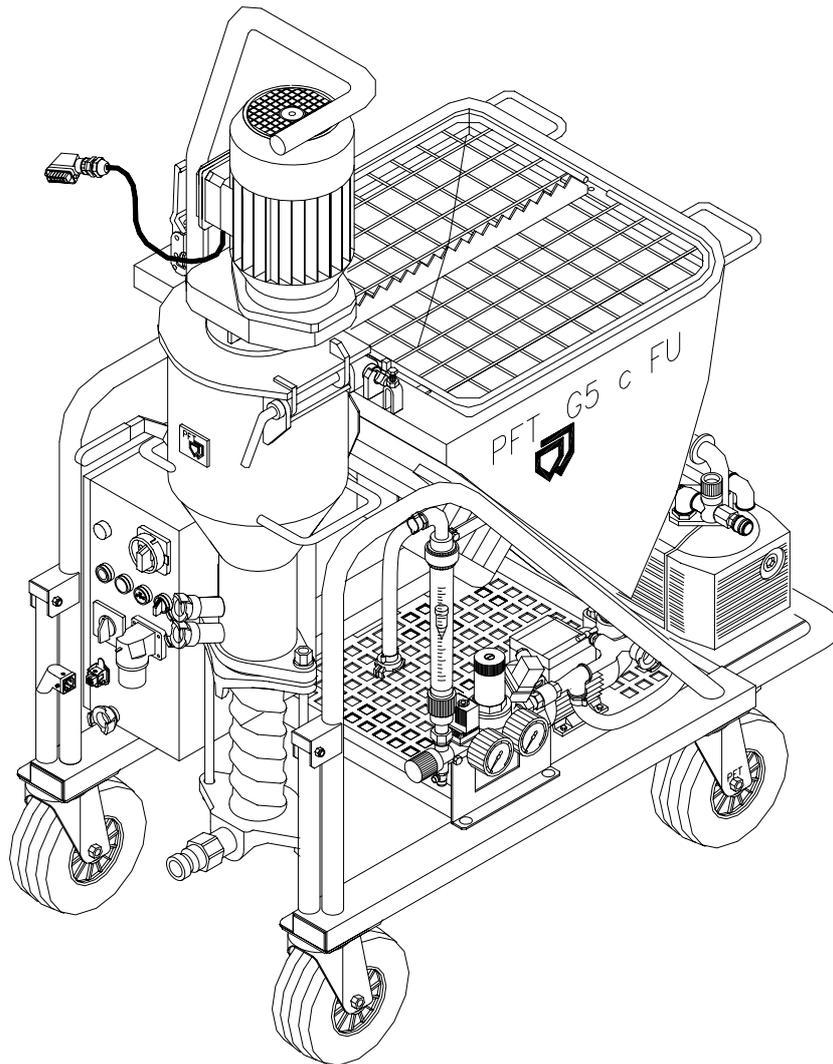
OPERATING MANUAL

(Item number of operating manual: 00 11 01 43)

(Item number of machine – parts list: 00 02 08 05)

Mixer Pump

PFT G 5 c FU 230V



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 c FU** 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 c FU** 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 c FU** 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 c FU** 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:

- 1) Water pressure switch
- 2) Pump pressure, backpressure
- 3) Air pressure switch
- 4) Pressure reducer

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Proper use of the machine

The **PFT G 5 c FU** is a continuously operating mixing pump for pre-mixed machinable mortar with a particle size of up to 2 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

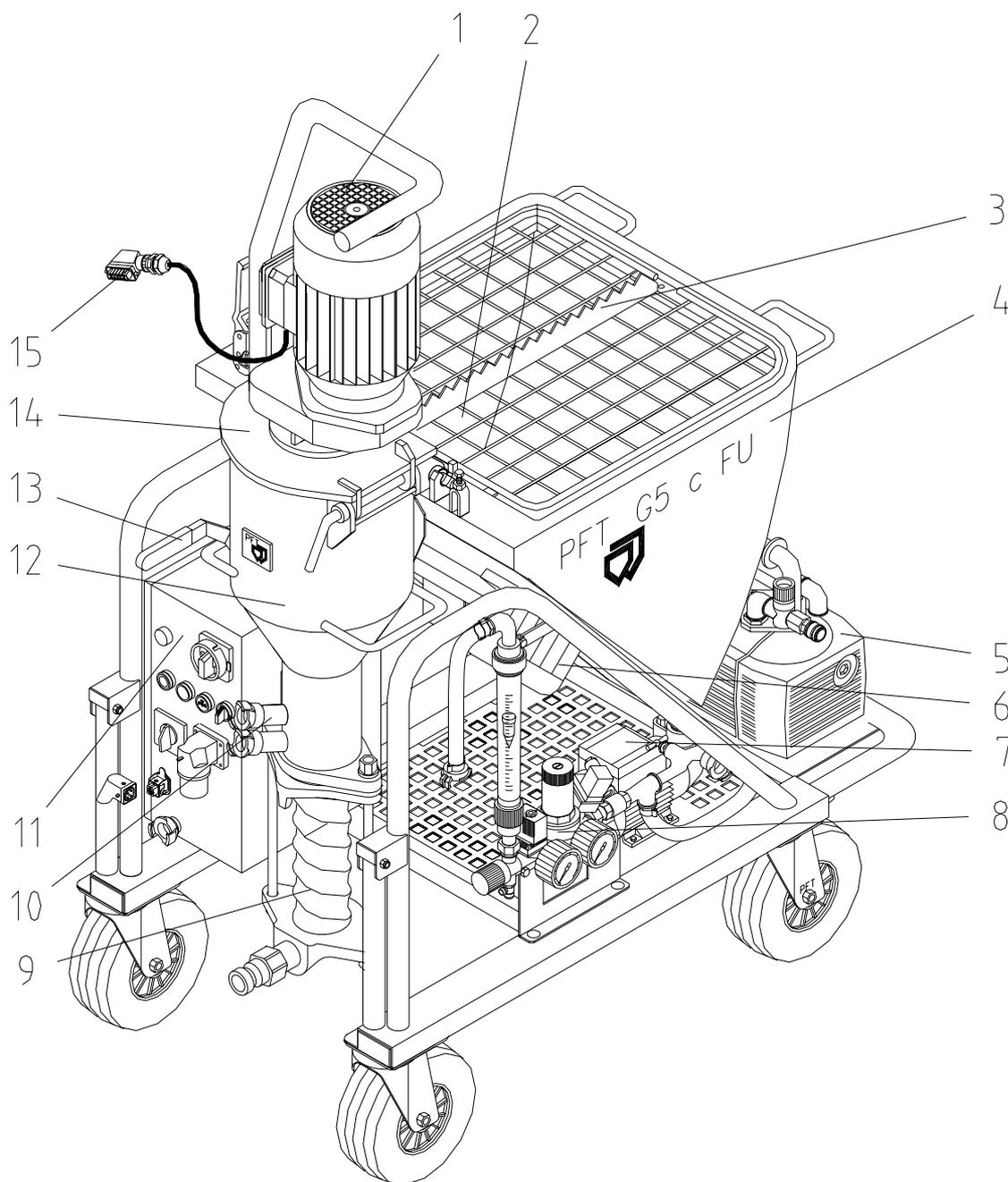
Description of functions

The PFT G 5 c FU 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.

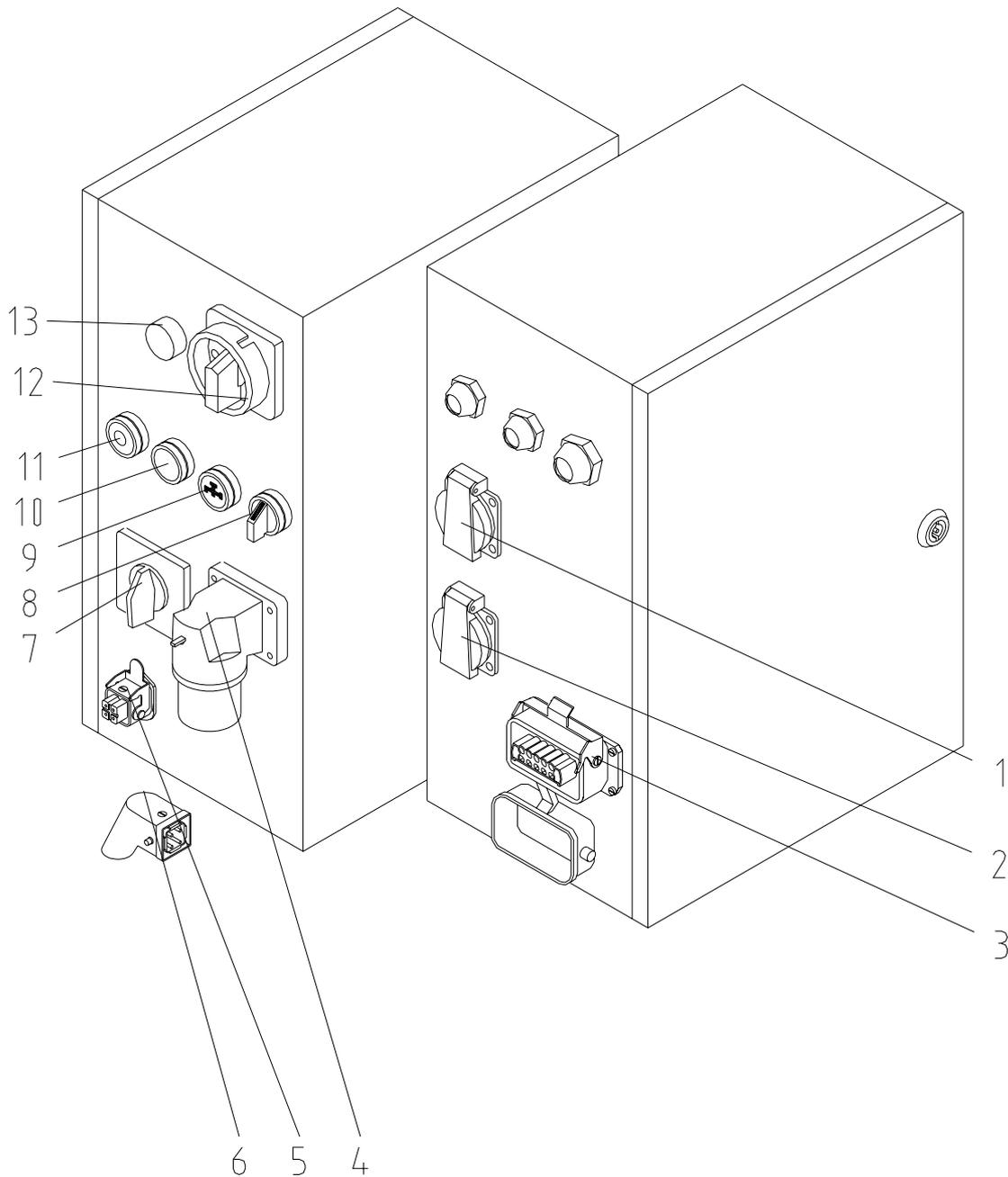
A spraying gun can be mounted at the end of the conveying hose. The compressed air required for spraying is supplied by a compressor.

Overview of G 5 c FU: Item number 00 02 08 05



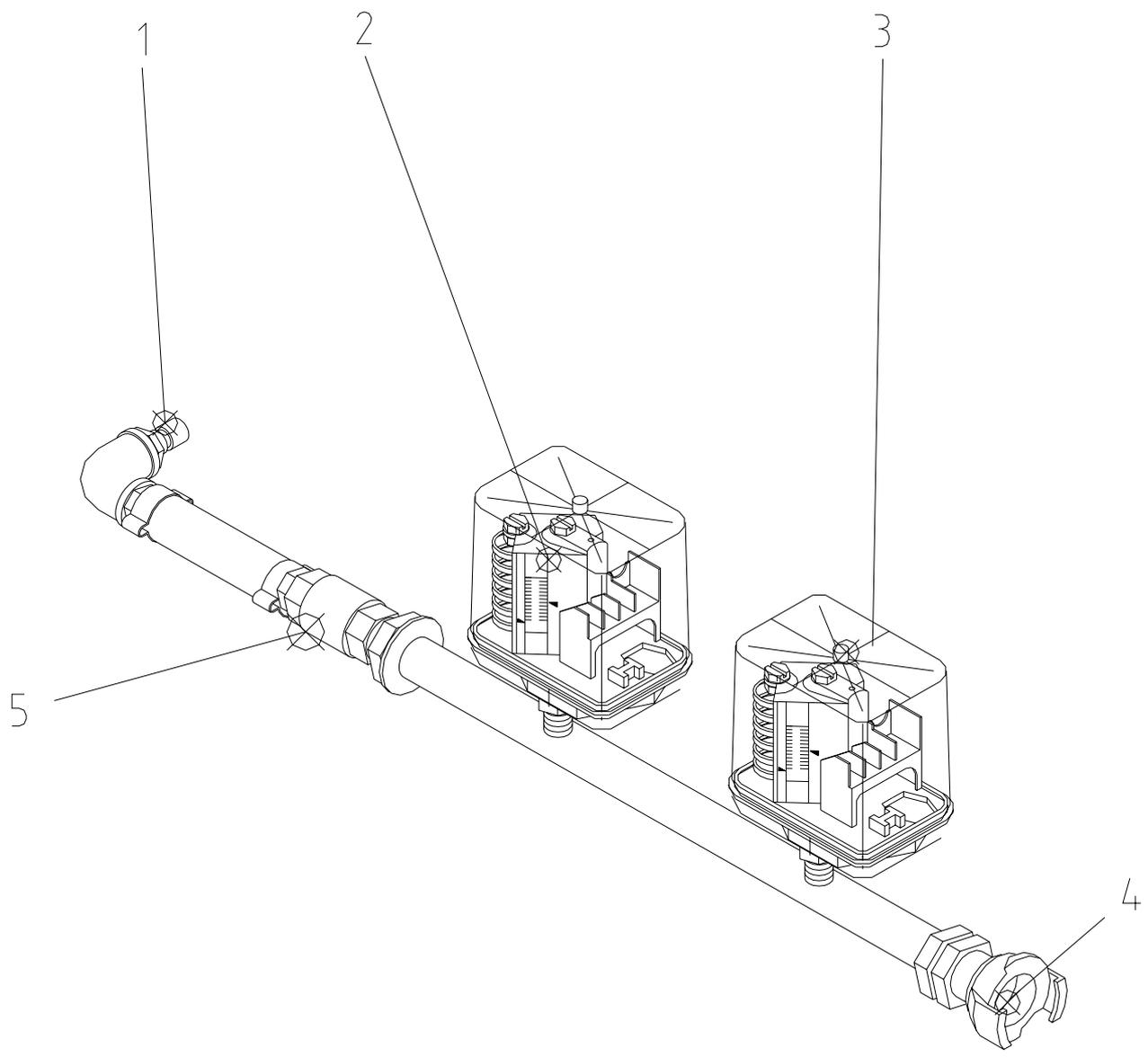
- | | |
|--------------------------------------|--|
| 1. Mixer pump motor | 9. Pump system D6-2L |
| 2. Star wheel | 10. Water supply to mixing tube |
| 3. Protective grille with bag opener | 11. Control box |
| 4. Material hopper | 12. Mixing tube with exchangeable flange |
| 5. Air compressor DT 4.16 | 13. Locking lever |
| 6. Star wheel gearbox | 14. Motor tilt flange |
| 7. Booster pump Pkm 60 | 15. Pump motor connection cable |
| 8. Water manifold | |

Overview of control box G 5 c FU: Item number 00 07 04 97



- | | |
|---|--------------------------------------|
| 1. Socket compressor 230 V, 16 A | 8. Mixer motor direction of rotation |
| 2. Socket for booster pump 230 V, 16 A | 9. Water flow button |
| 3. Housing (10-pin), mixer motor | 10. Operation ON |
| 4. Main power supply CEE 3 x 16 A | 11. Operation OFF |
| 5. Remote control socket 42 V | 12. Main switch |
| 6. Dummy plug for remote control socket | 13. Control lamp fault |
| 7. Star wheel selector switch | 14. |

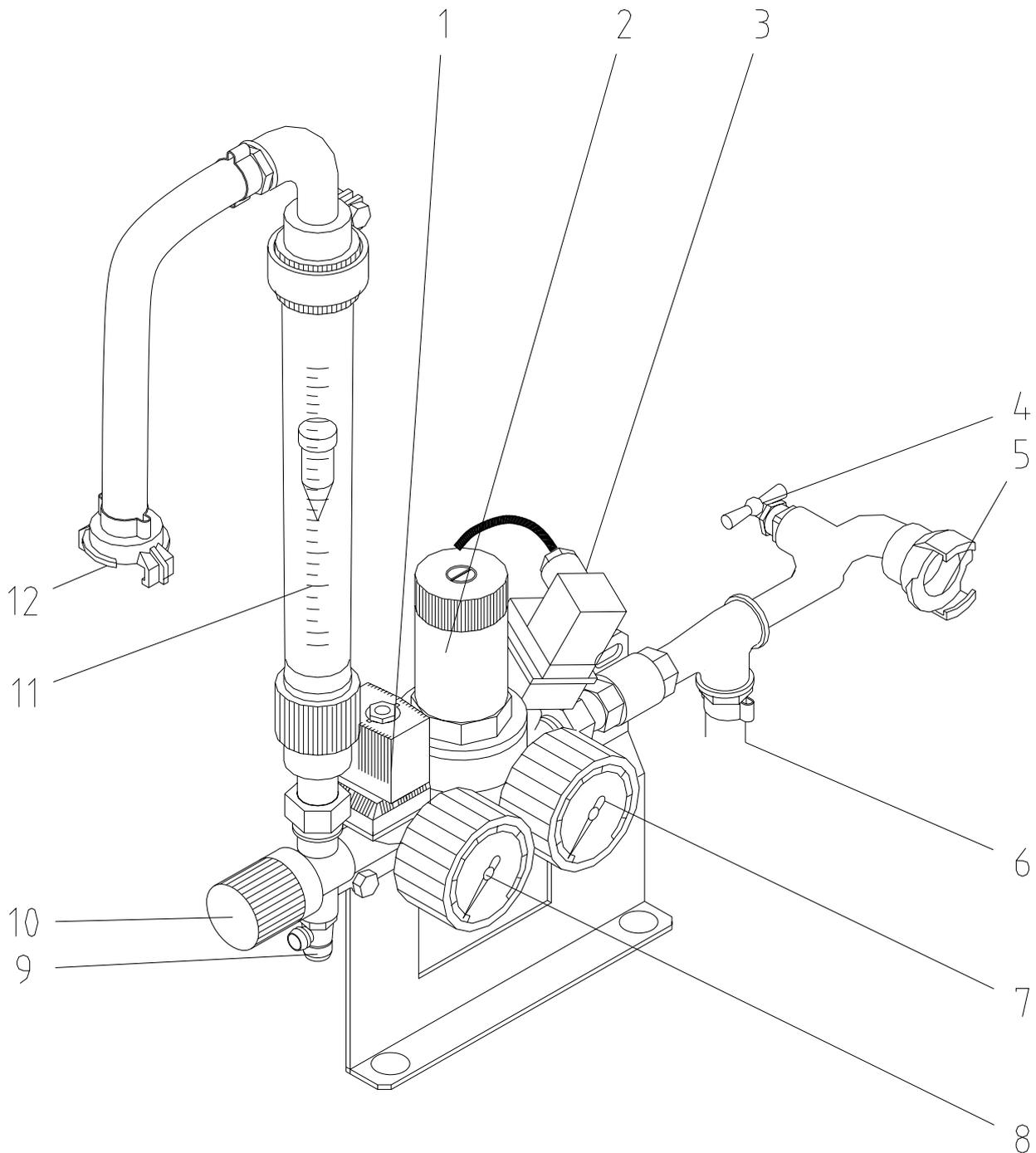
Overview of air manifold: Item number 00 03 96 13



- 1. Air from compressor
- 2. Compressor shutdown device
- 3. Air pressure safety switch

- 4. Air to spraying gun
- 5. Check valve, 1/2" female thread
- 6.

Overview of water manifold: Item number 00 04 91 76 – 1000 ltr.



- | | |
|--|--|
| 1. Solenoid valve | 7. Manometer 0 – 4 bar |
| 2. Pressure reducing valve
(regulation of water pressure) | 8. Manometer 0 – 16 bar |
| 3. Pressure switch 1.9 – 2.2 bar | 9. Outlet tap (draining of water manifold if
there is risk of freezing) |
| 4. Water outlet (open – closed) | 10. Needle valve (regulation of water quantity) |
| 5. Water outlet | 11. Water flow meter |
| 6. Water from booster pump | 12. Water to mixing tube |

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.

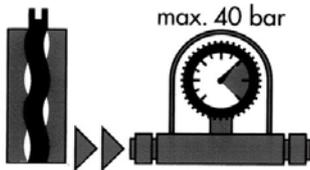
Therefore:

- 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.

Technical Specifications

Drive	Pump motor	4.0 kW 50 Hz
	Star wheel motor	0.3 kW 50 Hz
Speed	Pump motor	approx. 400 rpm
	Star wheel motor	approx. 12 rpm
Power consumption	Pump motor at maximum load	13.9 A at 230 V
	Star wheel motor at maximum load	1.8 A at 230 V
Electrical connection		230 V 1Ph. 16 A
Fuse protection		min. 16 A C slow-blow
Power unit		min. 10 kVA
Water supply		$\frac{3}{4}$ inch min. 2.5 bar
Pump output	D6-2L	approx. 20 ltr. at 400 rpm
Pumping distance*	max. for 25 mm \varnothing	20 m
	max. for 35 mm \varnothing	25 m
Operating pressure*		max. 15 bar
Compressor output		0.25 Nm ³ /min
Dimensions and weights	Filling height	930 mm
	Hopper capacity	150 litres
	Hopper capacity with attachment	240 litres
	Overall length	1250 mm
	Overall width	650 mm
	Overall height	1520 mm
	Pump motor	53 kg
	Mixer pump module	81 kg
	Container module	141 kg
	Compressor	23 kg
	Total weight	298 kg
Constant noise pressure level		77 \pm 1 dB(A)

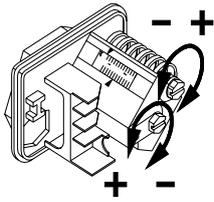
* Recommended value, depending on conveying height, pump condition and version, as well as mortar quality, composition and consistency

Warning!

If the 16 A slow-blow fuse protection is not sufficient when working with water pump and compressor, an external 230 V connection for both drives is recommended.

Settings

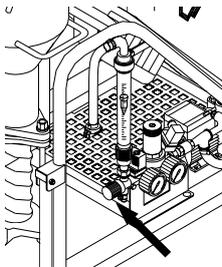
Safety switch



	Switch on machine	Switch off machine
Water	2.2 bar	1.9 bar
Air	0.9 bar	1.2 bar
Compressor	2 bar	3 bar

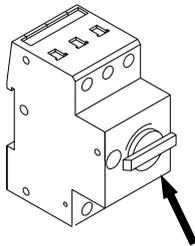
Compressor safety valve

1.5 bar against closed air pipe (factory setting, secured)



Pressure reducing valve

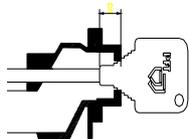
1.9 bar with maximum opening of water manifold



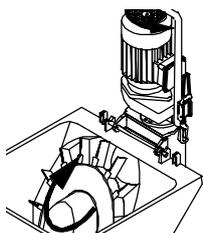
Motor protection switches

	Output	Setting	Description
Star wheel	0.3 kW	1.6 A	Q2

Air nozzle tube clearance

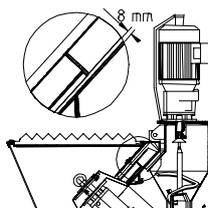


The distance between the air nozzle tube and plaster nozzle should always be equivalent to the diameter of the plaster nozzle hole; for example: 14 mm finishing plaster nozzle = 14 mm distance.



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 pump D6-2L



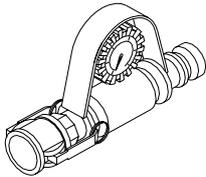
The mixer pump **PFT G 5 c FU** is standardly equipped with the pump system D6-2L.

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



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

New pump components with a conveying hose of 10 m should attain a conveying pressure of approx. 15 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

(item no. 20 21 68 10).

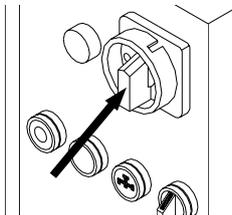
During installation/removal of the mortar pump, the following must be observed:

- the main switch must be switched off during assembly.

Furthermore, observe that:

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.



Checking the conveying pressure and backpressure

Connect the 10 m conveying hose

Connect the pressure tester to the outlet tap at the hose end

Open valve

Switch on machine and let water run until water emerges from the outlet tap (let hose bleed)

Close valve

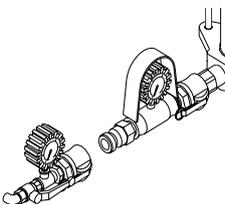
Let pump run against pressure until there is no more increase in pressure

Switch off the machine

If the required pressure is no longer attained, 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!

1. A D6-2L stator can be used up to 15 bar operating pressure.
2. The maximum conveying distance depends mainly on how a particular type mortar flows. Heavy, coarse-grained mortar does not flow well. Fluid mortars, filling compounds and floor screed have good flow characteristics.
3. Using thicker mortar hoses is recommended if you exceed an operating pressure of 15 bar.
4. Use the following original spare parts to avoid machine malfunctions and excessive wear on the pump motor, pump shaft and pump:

PFT rotors

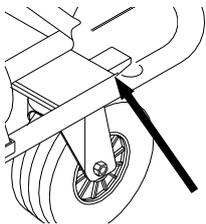
PFT stators

PFT pump shafts

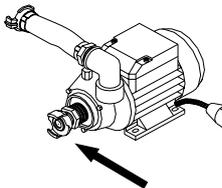
PFT mortar pressure hoses

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.

Start-up

- Transport assemblies as near as possible to the object to work with (for the assembly, see Transport).
- Lock the castor before putting the machine into service.



- Clean and bleed the 3/4" water hose to clean out impurities.
Then connect the water hose to the built-in water pump.

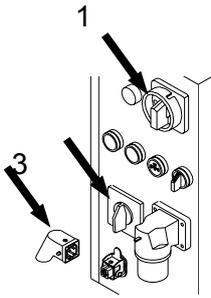
Note

Only use clean water that is free of particulates. The minimum pressure is 2.5 bar when the machine is running.

WARNING!

When working from the water drum, the strainer with filter screen (item no. 20 47 50 00) must be mounted (bleed water pump).

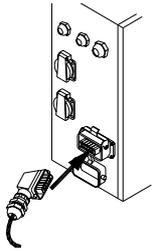
The machine may only be connected to a worksite distribution board with 16 A and approved 30 mA FI safety switch. The connection cable must correspond to the H07 RN-F 3 x 2.5 mm² version.



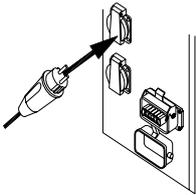
We always recommend using the 3 x 2.5 mm², 25 m PFT power cable with safety plug and CEE coupling (item no. 20 42 34 20).

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

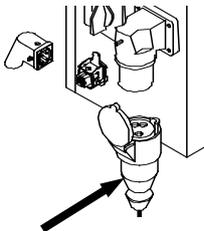
- Turn off the main reversing switch (1) ("0" position, lockable).
- Turn the star wheel switch (2) to "0".
- Pull out the dummy plug (3).



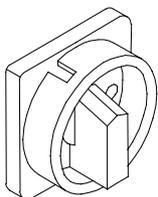
Connect pump motor (10-pin plug).



Switch off the compressor. (Pull the plug)



Connect the control box to the power supply.

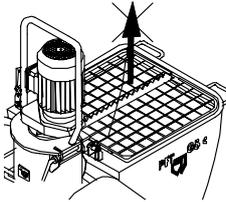


Now the following steps must be carried out:

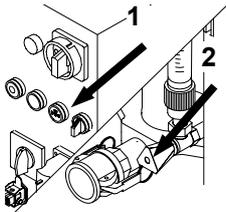
Turn on the main switch



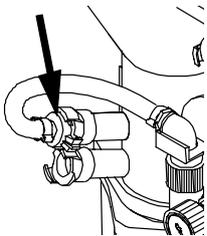
Warning:



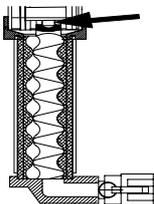
The protective grille should not be removed during operation or while preparing the machine.



Press water flow button (1) (water pump runs), adjust estimated water quantity at the needle valve (2).



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).

WARNING!



If the 7-pin connection plug of the mixer pump motor is removed, the control circuit is interrupted (starting lock). To put the machine back into service, the green ON switch must be used again.



Star wheel selector switch

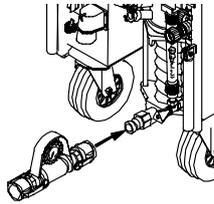
Position "1"

Star wheel runs in synchronization with the mixer pump and is switched on and off using the air control or remote control.

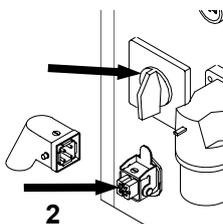


Position "0"

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.

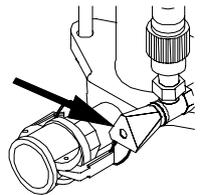


Connect the mortar pressure gauge to the pressure flange.

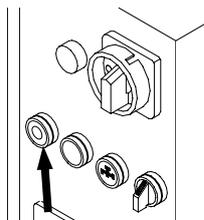


Fill the storage container with dry mortar.

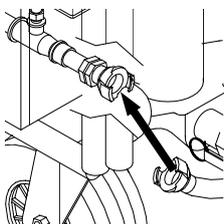
Turn the star wheel switch (1) to "1". Insert the dummy plug (2). Now the machine is running. The mortar consistency can now be checked at the mortar outlet flange (do not connect the mortar hose yet). Set the water quantity to approx. 10% above the nominal value with the motor running. The reference value is the water setting for the correct mortar consistency; e.g. Knauf MP 75 – reference value approx. 650 to 750 l/h.



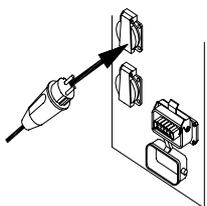
If mortar emerges, correct the water supply for optimum consistency by adjusting the water quantity with the needle valve – visible on the cone of the water flow meter. Turn the hand wheel in a clockwise direction to reduce water flow. Turn it in the opposite direction to increase water flow.



Press the red "OFF" pushbutton (machine stops)



Connect the air hose to the air manifold and spraying gun



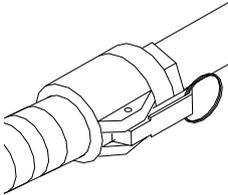
Switch on compressor (insert plug)

Connect all required mortar hoses to each other and flush them with water to avoid blockages (do not leave water in the hoses). To do so, use plaster coupling (in tool bag). If the mortar quality is unknown, pour approx. 3 litres of lime or plaster slurry into the first hose behind the machine.



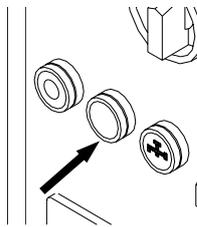
WARNING!

Make sure the coupling is clean and connected properly.



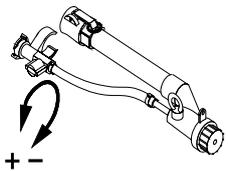
Connect the hoses to the mortar pressure gauge and observe the mortar hose seal again.

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

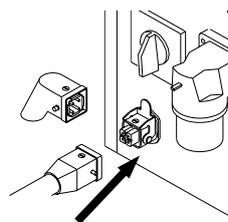


Press green "ON" selector switch and open air tap on spraying gun. The machine starts; plastering can now begin.

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.



Open and close the air tap on the spraying gun to switch the machine on and off.



NOTE:

If work is done without air (e.g. when pumping flow screed), the machine is switched on and off via a 42 V remote control. For this purpose, the dummy plug must be removed from the coupling and the remote control plug connected.

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). Uniform mixing and spraying cannot be ensured if the amount of water is insufficient. This can clog the hoses and the pumping components are then 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 result in a better spraying effect. It is important that the gap between the air nozzle tube and the nozzle outlet corresponds to the diameter of the nozzle (see also page 17).

Interruption of work

Observe the guidelines of the material manufacturer regarding interruptions.

It is recommended to clean the pump prior to longer interruptions. To do so, see the corresponding step on page 20 – Measures at the end of work and when cleaning.

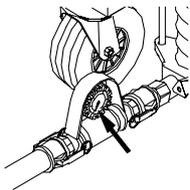
Every interruption of the spraying procedure results in minor irregularities of the mortar consistency. These normalise, however, as soon as the machine has been working for a while. Therefore, do not change the water supply each time you detect an irregularity, but wait instead until the consistency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

Measures at the end of work and when cleaning

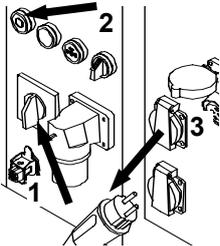


WARNING!

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 indicator.

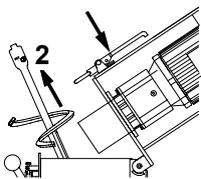


At the end of work, switch off the mortar supply (star wheel – turn star wheel switch to “0”) (1).

Run the mixing tube empty.

Press the red “OFF” pushbutton (2).

Switch off compressor (3) (pull plug) and open tap on finishing plaster device.

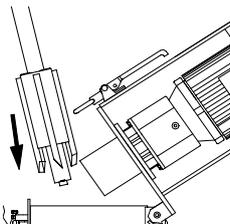


Disconnect mortar hose (only when depressurized).

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.

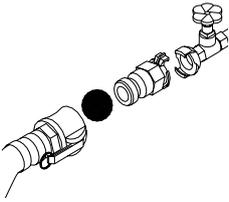
Close motor tilt flange and lock with snap lock; connect 7-pin coupling to control box.

Press green “ON” pushbutton approx. 5 – 10 seconds and let machine run until mixing tube is clean.

Press red “OFF” pushbutton, remove mixer cleaner.

Install the cleaned mixing shaft.

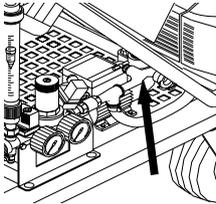
Close the motor tilt flange and lock it with the snap lock.



For cleaning, the hoses and mortar pressure gauge are connected to the water bleeder valve using the adapter (in the tool bag). This protects the pump from damage. A water-soaked sponge ball must first 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.

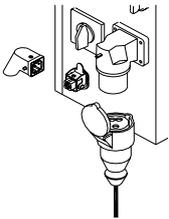
Repeat this procedure if the hoses are heavily soiled.

Clean the finishing plaster device separately under running water.

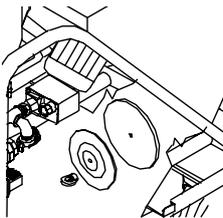


Close the water intake valve.

Depressurize the water hose by opening and then carefully disconnecting the water valve at the side.



Remove power supply.

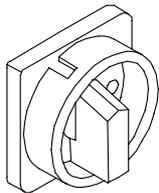


Empty the material hopper if the machine will not be used for several days.

To do so, open the hopper cleaning flap and remove the star wheel if necessary.



WARNING!



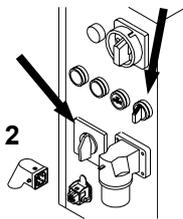
Prior to dismantling the hopper cleaning flap, the main switch must be turned off or the power supply must be disconnected.

Clearing hose blockages



WARNING!

In accordance with the safety regulations of the Builder's Guild, all personnel engaged in clearing hose blockages should wear safety goggles and should position themselves in such a way as to avoid being struck by discharged mortar.

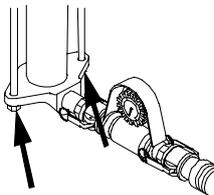


Switch off star wheel motor (1)

Run pump motor briefly in reverse, and in doing so:

Cover outlet opening of pump tube with foil

"Reverse" (2) (water supply is automatically interrupted) until pressure at mortar pressure gauge has fallen to 0 bar



Loosen nut on pressure flange slightly so that any residual pressure is released, detach hose coupling and clean hose

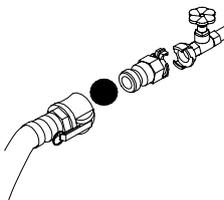
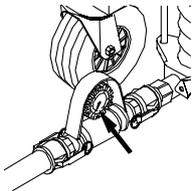
To remove residual mortar from the mortar hose, see page 20 "Cleaning the hose"

Measures to be taken in the event of a power failure



WARNING!

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



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



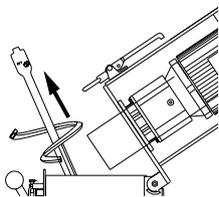
Release the tie rod screws, remove the pump, push the rotor out of the stator and clean it thoroughly. Clean the pressure flange or agitator (ROTOMIX or ROTOQUIRL). Clean the mixing area and the mixing shaft with water and a spatula. Then assemble the entire pump and prepare it for operation.

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

Using the strainer incl. filter screen (item no. 00 00 69 06) and booster pump, supply the machine with clean water from a container.

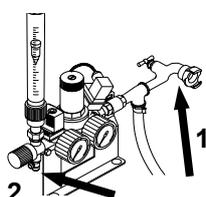
Measures to be taken if there is a risk of frost

After cleaning the machine:



Disconnect water supply.

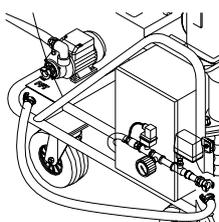
Remove mixing shaft.



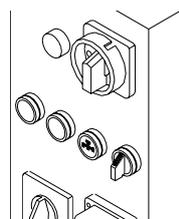
Open the water bleeder valve (1) and relieve the water pressure in the hose.

Disconnect the water hose and empty it.

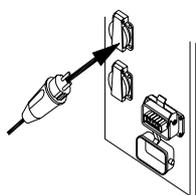
Open the outlet tap (2) on the water manifold.



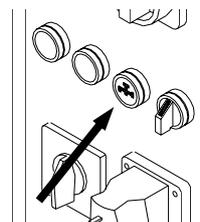
Remove water hose from the spraying gun and attach it to the water inlet.



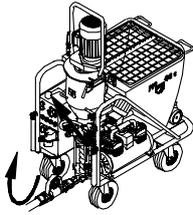
Switch on the main switch.



Switch on compressor (insert plug).

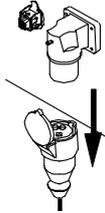


Press the water flow button. The water is now blown out of the manifold with compressed air (at 1.5 bar for approx. 1 minute).



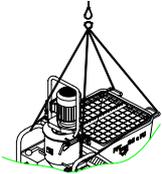
Disconnect and empty the mortar hoses.
 Empty the mixer pump by folding up the entire pump component.
 The machine is now completely empty with the exception of a small residue in the screw pump. However, the machine must still be started carefully the next day.

Transport



First disconnect the power supply, then all other cable connections.
 Remove water supply lines.
 If required, unhook mixing tube.

The **PFT G 5 c FU 230** mixer pump consists of several units (mixing tube, motor with tilt flange, material hopper) that can be transported separately.



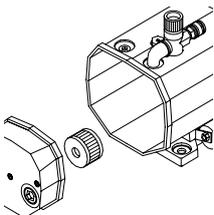
When transporting using a crane, all loose parts (compressor) must first be removed.
 Observe the ultimate load of the ropes (min. 350 kg).



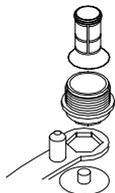
WARNING!

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

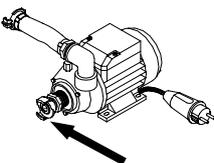
Maintenance



Clean the compressor's filter on a weekly basis, depending on operation. If heavily soiled, the filter should be replaced.

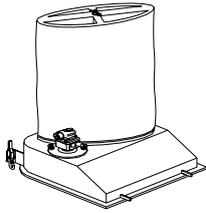


The dirt trap in the pressure reducer should be taken out and cleaned at least once every two weeks or replaced if necessary.



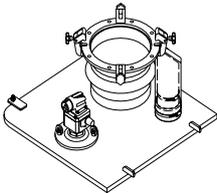
Inspect the brass screen at the opening to the booster pump daily.

Accessories



PFT injection hood for G 5 (item number 00 04 43 34)

The PFT injection hood is used for the feeding of dry material into the **PFT G 5 c FU 230** mixer pump with the help of the SILOMAT system.



PFT delivery hood for G 5 c, cpl. (item number 00 04 03 32)

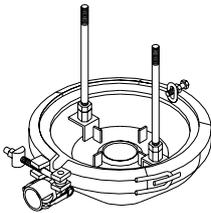
The PFT delivery hood is for feeding the **PFT G 5 c FU 230** mixer pump with dry material directly from the silo/container. If the material hopper of the **PFT G 5 c FU 230** mixer pump signals that it is empty, the mixer pump stops.



ROTOMIX D pumps, cpl. with size 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

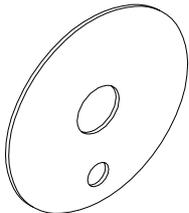
All guidelines of the material manufacturer must be observed.



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

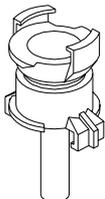
Agitator for the improved solubilisation and mixing of the material. Direct drive via the rotor tenons. Volume of approx. 4.2 l

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)

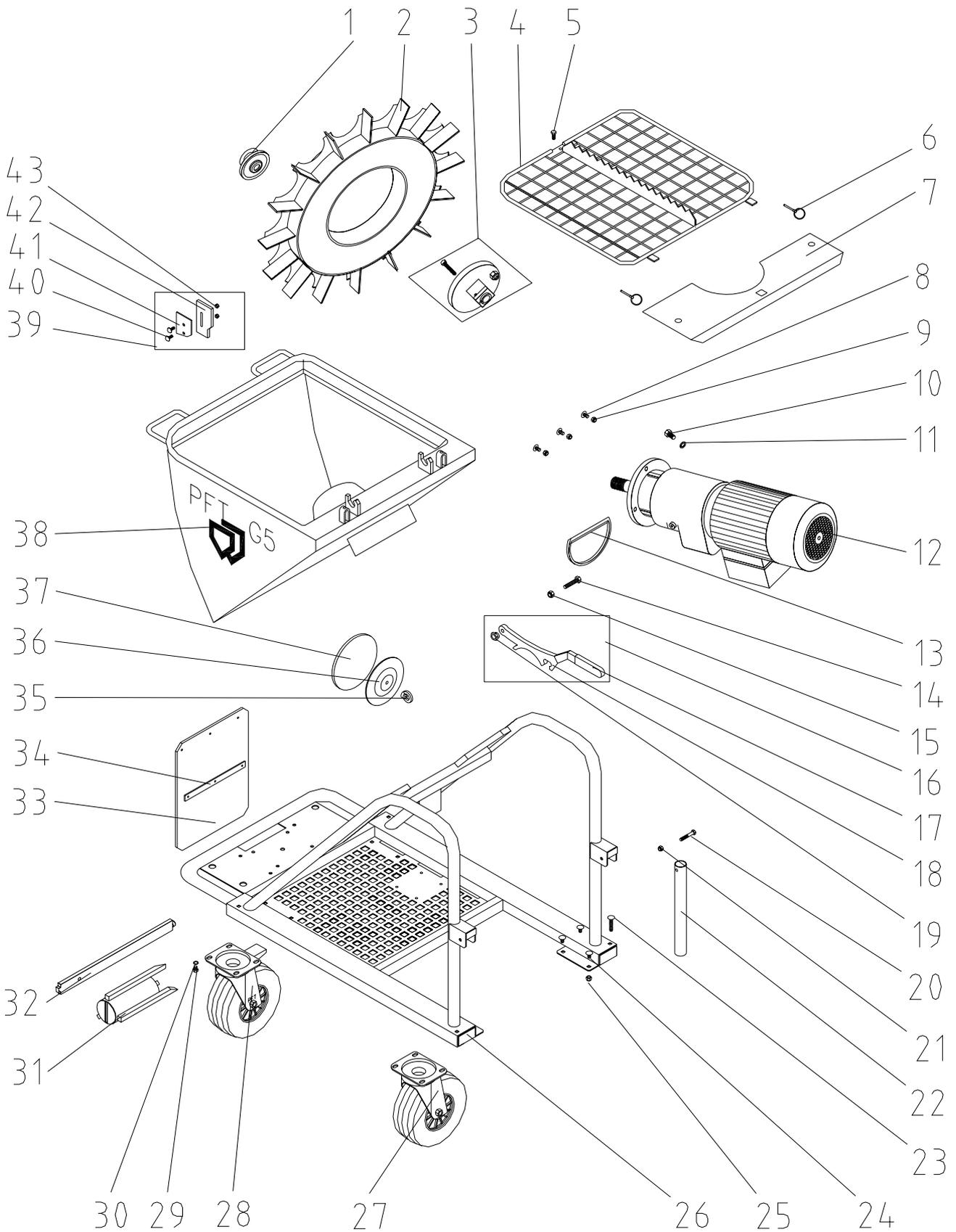
For the improved injection of water into the mixing area in the event of a low water factor.

Fault – Cause – Remedy

Fault	Cause	Remedy
Machine will not start.	<i>Water</i> Water pressure too low – Gauge displays pressure below 2.2 bar	- Check water supply - Clean dirt trap - Switch on booster pump
Machine will not start.	<i>Electricity</i> -Power supply okay? -FI safety switch triggered? -Main switch turned on? -Fault indicator lamp lights up? -Motor safety switch triggered? -Self-holding button not pressed? -Contactor defective? -Fuses defective? -Water safety switch incorrectly set? -Pump jammed?	
Machine will not start.	<i>Air</i> - Insufficient pressure gradient in remote control due to blocked air pipe or blocked air nozzle tube	Clean blocked air pipe or air nozzle tube.
Machine will not start.	-Air safety switch incorrectly set - Compressor connected and switched on?	
Machine will not start. (No display at flow meter)	<i>Material</i> - Too much thickened material in the hopper or mixing area - Material in pump component too dry	If necessary, empty the hopper to half-full and restart. WARNING! First turn off main switch and pull plug
Water is not running. (No display at flow meter)	- Solenoid valve (bore in diaphragm blocked) - Solenoid coil defective - Pressure reducing valve closed - Water supply blocked at pump tube - 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 safety switch defective or triggered	
Stops after running briefly.	- Dirt trap is clogged - Pressure reducer filter is dirty - Hose connection or water supply line too small - Water intake line too weak or too long	Clean or replace screen and enlarge the water connection Connect additional booster pump if necessary

Machine will not switch off	<ul style="list-style-type: none"> - Air pressure safety switch incorrectly set or defective - Air hose or gaskets defective - Air tap on spraying gun defective - Insufficient compressor output - Air supply line not connected to compressor 	<ul style="list-style-type: none"> - Adjust air pressure safety switch - Replace air hose or check compressor
No mortar flow (air bubbles)	<ul style="list-style-type: none"> - Poor mixture in mixing tube - Motor clutch defective - Mixing shaft defective - Inlet funnel on mixing tube has become wet - Mortar clogs and narrows mixing tube inlet 	<ul style="list-style-type: none"> Add more water Replace motor clutch If this doesn't help, clean or replace mixing shaft Dry mixing tube inlet and restart
"Thick-thin" mortar flow	<ul style="list-style-type: none"> - Not enough water - Water safety switch incorrectly set or defective - Mixing shaft defective; not original PFT mixing shaft - Pressure reducer incorrectly set or defective - Rotor worn out, defective - Stator worn out or clamped too loosely - Clamp defective (oval) - Inner wall of mortar hose defective - Rotor too deep in pressure flange - Not original PFT spare parts 	<ul style="list-style-type: none"> If there is not enough water, increase by 10% for approx. ½ minute and then slowly turn back to normal setting or tighten or replace pump components Replace mortar hose Check mixing shaft and motor clutch
Water level rises in mixing tube during operation	<ul style="list-style-type: none"> - Backpressure in mortar hose higher than pump pressure - Rotor or stator worn out - Hose blockage due to mortar being too thick (high pressure due to low water factor) 	<ul style="list-style-type: none"> Tighten or replace stator; if required, also replace rotor Unblock hose
Fault lamp lights up	<ul style="list-style-type: none"> Overload - Motor safety switch triggered (pump motor) - due to pump jamming with dry material - due to insufficient water quantity - Motor safety switch (2.5 A) triggered (star wheel motor) - Clogged material in hopper 	<ul style="list-style-type: none"> Clean mixing tube and increase water supply when starting up Clean hopper and star wheel

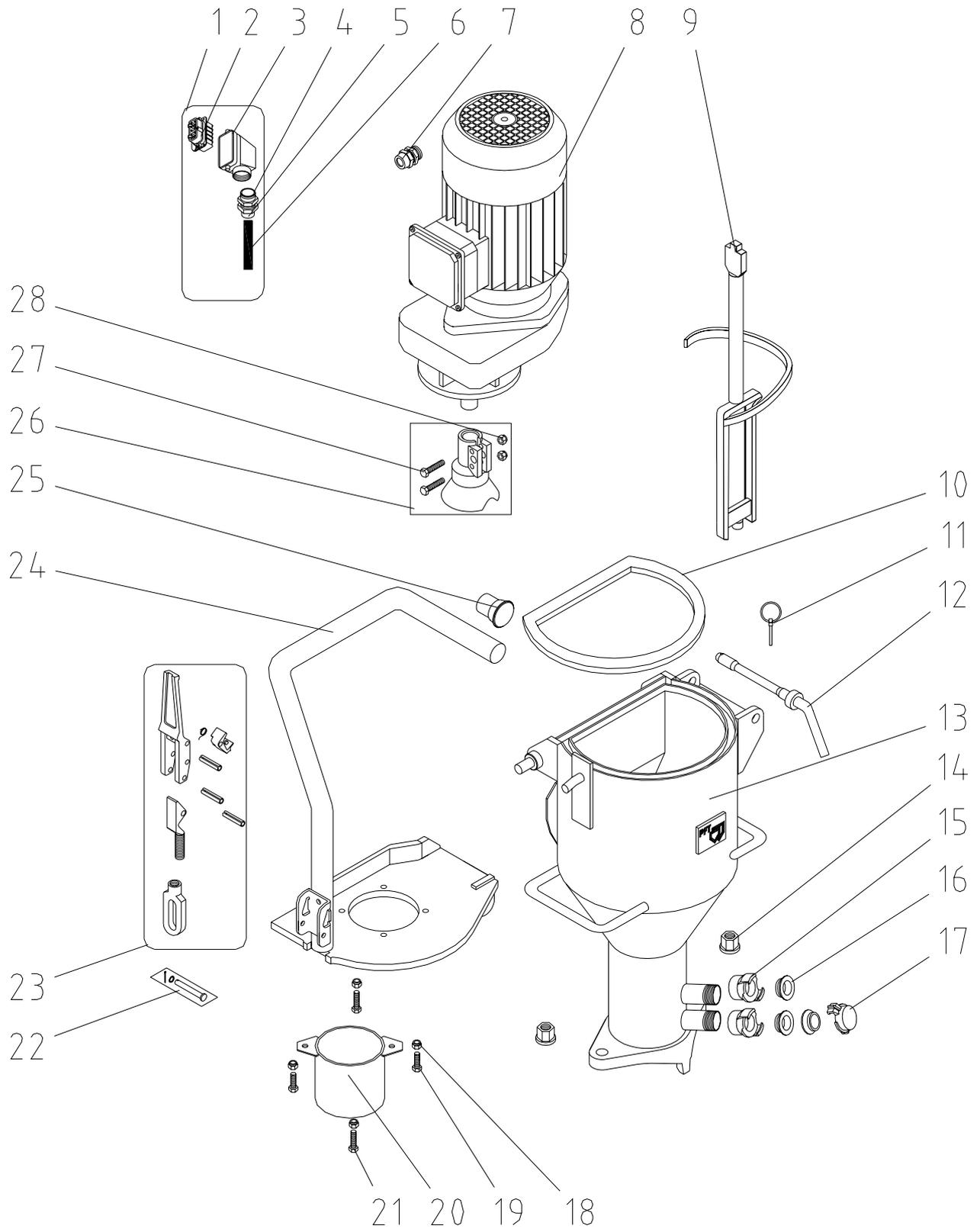
Spare parts diagram of material hopper and frame



Spare parts list for material hopper and frame

Item	Qty.	Item no.	Description
1	1	00 07 27 90	Star wheel ring nut, M24, zinc-plated
2	1	00 04 64 73	G 5 star wheel, deep-drawn, RAL9002
3	1	20 10 18 10	Star wheel fixing plate
4	1	00 00 73 61	G 5 protective grille
5	1	20 20 78 19	Hex. screw, M8 x 16 with collar
6	1	20 10 10 10	Splint, D 4.5 with ring
7	1	00 04 56 47	G 5 c anti-jam plate, deep-drawn, RAL9002
8	8	20 20 63 14	Round-head screw, M8 x 16, DIN 603, zinc-plated
9	8	20 20 72 00	Nut, M8, DIN 985, zinc-plated
10	4	20 20 99 61	Hex. screw, M12 x 20, DIN 933, zinc-plated
11	4	20 20 91 10	Spring washer, B 12, DIN 127, zinc-plated
12	1	00 05 85 78	Geared motor ZFQ38, 0.3 kW, 12 rpm, RAL2004
13	1	20 10 11 00	G 4 outlet opening gasket, sponge rubber
14	1	20 20 96 01	Hex. screw, M10 x 45, DIN 933, zinc-plated
15	1	20 20 72 10	Nut, M 10, DIN 985, zinc-plated
16	1	00 01 13 86	G 4 locking lever with rubber cap, RAL
17	1	00 01 04 62	Plastic handle 25 x 12 for locking lever
18	1	00 00 25 84	G 4 locking lever, 1 catch, RAL2004
19	1	00 08 80 29	Eccentric bushing MS for G 4 locking lever
20	2	20 20 78 02	Hex. screw, M8 x 50, DIN 933, zinc-plated
21	2	20 20 72 00	Nut, M8, DIN 985, zinc-plated
22	2	00 04 89 96	Carrying handle, folding, G 54 E, RAL2004
23	4	00 05 09 40	Round-head screw, M8 x 55, DIN 603, zinc-plated
24	12	20 20 63 22	Round-head screw, M8 x 20, DIN 603, zinc-plated
25	16	20 20 72 00	Nut, M8, DIN 985, zinc-plated
26	1	00 04 91 83	Frame G 5 c, canted, RAL2004
27	3	00 00 11 15	Castor G 4.66
28	1	00 00 11 16	Double-stop castor G 4.66
29	16	20 20 87 02	Hex. screw, M8 x 10, DIN 933, zinc-plated
30	16	20 20 91 00	Spring washer, B 8, DIN 127, zinc-plated
31	1	20 10 23 20	Mixing tube cleaner, D and R pumps
32	1	00 09 12 89	Cleaner shaft, zinc-plated
33	1	00 03 73 54	Dust cover for G 5 c star wheel motor, RAL2004
34	1	00 01 99 64	G 5 rubber cover for terminal strip, RAL9002
35	1	20 20 79 50	Ring nut, M8, DIN 582, zinc-plated
36	1	00 00 82 35	Cleaning hole cover (exterior), RAL9002
37	1	00 00 23 58	Disc gasket for cleaning opening, D=173 mm
38	1	00 04 58 48	G 5 material hopper, deep-drawn, RAL9002 with logo
39	1	00 03 91 79	Reetrofit kit, G 5 star wheel scraper
40	2	00 02 26 01	Round-head screw, M6 x 20, DIN 603, zinc-plated
41	1	00 02 26 04	Clamping plate for scraper rubber
42	1	00 02 26 02	Scraper for G 5 star wheel
43	2	20 20 62 00	Nut, M6, DIN 985, zinc-plated

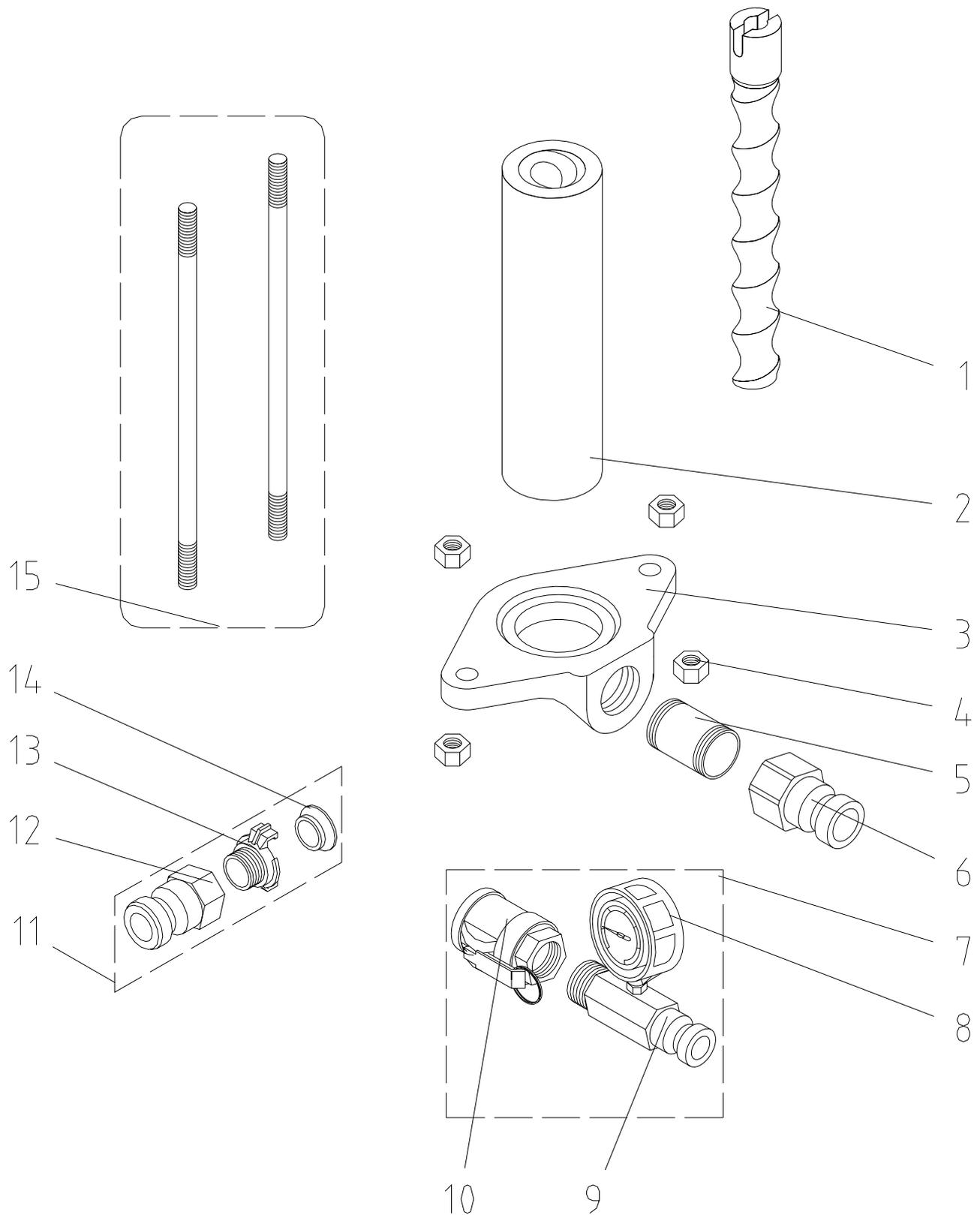
Spare parts diagram of mixing tube and geared motor



Spare parts list for mixing tube and geared motor

Item	Qty.	Item no.	Description
1	1	00 07 15 45	Motor connection cable, 1.9 m 7 x 1.5 mm ² , 16A with 10-pin industrial plug
2	1	20 43 23 00	Male insert, 10-pin HAN 10 E
3	1	00 04 06 71	Socket box, 10-pin HAN 10 E 16 A
4	1	00 06 69 81	EMC cable screw joint, M25 x 1.5
5	1	00 06 91 62	Extension (metal), PG16 / M25 x 1.5
6	1	00 06 91 30	Oil flex cable, 7 x 1.5 mm ² , 540P CP with shield
7	1	00 06 69 81	EMC cable screw joint, M25 x 1.5
8	1	00 05 35 27	Geared motor EFQ68, 4 kW, 400 rpm, tilt switch, RAL2004
9	1	20 10 35 10	G 4 / G 5 mixing shaft, armoured, RAL2004
10	1	20 10 09 00	G 4 tilt flange gasket, sponge rubber, 20 x 15 x 750
11	1	20 10 10 10	Splint, D 4.5 with ring
12	1	20 10 12 02	Motor tilt flange pin, zinc-plated
13	1	20 10 06 56	Mixing tube, G 4 D pump, RAL2004
14	2	20 20 99 21	Flanged nut, M16, DIN 6331, zinc-plated
15	2	20 20 11 00	Geka coupling, 1", female thread
16	3	20 20 17 00	Geka coupling gasket (pack of 50 pcs.)
17	1	20 20 16 50	Geka coupling dummy cover
18	4	20 20 72 00	Nut, M8, DIN 985, zinc-plated
19	2	20 20 78 00	Hex. screw, M8 x 30, DIN 933, zinc-plated
20	1	20 10 29 01	Protection tube for grasping claw, G 4
21	2	20 20 78 01	Hex. screw, M8 x 35, DIN 933, zinc-plated
22	1	20 20 85 22	Cotter bolt, 8 H11 x 58 x 54, with disc and splint, zinc-plated
23	1	20 10 08 01	Snap lock with catch
24	1	00 04 76 21	G 54 tilt flange with tubular bar, RAL2004
25	1	00 04 80 15	PVC cap, 1" (round, black)
26	1	00 06 18 58	G 4 cast grasping claw with round funnel trap
27	2	00 02 32 71	Hex. screw, M 8 x 40, DIN 931, zinc-plated
28	2	20 20 72 00	Nut, M8, DIN 985, zinc-plated

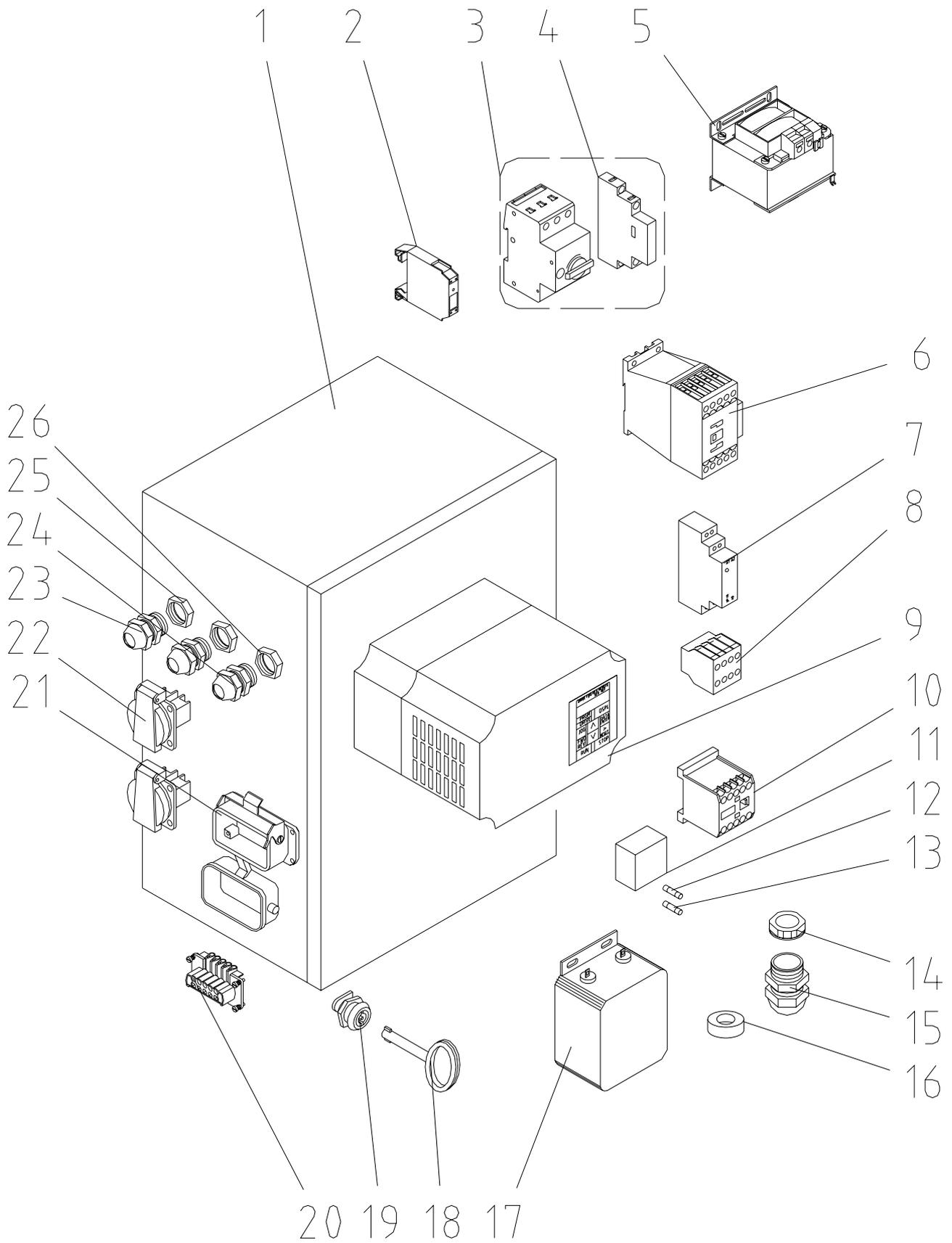
Spare parts diagram of mortar pump / mortar pressure gauge



Spare parts list for mortar pump / mortar pressure gauge

Item	Qty.	Item no.	Description
1	1	20 11 30 13	Rotor D6-2L, blue head
2	1	20 11 55 07	Stator D6-2L, 200 mm long, maintenance-free, blue
3	1	00 04 16 64	D pump pressure flange, G 4, zinc-plated, 1 1/4" female thread
4	4	20 20 99 20	Hex. nut, M16, DIN 934, zinc-plated
5	1	20 20 32 60	Double nipple, 1 1/4" x 40, no. 23, zinc-plated
6	1	20 19 93 01	Coupling, 25 V-part, 1 1/4" female thread
7	1	00 10 22 27	Mortar pressure gauge, 25 mm, zinc-plated, 0-100 bar, cpl.
8	1	00 09 90 88	Gauge with plastic housing, 0-100 bar, 1/2" pressure transmitter VA
9	1	00 04 86 92	Coupling, 25 V-part, 1" male thread with 1/2" bore
10	1	20 19 92 00	Coupling, 25M part, 1" female thread LW24 with gasket
11	1	20 19 95 00	Plaster coupling, 25 V-part, LW24 with Geka
12	1	20 19 93 00	Coupling, 25 V-part, 1" female thread
13	1	20 20 08 00	Geka coupling, 1" male thread
14	1	20 20 17 00	Geka coupling gasket (pack of 50 pcs.)
15	1	20 11 87 09	Tie rods, M16 x 290 mm (1 set = 2 pcs.)

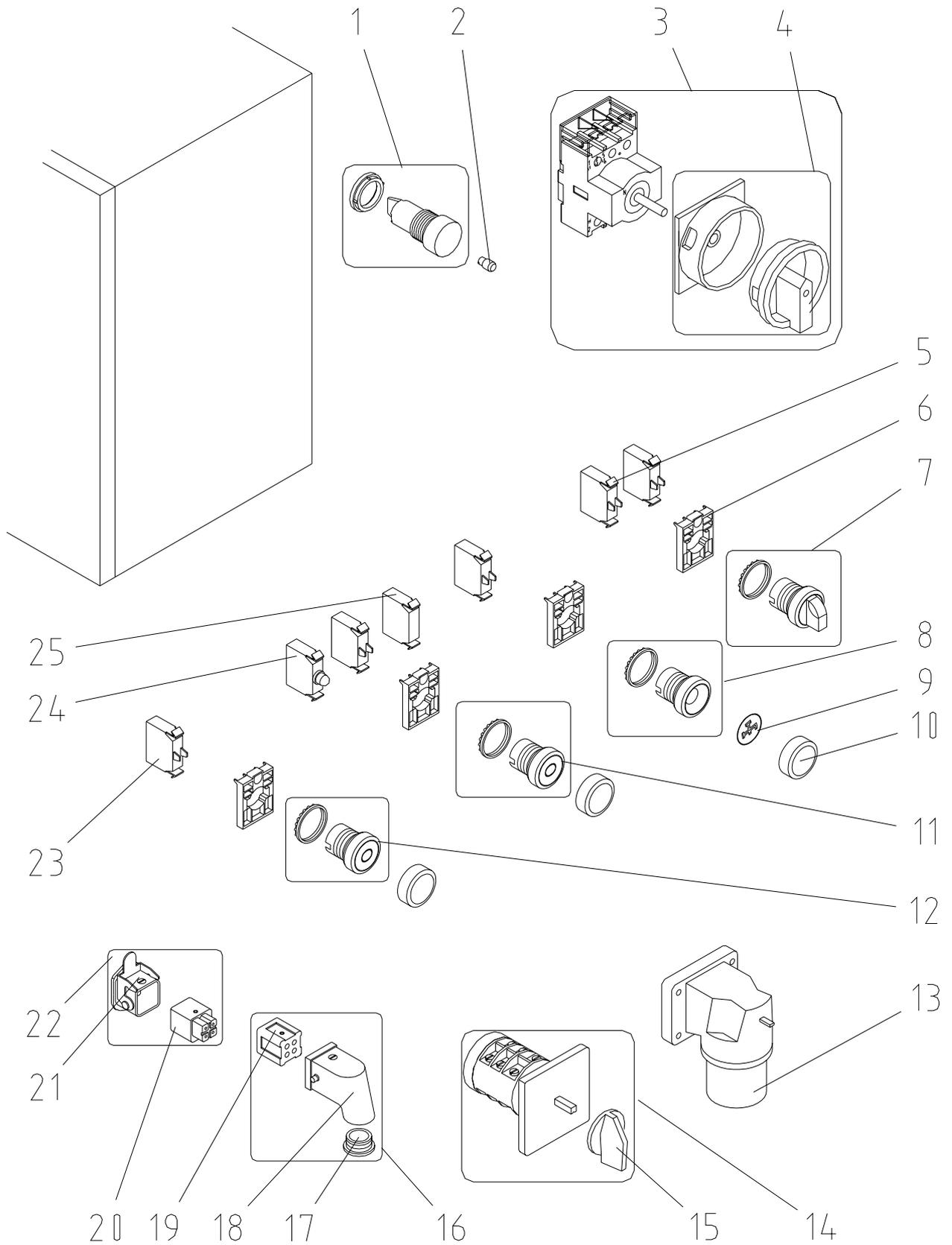
Spare parts diagram of control box: Item no. 00 07 04 97



Spare parts list for control box: Item number 00 07 04 97

Item	Qty.	Item no.	Description
1	1	00 07 04 97	G 5 c control box with frequency converter
2	1	20 46 20 10	Switching relay STR 2 W DC 12 V
3	1	00 00 93 70	Motor protection switch 1.6-2.5 A PKZM 0-2.5
4	1	00 02 14 01	Auxiliary contact NHI-11-PKZO
5	1	00 02 21 51	Transformer unit, 230 V/42 V, 70 VA, NEW
6	1	00 08 42 25	Air-break contactor, DIL M17-10 42 V, 50 Hz 48 V, 60 Hz 7.5 kW, size II
7	1	20 44 81 20	Switching relay 42 V, 2 change-over contacts
8	1	00 08 52 93	Auxiliary switch DILM 32-XHI11 1S / 1Ö
9	1	00 03 75 92	Frequency converter, 230 V 4 kW 17.6 A programmed
10	1	20 44 66 10	Air-break contactor, DIL EM 10, 42 V 50 Hz/48 V 60 Hz
11	1	00 02 22 25	Foamed rubber fuse block
12	2	20 41 90 30	Microfuse, 5 x 20, 0.5 A, slow-blow
13	1	20 41 90 21	Microfuse, 5 x 20, 2.0 A, slow-blow
14	1	00 06 69 84	EMC counternut, M25 x 1.5
15	1	00 06 69 81	EMC cable screw joint, M25 x 1.5
16	1	00 06 69 94	Ferrite toroidal core d1-35.5 mm d2-19.2 mm
17	1	00 08 15 16	EMC filter for frequency converter, 4.0 kW 230 V 32 type: FN 2410-32-33
18	1	20 44 45 00	Key for control box, 3 mm
19	1	00 03 62 49	Lock for control box, (double-bit key)
20	1	20 43 22 00	Female insert, 10-pin, HAN 10 E
21	1	20 43 20 01	Housing, 10-pin, HAN 10 E
22	2	20 42 72 10	Panel mounted safety socket, grey
23	2	00 04 11 41	Skintop connection, M16 x 1.5
24	1	00 04 11 27	Skintop connection, M20 x 1.5
25	2	00 04 11 43	Skintop counternut, M16 x 1.5
26	1	00 04 11 45	Skintop counternut, M20 x 1.5

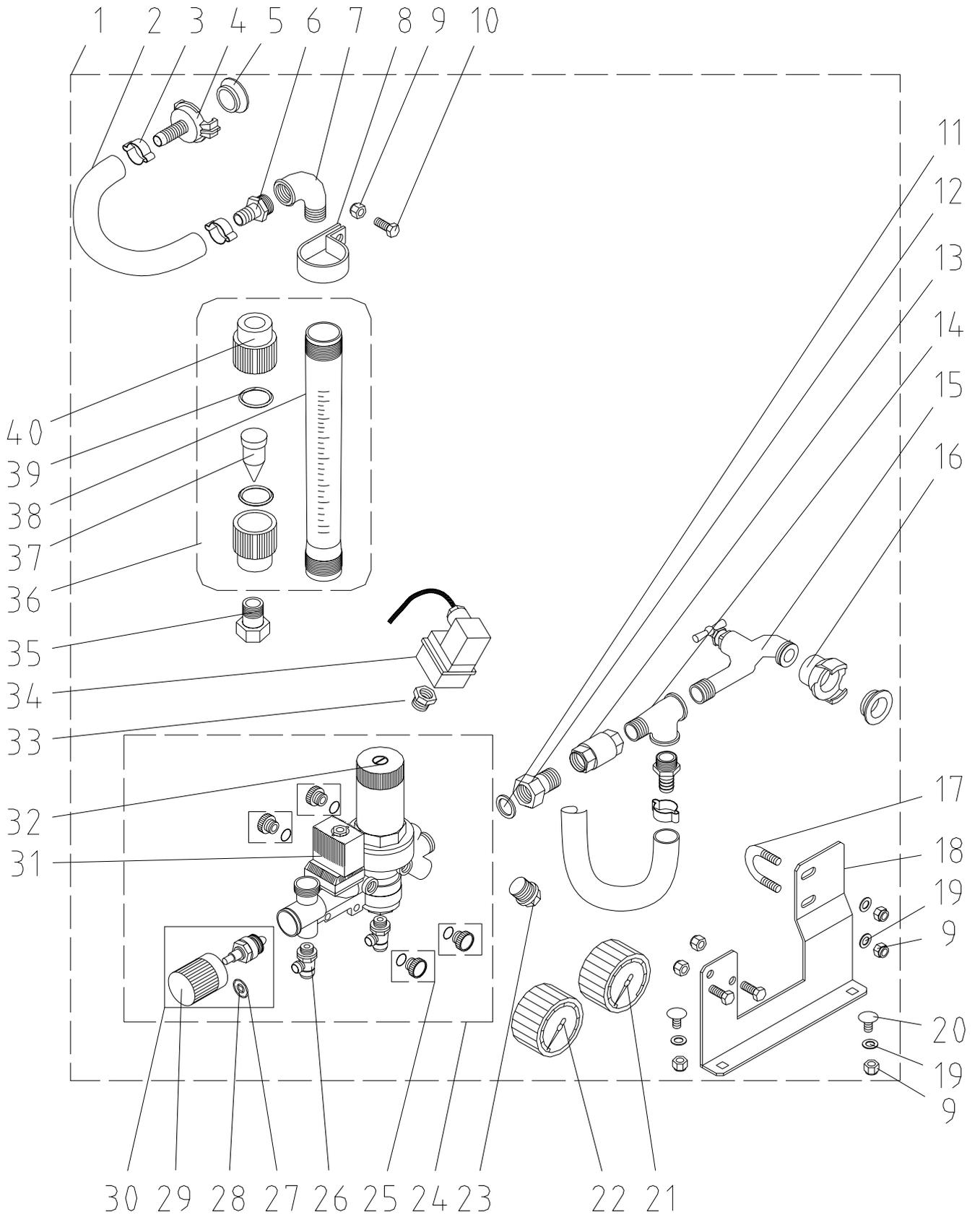
Spare parts diagram of control box: Item number 00 07 04 97



Spare parts list for control box: Item number 00 07 04 97

Item	Qty.	Item no.	Description
1	1	00 00 22 51	Control lamp plug-type socket, red, without light bulb
2	1	20 45 91 01	Light bulb, 42 V 2 W, plug-type socket, BA 9S
3	1	20 45 40 00	Main switch, 25 A 3-pin
4	1	20 45 40 50	Toggle with locking collar for main switch
5	4	00 05 38 35	Contact element, 1 closer, M22
6	4	00 05 38 34	Fastening adapter for switch elements
7	1	00 05 38 78	Selection switch toggle /sensing 0 latching M22
8	1	00 05 38 39	Pushbutton without sensor plate M22
9	1	00 05 38 42	Sensor plate for pushbutton, black, liquid M22
10	1	00 05 38 30	Membrane, round, for pushbutton, IP 67 M22-T-D
11	1	00 05 38 33	Illuminated button, green M22
12	1	00 05 38 37	Pushbutton, red, OFF, M22
13	1	00 01 25 77	CEE device plug, 3 x 16 A 6h blue no. 611306
14	1	00 02 21 62	On/Off switch, 3-pin, CA10 A202-600E
15	1	20 45 45 10	Toggle with screw for pole changing switch
16	1	20 42 85 01	Dummy plug, 4-pin, HAN 3A
17	1	20 43 12 00	Dummy stopper, PG 11
18	1	20 42 86 05	Socket box, 4-pin + 5-pin, angled
19	1	20 42 86 06	Male insert, 4-pin, HAN 3A
20	1	20 42 86 07	Female insert, 4-pin, HAN 3A
21	1	20 42 86 04	Housing, 4/5-pin, HAN 3A/HA 4
22	1	20 42 98 00	Coupling, 4-pin, HAN 3A with female insert
23	1	00 05 38 36	Contact element, 1 opener, M22
24	1	00 05 38 80	Illuminated element, green, 12-30 V
25	1	00 05 38 86	LED resistor series element for 42 V

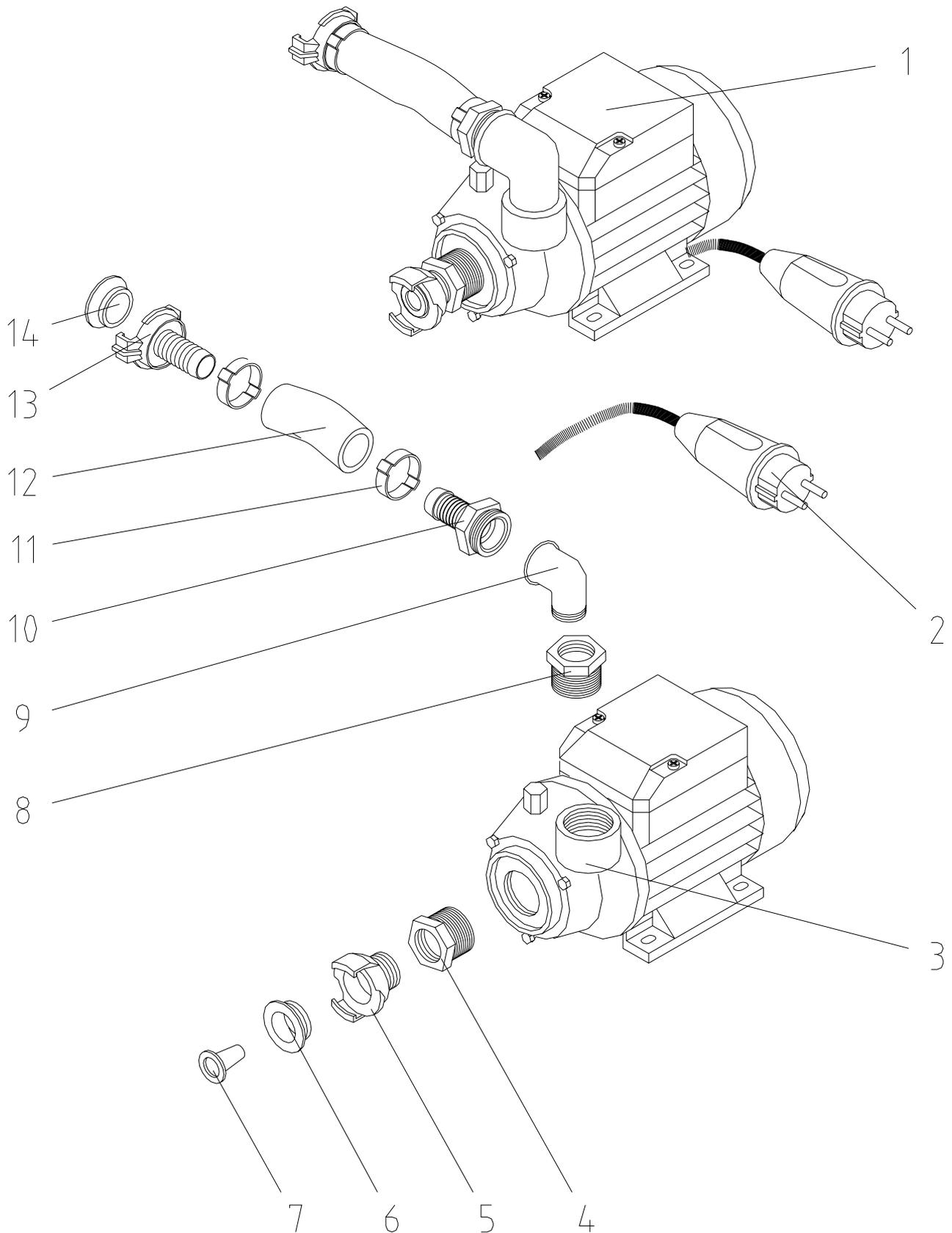
Spare parts diagram of water manifold: Item number 00 04 91 76



Spare parts list for water manifold: Item number 00 04 91 76

Item	Qty.	Item no.	Description
1	1	00 04 91 76	Water manifold, G 54 E, cpl., 1000 l, RAL2004
2	1	20 21 35 00	Water/air hose 1/2" x 580 mm
3	3	00 05 91 96	Hose clip 19-21
4	1	20 20 15 00	Geka coupling, 1/2" socket
5	1	20 20 17 00	Geka coupling gasket (pack of 50 pcs.)
6	2	20 19 04 10	Hose screw joint, 1/2" male thread, 1/2" socket
7	1	20 20 36 10	Elbow, 1/2" female/male thread, no. 92, zinc-plated
8	1	00 04 91 35	Water flow meter clamp, G 54, RAL2004
9	7	20 20 72 00	Nut, M8, DIN 985, zinc-plated
10	3	20 20 61 00	Hex. screw, M8 x 20, DIN 933, zinc-plated
11	1	20 15 60 10	Fibre sealing ring, 24 x 18 x 2
12	1	20 20 31 07	Nipple, 1/2", flat with 3/4" reducer nut for water manifold
13	1	20 21 90 50	Check valve, 1/2" female thread
14	1	20 20 40 00	T-piece, 1/2" female, 1/2" female, 1/2" male threads, no. 134, zinc-plated
15	1	20 21 50 00	Hose tap, 1/2"
16	1	20 20 12 00	Geka coupling, 3/4" female thread
17	1	20 20 99 85	Round steel rod, M8 x 3/4" x 43, zinc-plated
18	1	00 05 33 91	Bracket, water manifold, long, G 54 E, RAL2004
19	8	20 20 93 13	Washer, B 8.4, DIN 125, zinc-plated
20	2	20 20 63 14	Round-head screw, M8 x 16, DIN 603, zinc-plated
21	1	00 01 99 13	Gauge, 0-16 bar, 1/4" rear, D = 50 mm
22	1	00 00 93 67	Gauge, 0-4 bar, 1/4" rear, D = 50 mm
23	1	20 20 58 80	Screw plug, 1/2", DIN 910
24	1	00 03 92 86	Manifold block, red brass, DK 06 FN-1/2" E 42 V
25	1	20 15 61 00	Sealing plug with O-ring R 1/4" f.D06FN
26	1	00 04 04 28	Bleed valve, manifold block, red brass
27	1		O-ring, 18 x 2.5, DIN 3771-NBR 70
28	1		O-ring, 6 x 1.5, DIN 3771-NBR 70
29	1	00 04 05 80	Handle for control valve, red brass
30	1	00 04 04 26	Control valve insert, cpl., red brass
31	1	00 01 96 06	Solenoid valve, manifold block, G 5
32	1	00 01 96 07	Pressure reducing valve, manifold block, red brass, G 5
33	1	20 20 51 12	Reduction nipple, 3/8" male thread, 1/4" female thread, no. 241, zinc-plated
34	1	20 44 76 50	Pressure switch PS3/AF1 HMRS, 1/4", 1.9 bar - 2.2 bar closer
35	1	20 20 31 05	Nipple, 1/2", conical with 3/4" reducer nut for item no. 20157700
36	1	20 18 30 00	Water flow meter, 100 l/h - 1000 l/h, cpl.
37	1	20 18 34 00	Cone (WDFM type 1500)
38	1	20 18 31 00	Plastic tube 100 l/h - 1000 l/h
39	1	20 18 32 00	O-ring, 28 x 3.5, DIN 3771-NBR 70
40	1	20 18 33 10	Reduction piece, 1" male thread - 1/2" female thread, plastic

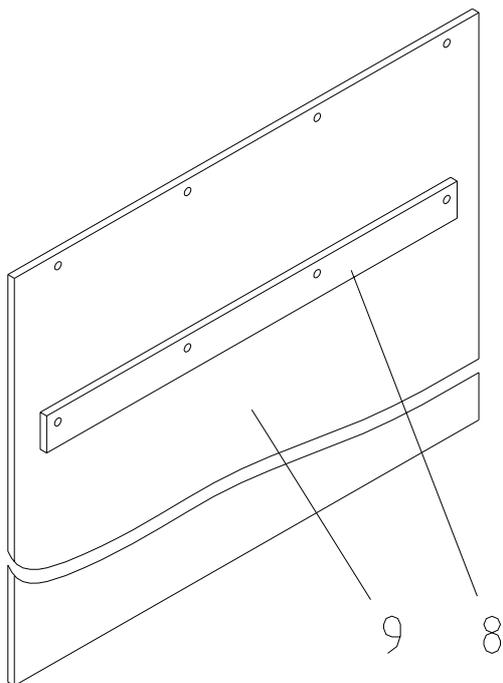
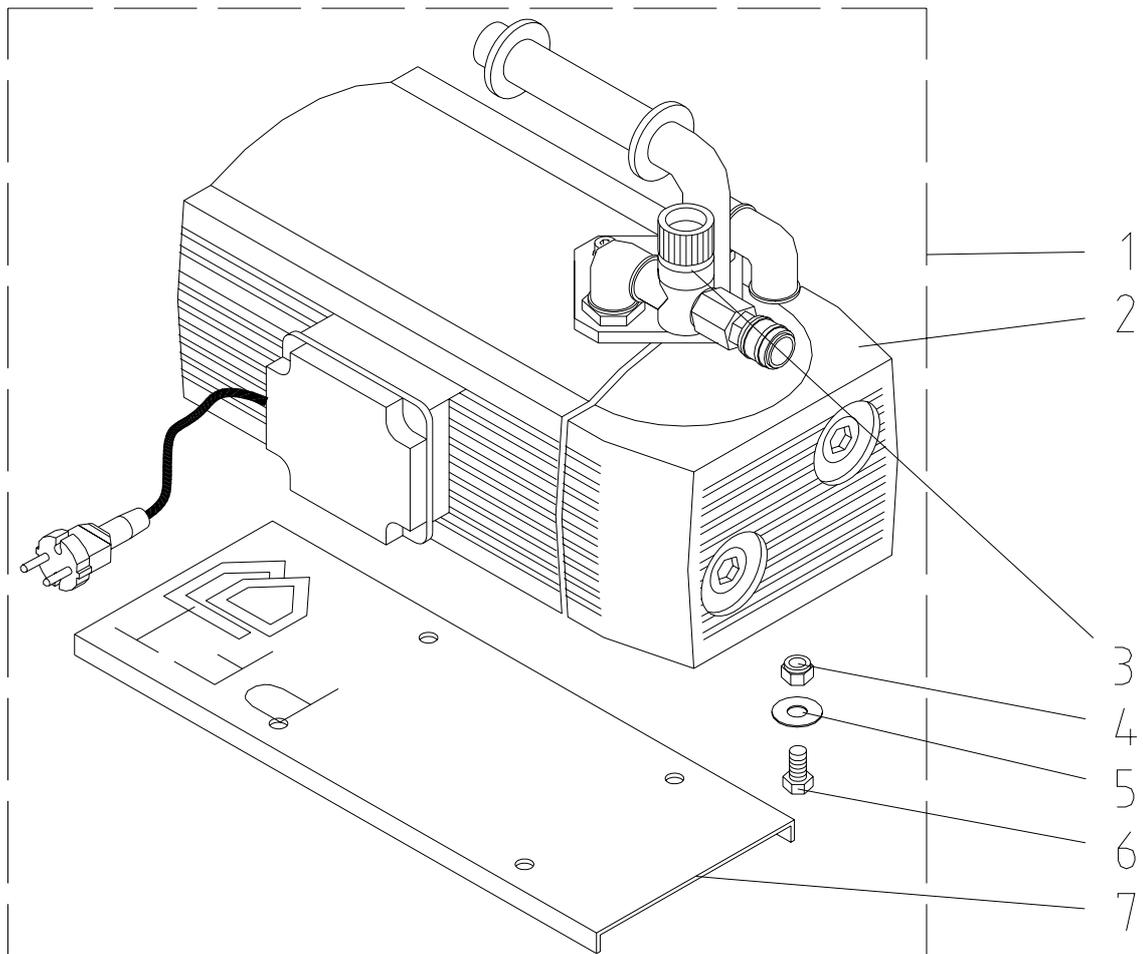
Spare parts diagram of booster pump: Item number 00 05 24 76



Spare parts list for booster pump: Item number 00 05 24 76

Item	Qty.	Item no.	Description
1	1	00 05 24 76	Booster pump, G 54 E 230 V Pkm 60 lateral cpl.
2	1	20 42 41 43	Motor connection cable, 0.8 m safety plug
3	1	00 09 93 12	Booster pump, AV3 0.5 kW PKm 65 230 V 1 Ph suction line at front, bronze pump head
4	1	20 20 50 00	Reduction nipple, 1" male thread - 3/4" female thread, no. 241
5	1	20 20 09 10	Geka coupling, 3/4" male thread
6	2	20 20 17 00	Geka coupling gasket (pack of 50 pcs.)
7	1	20 15 20 00	Geka coupling dirt trap
8	1	20 20 54 00	Reduction nipple, 1" male thread, 1/2" female thread, no. 241
9	1	20 20 36 10	Elbow, 1/2" female/male thread, no. 92, zinc-plated
10	1	20 19 04 10	Hose screw joint, 1/2" male thread, 1/2" socket
11	2	00 05 91 96	Hose clip 19-21
12	1	20 21 36 12	Water/air hose, 1/2" x 500 mm
13	1	20 20 15 00	Geka coupling, 1/2" socket
14	1	20 20 17 00	Geka coupling gasket (pack of 50 pcs.)

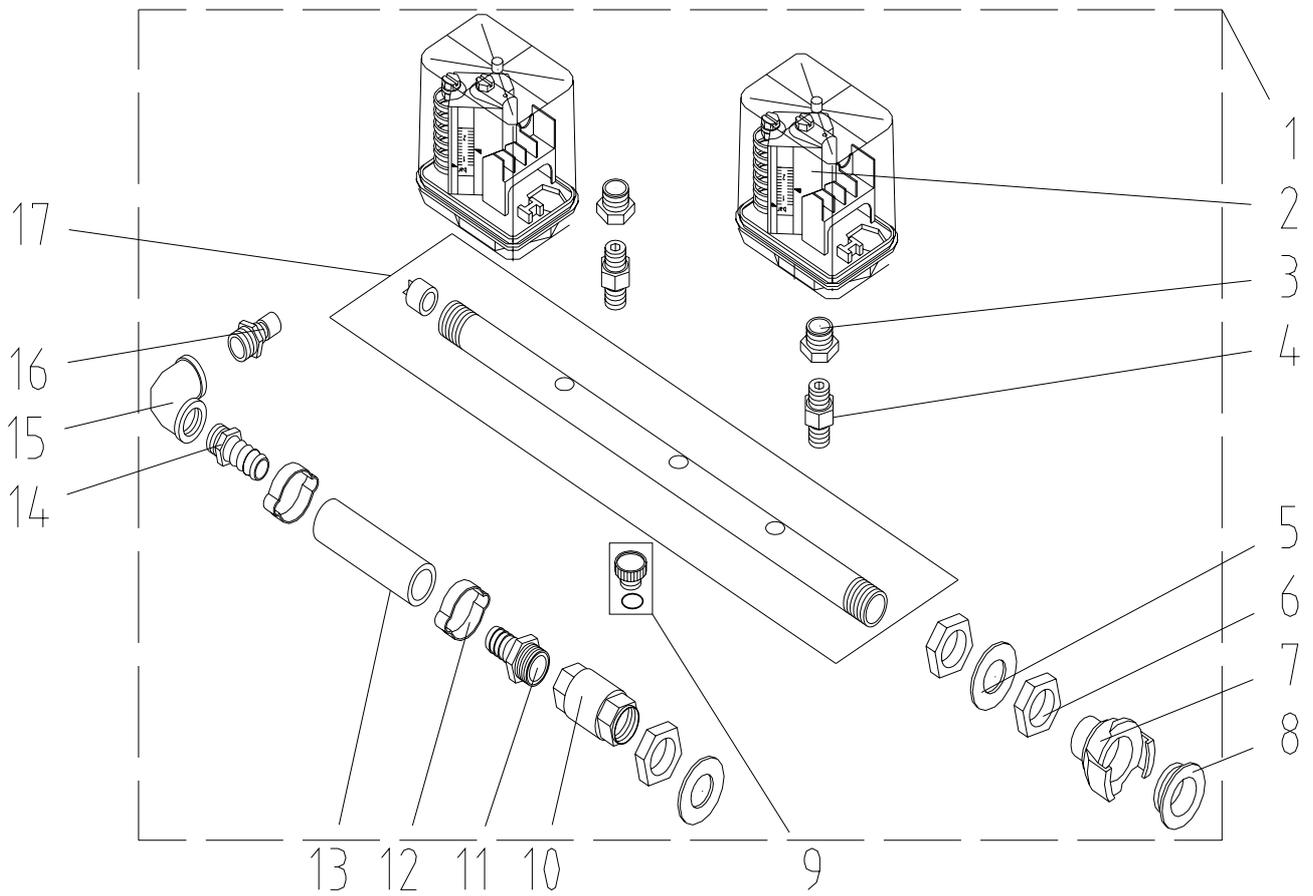
Spare parts diagram of air compressor DT 4.16: Item number 00 07 64 44



Spare parts list for air compressor DT 4.16: Item number 00 07 64 44

Item	Qty.	Item no.	Description
1	1	00 07 64 44	Air compressor DT4.16, 230 V, 1m cable, RAL2004, cpl.
2	1	00 04 77 22	Air compressor DT4.16, 230 V 50/60 Hz with 1 m cable and safety plug, RAL2004
3	1	00 00 10 19	Pressure regulating valve, air compressor, 230 V
4	4	20 20 72 00	Nut, M8, DIN 985, zinc-plated
5	8	20 20 93 20	Washer, 8.4 x 25 x 1.5, zinc-plated
6	4	20 20 78 00	Hex. screw, M8 x 30, DIN 933, zinc-plated
7	1	00 02 09 91	Adapter plate for compressor DT3.16, RAL2004
8	1	00 03 74 27	Terminal strip, compressor skirting, G 5 c, RAL2004
9	1	00 03 74 26	Dust skirting, compressor, G 5 c

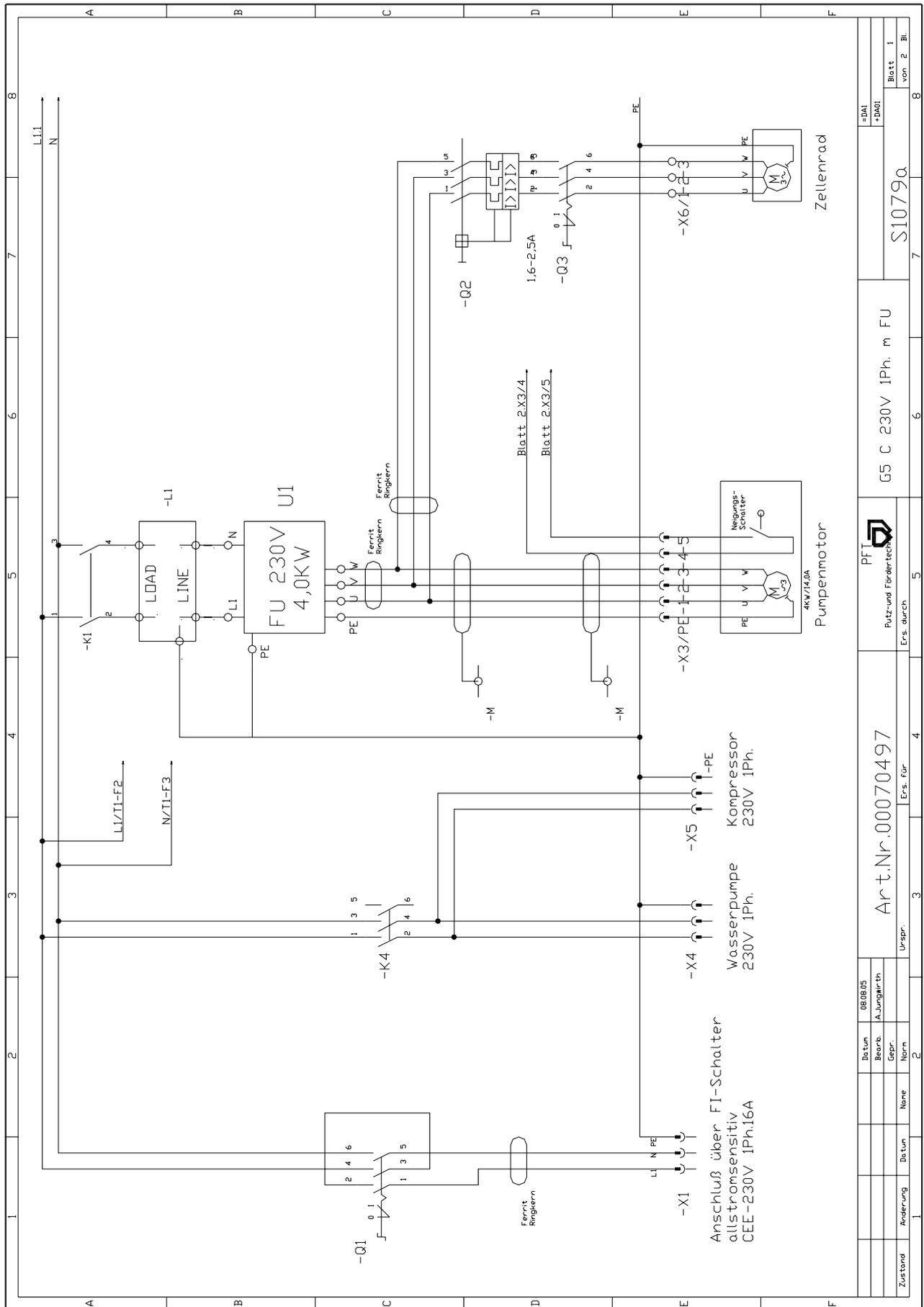
Spare parts diagram of air manifold: Item number 00 03 96 13



Spare parts list for air manifold: Item number 00 03 96 13

Item	Qty.	Item no.	Description
1	1	00 03 96 13	Air manifold, G 5 c FF4-4 without gauge
2	2	20 44 76 01	Pressure switch type FF4-4 0.22-4 bar
3	2	20 20 51 12	Reduction nipple, 3/8" male thread, 1/4" female thread, no. 241, zinc-plated
4	2	20 20 37 12	Screwed joint, 1/4" male brass thread for automatic switch-off
5	2	20 20 93 15	Washer, B 21, DIN 125, zinc-plated
6	3	00 00 28 11	Tube nut, G 1/2"
7	1	20 20 13 00	Geka coupling, 1/2" female thread
8	1	20 20 17 00	Geka coupling gasket (pack of 50 pcs.)
9	1	20 15 61 00	Sealing plug with O-ring R 1/4" f.D06FN
10	1	20 21 90 50	Check valve, 1/2" female thread
11	1	20 19 04 10	Hose screw joint, 1/2" male thread, 1/2" socket
12	2	00 05 91 96	Hose clip 19-21
13	1	20 21 35 02	Water/air hose, 1/2" x 960 mm
14	1	20 19 04 00	Hose screw joint, 3/8" male thread, 1/2" socket
15	1	20 20 36 03	Elbow, 3/8" femal thread, no. 90, zinc-plated
16	1	20 20 21 01	EWO coupling, V-part, 3/8" male thread
17	1	00 03 75 69	Air manifold pipe, 1/2", G 5 c

Circuit diagram



Zustand		Änderung		Datum		Name		Norm		08.08.05		Art.Nr. 00070497		Ers. für		3		Ers. durch		5		G5 C 230V 1Ph. m FU		S1079a		Blatt 1		von 2 Bl.	

Parameter settings for the Yaskawa type 606 V7 frequency converter

Parameter	Function	Setting	Notes
001	Password	0	When adjusting parameters, set to 4, then to 0
002	Selection of control type	0	
003	Selection of operational reference value	1	
005	Selection of shutdown procedure	1	
008	Selection of frequency reference value	1	
011	Maximum output frequency	70	Hz
012	Maximum voltage	230	V
014	Mean output frequency	10	Hz
015	Mean output frequency voltage	48	V
016	Minimum output frequency	1.5	Hz
019	Acceleration time 1	2.5	sec.
020	Deceleration time 1	0	
021	Acceleration time 2	0	
022	Deceleration time 2	0	
024	Fixed reference value 1	46	Hz (new motor 401 rpm)
025	Fixed reference value 2	50	Hz
031	Fixed reference value 8	14.88	Hz
034	Fixed reference value lower limit	43	%
036	Motor nominal current	14.9	A (for 4 kW motor)
037	Electronic thermal protection	0	On
038	Thermal protection triggers after	1 min.	
039	Fan	1	Continuous operation
058	Multi-function output selection 2	4	
090	Time for stop	0.5	sec.
093	Current limiting during acceleration	190	%
095	Frequency detection level	30	Hz
105	Torque compensation	25	
106	Nominal slip of motor	3.3	Hz

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 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	Rework/ replace
Material hopper	Check all welded seams for cracks.		
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 mixing area for wear.		
Mixing shaft	Check pump coupling for wear.		
Protective grille	Is protective grille still evenly flat?		
Frame	Check all welded seams for cracks.		
Frame	Check whether all screwed joints are firmly seated.		
Frame	Check for deformation. Stability must be ensured.		
Frame	Plastic feet okay?		
Castors	Do the castors turn with ease?		
Water flow meter	Is the inspection glass still clearly transparent and sealed?		
Solenoid valve	Functional check		
Pressure reducing valve	Functional check (at 1.5 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 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 firmly seated.		
Type plate	Available and legible		
Operating instructions	Available		
Mortar pressure gauge	Functional check		

WE KEEP THINGS MOVING



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