

# PC30 operating instructions



## EC declaration of conformity

In accordance with EC Directive 2006/42/EC on machinery

Name and address of the manufacturer:

Gemini GmbH, Rheinstraße 7, 88046 Friedrichshafen

Tel. +49 7541 98156-15, Fax: +49 7541 98156-20

This declaration refers only to the machinery in the condition in which it was placed on the market; it does not take into account any parts fitted and/or subsequent interventions carried out by the end user.

This declaration becomes invalid if the product is modified or altered without the manufacturer's consent.

We hereby declare that the following machine:

Type designation: feed pump

Machine/serial number:

Year of construction:

Product name: peristaltic pump PC30

Description:

Feed pump for processing machine-compatible, pre-mixed liquid and pasty materials such as paint  
Ceiling plasters, emulsions, fillers and fine fillers,  
bitumen sealants, mineral sealants

Complies with all relevant provisions of the Machinery Directive 2006/42/EC.

The machine also complies with the provisions of Directive 2006/95/EC.

The following harmonized standards and directives are applied:

ISO 14121-1, ISO 12100 1/2, EN 60204-1, EN 13857, EN 953

Friedrichshafen, September 14, 2024

place, date

Philipp Schweizer, Managing Director

Name, first name and function of the signatory

Signature

# Table of contents

General.....	5
1.1 Information about this manual	5
1.2 Explanation of symbols	5
1.3 Information about this manual	5
1.3.1 Purpose of this manual	5
1.3.2 Limitation of Liability	5
1.3.3 Warranty	5
1.3.3.1 Assertion	5
1.3.3.2 Warranty claim	6
1.3.4 Carrying out repairs	6
2 Security.....	6
2.1 Intended use	6
2.2 General sources of danger	6
2.2.1 Notes in the operating instructions	7
2.2.2 Inspection before starting work	7
2.2.3 Modifications and changes	7
2.2.4 Cleaning and maintenance of the machine	7
2.2.5 Relocation of the machine	7
2.3 Instructions on the machine	7
2.4 Personnel qualifications	8
2.5 Responsibility of the operator	8
2.6 Personal protective equipment (PPE)	8
3 Technical data .....	8
3.1 Type plate	8
3.2 Electrical control, conveying capacity, grain size, weight, dimensions	8
3.3 Material container	9
3.4 engine	9
3.5 Noise emissions	9
3.6 Operating conditions	9
4 Structure and function .....	9
4.1 Scope of delivery peristaltic pump PC30	9
4.2 Functionality	9
4.3 Assemblies	10
4.3.1 Description of the modules	10
4.3.1.1 Material container	10
4.3.1.2 Basic unit including motor, pump housing and control	10
4.4 Displays and controls	11
4.4.1 Flow rate regulation	11
4.4.2 Main switch with flow and return	11
4.4.5 Engine	12
4.5 Connections	12
4.5.1 Power connection (230 V)	12
4.5.2 Remote control cable	12
4.5.3 Connecting the material hose	12

4.7 Spare parts and illustrations	13
transport and storage	15
5.1 Safety instructions for transport	15
5.2 Transport inspection	15
5.3 Damage report	15
5.4 Complaints	15
5.5 Packaging	15
5.6 Transport of the used machine in the vehicle	15
5.7 Storage	15
6 Installation .....	16
6.1 Delivery condition of the machine	16
6.2 Flange mounting of material container	16
6.3 Connecting the material hose	16
6.4 Electrical connection	16
7 Commissioning .....	17
7.1 Using pasty material from the bucket	17
7.2 Putting the machine into operation	17
7.3 Function after commissioning	17
7.4 Material change	18
7.5 Relocation on the construction site	18
8 Operation, operation.....	18
8.1 Check operating behavior	18
8.2 Work break / end of work	18
9 areas of application	19
10 Cleaning & Decommissioning .....	20
10.1 Cleaning process	20
10.2 Decommissioning	20
11 Maintenance .....	20
11.1 Maintenance plan	21
11.2 Checking all electrical connections and supply lines	21
11.3 Lubrication	21
11.4 Checking the diaphragm and conveyor disc	21
11.5 Replacing the membrane and conveyor disc	21
12 Faults and troubleshooting .....	22
13 Dismantling, disposal.....	24
13.1 Security	24
13.2 Disassembly	24
13.3 Disposal	24

# General

## 1.1 Information about this manual

- This manual enables the machine to be used safely and efficiently.
  - The operating personnel must read and understand this manual carefully before starting any work.
- The basic requirement for safe working is compliance with all safety instructions. • This manual is part of the machine and must be kept in the immediate vicinity of the machine for
  - kept accessible to operating personnel at all times.
- In addition to the information in this manual, local accident prevention regulations and national occupational health and safety regulations apply.

## 1.2 Explanation of symbols

Hazard warnings are marked with symbols for easier recognition. These indicate the severity of the danger.

- Please be sure to follow these instructions.



**DANGER** means an immediate imminent danger. If not avoided, death or serious injury will result.



**WARNING** indicates a potentially dangerous situation. If not avoided, death or serious injury may result.



**CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or damage to the equipment.



**NOTE** refers to useful tips for the effective use of the machine

## 1.3 Information about this manual

### 1.3.1 Purpose of this manual

The operating instructions are intended to provide information to the plant manager as well as the fitters and operators of the machine on the construction site. It contains important information for safe use, optimal results and long-term use.



risk of incorrect operation  
Failure to follow the operating instructions may result in  
life and health of the operators  
and the risk of damage to the machine.

- Read this manual carefully before handing it over to your installers or operators.
- Ensure that installers and operators read this manual carefully before installing and operating the machine.
- Always keep the operating instructions handy and in good readable condition.

### 1.3.2 Limitation of Liability

All technical information, data and operating instructions contained in this manual correspond to the latest status at the time of printing and are provided to the best of our knowledge, taking into account our previous experience and knowledge. The manufacturer accepts no liability for damage due to: • Failure to follow these instructions • Improper use • Use of untrained personnel • Unauthorized modifications • Technical changes • Use of unapproved spare parts

### 1.3.3 Warranty

The statutory warranty period of 12 months from the date of purchase/invoice date of the commercial end customer applies to our devices.

#### 1.3.3.1 Assertion

In the event of a warranty claim, please send the complete device together with the invoice to our headquarters in Friedrichshafen

Please contact our service  
Hotline +49 7541 98156-15

### 1.3.3.2 Warranty claim

Claims are only valid for material or manufacturing defects and only when the device is used as intended. Wear parts are not covered by the warranty. All claims are voided by the installation of parts of foreign origin, improper handling and storage, and obvious non-compliance with the operating instructions. In this context, we refer to our General Terms and Conditions.

### 1.3.4 Carrying out repairs

All repairs may only be carried out by employees of Gemini GmbH or authorized specialist partners of Gemini GmbH.

## 2 Security

### 2.1 Intended use

You may only operate this machine if the following conditions are met:

- The PC30 peristaltic pump is used to pump liquid and pasty materials, such as finishing plaster (up to grain size 3 mm), paints, emulsions, fire barriers, concrete contact, decorative coatings, sealing slurries and bitumen thick coatings, etc.
- Before spraying a material for the first time, it is advisable to carry out tests on small areas.
- Only use the machine within its operating set limits and in accordance with the technical Data.
- Pay particular attention to the safety and operating instructions given in this manual.



In case of improper use of the Peristaltic pump PC30 threatens the Users dangers to life and Life and damage to the PC30 peristaltic pump or other assets.

Danger of misuse!

Misuse of the PC30 peristaltic pump can lead to dangerous situations.



- Never use the PC30 peristaltic pump to produce other products such as food.

- Never use the PC30 peristaltic pump outside the values specified in the "Technical Data".

### 2.2 General sources of danger

Electrical voltage.

Danger of death from electric shock. • Do not allow anyone working on the

Electrical control may only be carried out by a qualified electrician.



- Turn off the machine and unplug the power cord.
- Secure the machine against unintentional restart.

### 2.2.1 Notes in the operating instructions



**Vorsicht**

Safety instructions in the operating instructions alert the operating personnel to impending dangers.

pay attention to all technical instructions and hazard warnings in this operating instructions.

### 2.2.2 Inspection before starting work

Defects or damage can endanger the safety of the operating personnel and impair the functionality of the machine.



**Warnung**

- Before starting work, check the Machine for externally recognizable

Damage or defects. • Do not use the machine

Operation if you notice any damage or defects in the machine. • Ensure that the damage or defects are rectified.

### 2.2.3 Modifications and changes

Modifications or changes may endanger the safety of the operating personnel, as well as affect the functionality of the machine. • Do not make any changes, additions or modifications to the machine



**Gefahr**

without prior consultation with Gemini GmbH and its written consent, otherwise the operating license will expire.

### 2.2.4 Cleaning and maintenance of the machine



**Warnung**

Cleaning and maintenance work can endanger the safety of the operating personnel and impair the functionality of the machine.

1. Turn off the machine and unplug the power plug.
2. Secure the machine against accidental restart.

3. Before cleaning with the water jet, cover all openings into which water must not penetrate for safety and functional reasons.

4. After cleaning, completely remove the covers previously installed to protect against water.

### 2.2.5 Relocation of the machine



**Vorsicht**

Changes in location can affect the safety of the operator personnel and impair the functionality of the machine.

1. Turn off the machine and unplug the power plug.
2. Drive the machine to the new location the construction site.
3. Always place the machine flat and stable.
4. Restore the external power supply before operating the machine again.

### 2.3 Instructions on the machine



**Gefahr**

Safety instructions on the machine make it

Operating personnel are alerted to impending dangers.

The following warning signs are attached to the PC30 peristaltic pump: • Electrical voltage!

Danger of death from electric shock (1).

- The machine may only be operated using a plug-in device that is protected by an RCD (FI)  $I_{\Delta n} \leq 30 \text{ mA}$  (2).

## 2.4 Personnel qualifications

Gemini GmbH offers training courses on how to operate the PC30 peristaltic pump. Use this service for the initial commissioning of the machine, during which the users are also trained in how to use the machine.



If the operator is unqualified, Peristaltic pump PC30 threatens the life and health of the operating personnel as well as material damage to the PC30 peristaltic pump or other assets.

## 2.5 Responsibility of the operator

- To operate the peristaltic pump, set PC30 only trained or instructed personnel
  - a.
- Clearly define the responsibilities of personnel for operation, setup, maintenance and repair.
- Only employ untrained or instructed personnel under the supervision of a trained or instructed specialist. • Only allow work on the electrical control system to be carried out by a qualified electrician.

## 2.6 Personal protective equipment (PPE)



PPE, especially gloves, Safety shoes, safety helmet, Safety glasses and respiratory protection are use.

## 3 Technical data

### 3.1 Type plate



Model: MA-PC30  
Förderleistung: 1-8 l/min.  
Motor: 1.200 Watt  
Max. Druck: 1.5 MPa - 15 bar  
S/N: 2024-PC30-100



When ordering spare parts, having queries or complaints, always state the machine number.

You can find this information on the type plate or on the delivery note.

### 3.2 Electric control, conveying capacity, grain size, weight, dimensions

mains voltage	230 V, 50 Hz
Mains supply cable (CEE plug)	16 A (on-site)
Performance	1.2 kW
insurance	16 A
conveying capacity	max. 8 l/min.*
conveying distance	max. 30 m*
discharge head	max. 20 m*
grain size	max. 3 mm
Weight	approx. 30 kg
Dimensions:	
length	680 mm
Width	550 mm
Height	680 mm



3.3 Material container

filling quantity	30 liters
------------------	-----------

3.4 engine

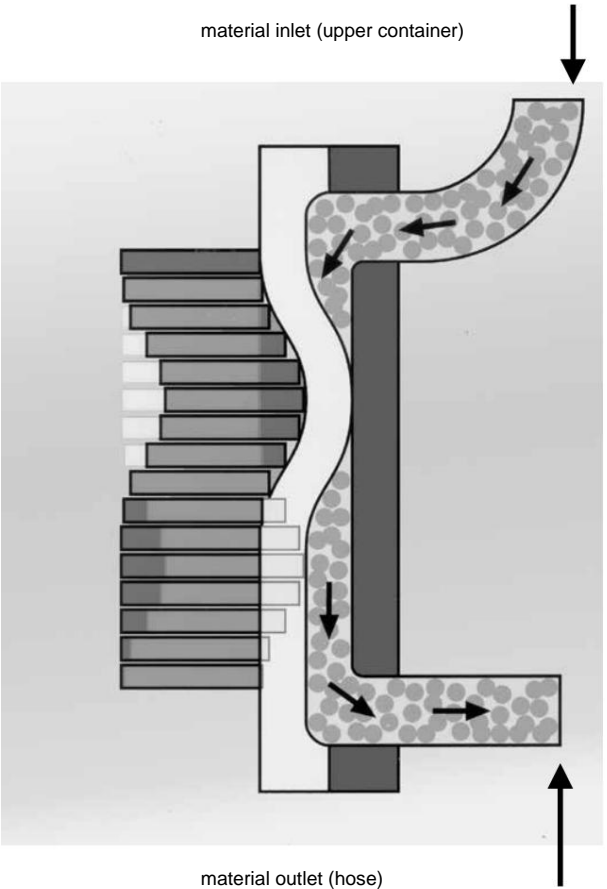
power/speed	0.55 kW, 239 rpm
installation position	engine horizontal
Electrical data	f = 50 Hz , I = 3.6 A, U = 230 V, IP 55
thermal class	F, ED = S1
Color	painted, gray RAL 7035

3.5 Noise emissions

sound power level LWA	78 dB (A)
-----------------------	-----------

3.6 Operating conditions

temperature range	2 - 45 °C
Relative humidity,	maximum 80%



4 Structure and Function

4.1 Scope of delivery peristaltic pump PC30

The scope of delivery results from the components of the order and can be checked using the delivery note.

MASPRA PC30 basic module (item no. 10351):

- Chassis • Gear motor
- Peristaltic pump unit • Electrical control with connection cable, 3 m • Upper container with lid

MASPRA PC30 Ready to spray:

- like basic module plus: • Material hose 1" x 10m
- Air hose 3/8" x 10m
- Remote control cable 11m with on/off switch • Spray lance with nozzles 4.5 / 6.5 / 8.5 / 10.5mm

4.2 Functionality

The MASPRA PC30 is a peristaltic pump (displacement pump) in which the material to be conveyed is sucked out of the material container (1) and is conveyed further into the material hose (4) by contraction movements. Two cylindrical roller bearings driven by the gear motor displace the material to be conveyed by rotating movements against slide plates arranged in a ring (5).

Due to these wave movements of the slide plates, the material is transported extremely gently between the membrane (3) and the conveyor disc (2) into the material hose.



View of the slide plates in the pump housing after removing the conveyor disc and diaphragm.

Please note the optimal order of assembly.



1. Flange the material container  
to the base unit of the machine.
2. Flange the material  
hose to the GEKA coupling provided on the  
base unit.
3. Connect the power cable of the  
Peristaltic pump PC30 with external power  
supply.

## 4.3 Assemblies

### 4.3.1 Description of the modules

Position	Component
1	material container
2	Basic unit including motor, pump housing, control and carriage

#### 4.3.1.1 Material container

The material container holds 30 liters and is operated by means of a a Storz coupling attached to the pump housing.



#### 4.3.1.2 Basic unit including motor, pump housing and control

Connect the power cable to the external power supply (230 V / 50 Hz). The PC30 peristaltic pump may only be operated with an approved residual current device (30 mA) RCD. The controls for the

The flow rate control, the selector switch (forward and reverse) and the connection plug for the remote control cable are located on the side panel of the machine.

## 4.4 Displays and controls



Control elements of the PC30 peristaltic pump:

Flow rate regulation (1), switch (2) with flow ("FWD") and reverse ("REV"), speed display (3)

### 4.4.1 Flow rate regulation



The optimal operating pressure and thus the flow rate depends heavily on the material. You can adjust the pressure continuously using the handwheel. Position 0 corresponds to the lowest pressure. The maximum pressure corresponds to the scale value ~ 9.

### 4.4.2 Main switch with flow and return



If the main switch is set to "AUTO", the PC30 peristaltic pump is switched off. To switch on the feed pump (feed), turn the switch to the right to "FWD". The PC30 peristaltic pump is equipped with a return line that you can activate with the "REV" setting. You will need this return line if a hose becomes clogged. The return line of the pump reduces the pressure in the material hose.

Risk of injury due to overpressure.



Before opening the Hose couplings or removing the spray lance, use the return line "REV" to reduce the operating pressure in the system.

#### 4.4.5 Engine

Electrical voltage - risk of death from electric shock.



1. Have work on the electrical  
Electrical control may only be carried out by a qualified electrician.
2. Turn off the machine.  
To do this, set the main switch to "OFF".
3. Unplug the power cord.
4. Secure the machine against unintentional restart.  
ten.

#### 4.5 Connections

##### 4.5.1 Power connection (230 V)

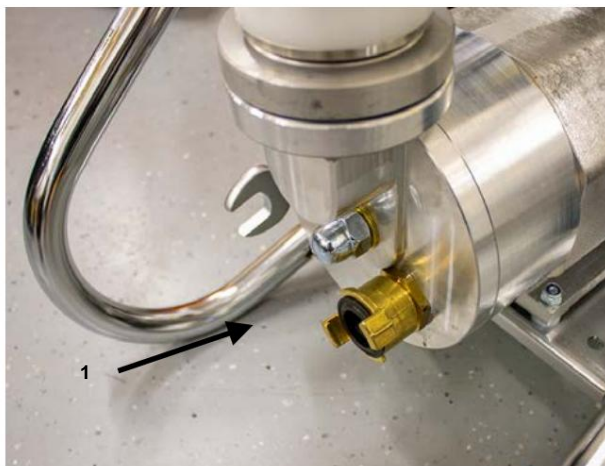
The machine may only be operated via a plug-in device that is protected by an RCD (FI) I<sub>yn</sub> ≤ 30 mA.

##### 4.5.2 Remote control cable



If the machine is to be switched on and off via cable remote control, the plug of the remote control cable must be inserted into the coupling on the control element. The pump is then set to "AUTO" (feed) at the main switch.

##### 4.5.3 Connecting the material hose



GEKA coupling (1) below the material container for flanging the material hose.

#### 4.7 Spare parts and illustrations

The spare parts for the PC30 peristaltic pump are marked with numbers in the following pictures.

The individual positions are described in the table below the respective figures.

Description of the columns of the tables:

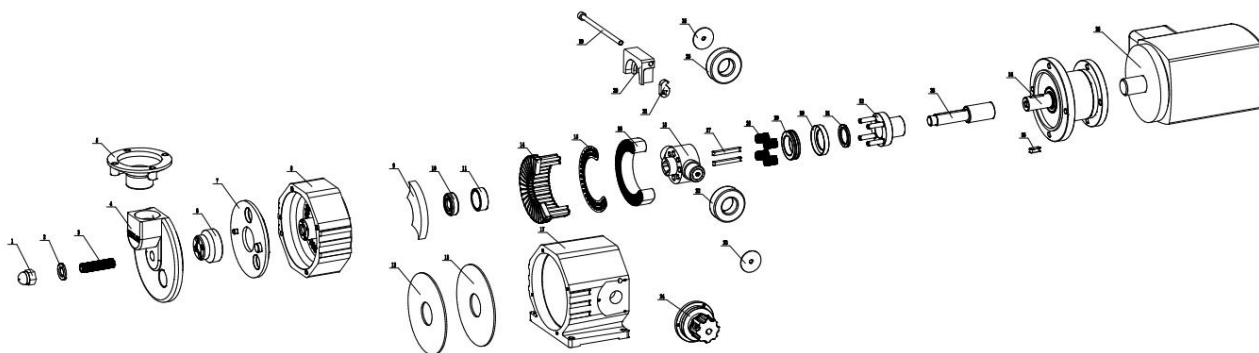
**Position:** Corresponds to the number in the drawing with which a spare part is identified.

**Article number:** original article number.

**Installation quantity:** Number of parts of this item as installed in the PC30 peristaltic pump.

**ME:** Unit of measure of this position.

**Description:** Description of the spare part.



Position	Description	Beschreibung	Art.-Nr. / Part N°	Teil von / Part of	Menge / Qty.	Listenpreis / Listprice
1	M14 ball nut	M14 ball nut	MA-PC30#1		1	
2	Gasket	Gasket	MA-PC30#2		1	
3	14*65 fastening screws	14*65 fastening screws	MA-PC30#3		1	
4	Front pump cover	Front pump cover	MA-PC30#4		1	
5	Feed flange	Feed flange	MA-PC30#5		1	
6	Diaphragm fixing seat	Diaphragm fixing seat	MA-PC30#6		1	
7	Discharge positioning diaphragm	Discharge positioning diaphragm	MA-PC30#7		1	
8	Front pump body	Front pump body	MA-PC30#8		1	
9	Diaphragm forming seat	Diaphragm forming seat	MA-PC30#9		1	
10	Bearing	Bearing	MA-PC30#10		1	
11	cover	cover	MA-PC30#11		1	
12	Diaphragm	Diaphragm	MA-PC30#12		1	
13	Diaphragm	Diaphragm	MA-PC30#13		1	
14	Squeeze pin keys	Squeeze pin keys	MA-PC30#14		25	
15	Gasket	Gasket	MA-PC30#15		1	
16	Pin key guide	Pin key guide	MA-PC30#16		1	
17	Rear pump body	Rear pump body	MA-PC30#17		1	
18	Roller seat	Roller seat	MA-PC30#18		1	
19	Pressure regulating block screw	Pressure regulating block screw	MA-PC30#19		1	
20	Pressure regulating block	Pressure regulating block	MA-PC30#20		1	
21	Pressure regulating positioning block	Pressure regulating positioning block	MA-PC30#21		1	
22	Needle Roller Bearing	Needle Roller Bearing	MA-PC30#22		1	
23	Bearing spacer	Bearing spacer	MA-PC30#23		1	
24	Pressure regulating valve assembly	Pressure regulating valve assembly	MA-PC30#24		1	
25	Needle Roller Bearing	Needle Roller Bearing	MA-PC30#25		1	
26	Bearing spacer	Bearing spacer	MA-PC30#26		1	
27	Pin	Pin	MA-PC30#27		2	
28	Spring	Spring	MA-PC30#28		4	
29	Bearing	Bearing	MA-PC30#29		1	
30	Bearing sleeve	Bearing sleeve	MA-PC30#30		1	
31	Gasket	Gasket	MA-PC30#31		1	
32	Spring seat	Spring seat	MA-PC30#32		1	
33	Output shaft	Output shaft	MA-PC30#33		1	
34	Gearbox	Gearbox	MA-PC30#34		1	
35	Pin	Pin	MA-PC30#35		1	
36	Brushless motor	Brushless motor	MA-PC30#36		1	

## transport and storage

### 5.1 Safety instructions for transport

Slipping machine

Danger to life for drivers and road users.



- Make sure that the machine is stable during transport. • Fasten the machine securely to prevent it from slipping.

Risk of injury from carrying or lifting the machine



- The machine weighs 28 kg. When transporting the machine manually, observe the regulations for professional lifting and carrying (e.g. load handling regulations).

### 5.2 Transport inspection

Upon receipt, check the machine immediately for completeness and transport damage.

- Do not leave any parts in the packaging.

### 5.3 Damage report

If there is externally visible transport damage, proceed as follows:

1. Write a damage report with the following information: - Your customer address
  - Name of the transport company and driver
  - Date and time of delivery
  - Order number and machine name according to the delivery note
  - Description of the damage
  - Driver's signature
  - Signature of the recipient at the customer's premises
2. Have the transport damage confirmed by signature from the driver.
3. Send a copy of the damage report to the transport company and a copy to Gemini GmbH.
4. Clarify the options for resolving the damage with our service.

### 5.4 Complaints

You can only assert claims for damages relating to transport damage if

You must immediately notify the delivery company gene.

### 5.5 Packaging

The new machine is packed in a cardboard box and together with the dismantled material container

and any accessories are delivered on a pallet.

- Dispose of the packaging material as required by law.

### 5.6 Transport of the used machine in vehicle



Slipping machine.  
Danger to life for driver and road users.

1. Make sure that the machine is switched off during is stored safely during transport.
2. Secure the machine against slipping.schen.

Leaking material residues



- Clean the machine before transport.
- Secure the machine in the vehicle tool with suitable fastening material.

### 5.7 Storage

If the machine is not used for a long period of time, thorough cleaning is necessary.

Store the machine under the following environmental conditions:

- Dry
- Frost-free
- Dust-proof • Corrosion-proof (e.g. salt water)

## 6 Installation

Please note the following instructions when setting up and positioning the machine:

requirements for the installation site

- Make sure there is enough space around the machine to ensure that the material container can be filled and the machine can be operated.
- Only install the PC30 peristaltic pump on a flat, horizontal surface.
- Prevent the machine from slipping.
- Cover the ground beneath the machine with

a plastic film.

- In rainy weather, place the machine in a dry, sheltered area.
- Avoid direct sunlight, especially during continuous operation, to prevent the motor from overheating.

### 6.1 Delivery condition of the machine

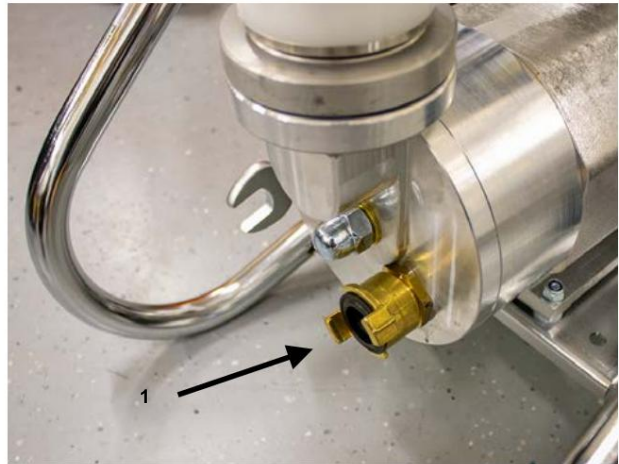
The PC30 peristaltic pump is delivered fully assembled from the factory. All you have to do is flange on the material container.



### 6.2 Flange mounting of material container

The material container is flanged to the base unit with a clockwise rotation.

### 6.3 Connecting the material hose



GEKA coupling (1) below the material container for flanging the material hose.

### 6.4 Electrical connection

1. Only connect the PC30 peristaltic pump to a compliant 230 V construction site power distribution board with a residual current device (30 mA) RCD.
2. Make sure that the connection is fused with at least 16 A and that the cross-section of the supply cable is at least 2.5 mm.
3. Connect the power cable of the PC30 peristaltic pump to the external power supply.

## 7 Commissioning



Health hazard from aerosols.

When working and cleaning the machine, inhaled aerosol mist can pose a health hazard.

- The machine operator or persons who Fill the material into the material container or the Machine cleaners must wear a protective mask. Observe the applicable work regulations (e.g. respiratory and eye protection) as well as the safety data sheets of the material manufacturers.



Risk of injury from pasty material

When filling the material container with the ready-mixed material or with bucketed material, splashes of material can cause injuries, especially in the area of the eyes and face. • Always wear protective goggles.

### 7.1 Remove pasty material from the bucket

turn around



Observe the applicable work regulations (e.g. respiratory and eye protection)

Dispose of empty plastic buckets and other packaging materials in an environmentally friendly manner, according to the packaging manufacturer's instructions.

### 7.2 Putting the machine into operation

1. Only connect the PC30 peristaltic pump to a compliant 230 V construction site power distribution board with a residual current device (30 mA) RCD.

2. Make sure that the connection is fused with at least 16 A and that the cross-section of the supply cable is at least 2.5 mm.
3. Flange the material container to the base device of the machine.
4. Connect the power cable of the PC30 peristaltic pump to the external power supply.
5. Flange the material hose to the designated intended GEKA coupling of the basic unit.
6. Fill the material container with pre-lubrication liquid (e.g. wallpaper paste).
7. Hold the end of the material hose over a bucket.
8. Set the main switch to "REMOTE" until the pre-lubrication fluid comes out of the material hose.
9. Set the main switch to "OFF"
10. Flange the other end of the material hoses the spray head to the GEKA coupling.
11. Connect the air hose of the compressor to the spray head.
12. Fill pasty material into the material container.
13. Set the main switch to "REMOTE". 14. Open the ball valve on the spray head until pasty material comes out of the material hose. Hold Place the spray head over the material container.
15. Adjust the desired flow rate using the handwheel. Allow the material to flow from the hose back into the material container until the desired flow rate is reached.
16. Set the main switch to "OFF".
17. Remove the dummy plug from the connector for the Disconnect the remote control cable and plug the remote control cable into the contact.
18. Connect the remote control cable with adhesive tape or cable ties with the material hose and the air hose of the compressor.
19. Set the main switch to "REMOTE". 20. Open the air valve.
21. Open the ball valve on the spray head.
22. Press the green button on the remote control cable to switch on the machine.
23. To switch off the machine, follow the above steps in reverse order.

### 7.3 Function after commissioning

The motor starts. The pasty material is sucked out of the material container and conveyed through contraction movements into the material hose and to the spray head.

## 7.4 Material change

1. Close the air valve and drive the machine  
Empty the machine's material container over a suitable collecting container.
2. Press the button on the remote control cable to turn off the machine and connect the  
Ball valve on the spray head.
3. Then fill the material container with water and remove any adhering material.
4. Press the button on the remote control cable to  
Turning on the machine.
5. Open the ball valve on the spray head until the  
Water comes out of the spray head.
6. Close the ball valve on the spray head 7. Open the screw connection on the spray head and remove the nozzle.
8. Clean the nozzle with a sponge or cleaning brush.
9. Disconnect the material hose and put a sponge ball into the material hose. Fill up with some more water. Press  
  
Then press the button on the remote control cable to switch on the machine and open the ball valve on the spray head. The sponge ball is conveyed through the material hose together with the water and loosens any residual material from the walls of the material hose.
10. After the sponge ball comes out of the spray head, press the button on the remote control cable to turn off the machine.
11. Repeat this process with the sponge ball up to two times, depending on the degree of soiling.
12. Put the cleaned nozzle back into the spray head.
13. Fill the material container with pre-lubrication liquid (e.g. wallpaper paste).
14. Hold the end of the material hose over a bucket.
15. Set the main switch to "REMOTE" until the pre-lubrication fluid comes out of the material hose.
16. Set the main switch to "OFF" 17. Fill pasty material into the material container.

## 7.5 Relocation on the construction site

Changes in location can affect the safety of the operator personnel and impair the functionality of the machine.

1. Turn off the machine and unplug the power plug.
2. Drive the machine to the new location  
the construction site and always position the machine flat and stable.
3. Restore the external power supply before operating the machine again.

# 8 Operation, Operation

## 8.1 Check operating behavior

1. If you notice any deviations in the operating behavior, stop using the PC30 peristaltic pump immediately.
2. Ensure that any damage or defects that lead to the abnormal operating behavior are remedied.

## 8.2 Work break / end of work

1. If the duration of a work break exceeds the setting time of the material to be processed, there is a risk that the material will set during the break.
2. For short work interruptions, close the air valve and the ball valve on the spray head and close the material container with the deckel.
3. During longer breaks, close the air valve and move the material container of the machine over a suitable collecting container.
4. Press the button on the remote control cable to turn off the machine and connect the  
Ball valve on the spray head.
5. Then fill the material container with water and remove any adhering material.
6. Press the button on the remote control cable to  
Turning on the machine.
7. Open the ball valve on the spray head until the  
Water comes out of the spray head.
8. Close the ball valve on the spray head 9. Open the screw connection on the spray head and remove the nozzle.
10. Clean the nozzle with a sponge or cleaning brush.
11. Disconnect the material hose and put a sponge ball into the material hose. Fill with some more water. Press  
  
Then press the button on the remote control cable to switch on the machine and open the ball valve on the spray head. The sponge ball is conveyed through the material hose together with the water and loosens any residual material from the walls of the material hose.

12. After the sponge ball comes out of the spray head, press the green button on the remote control cable to switch off the machine.
13. Repeat this process with the sponge ball up to two times, depending on the degree of soiling.
14. Put the cleaned nozzle back into the spray head.
15. At the end of the working day, unplug the power cord.

## 9 areas of application

	peristaltic pump PC30
airless spray fillers	
exterior/interior emulsion paint silicate paint *	
Acoustic ceiling coatings, fine	X
acoustic renovation paint	X
acoustic spray plasters, multi-layer	
cotton plasters	X
concrete contact	X
bitumen thick coatings	X
floor leveling compounds	
fire protection mortar	
Decorative fine coatings	X
Mineral sealing slurries	X
Liquid Woodchip	X
floor leveling compounds	
aerated concrete coatings	X
lime slip	X
lime plasters	
lime-cement plasters	
Mineral structural plasters	X
Pasty structural plasters	X
plaster base	X
reprofiling mortar	
renovation plaster systems	
SPCC mortar	
SPCC spatula	X
spray fillers	X
ETICS adhesive, mineral	
ETICS adhesive, pasty	X
cement pastes, suspensions	X
cement plasters	X

## 10 Cleaning & Decommissioning

### 10.1 Cleaning process

1. Close the air valve and drive the machine  
Empty the machine's material container over a suitable collecting container.
2. Press the button on the remote control cable to turn off the machine and connect the  
Ball valve on the spray head.
3. Then fill the material container with water and remove any adhering material.
4. Press the button on the remote control cable to  
Turning on the machine.
5. Open the ball valve on the spray head until the  
Water comes out of the spray head.
6. Close the ball valve on the spray head 7. Open the screw connection on the spray head and  
remove the nozzle.
8. Clean the nozzle with a sponge or  
cleaning brush.
9. Disconnect the material hose and put a sponge ball into the material hose. Fill up with some more water. Press

Then press the button on the remote control cable to switch on the machine and open the ball valve on the spray head. The sponge ball is conveyed through the material hose together with the water and loosens any residual material from

the walls of the material hose.

10. After the sponge ball comes out of the spray head, press the button on the remote control cable to turn off the machine.
11. Repeat the cleaning process with the sponge ball up to two times, depending on the degree of soiling.
12. Put the cleaned nozzle back into the spray head.



### Hinweis

Carry out this cleaning process before longer work breaks (> 0.5 hours).

### 10.2 Decommissioning

1. Clean the machine.
2. Remove the remote control cable from the base unit and insert the dummy plug.
3. Turn the main switch to OFF.
4. Unplug the power cord.

## 11 Maintenance

Have the machine checked once a year in a specialist workshop. Parts that are subject to wear must be replaced as soon as the wear limit is reached. Portable machines, such as the PC30 peristaltic pump, must be subjected to an annual electrical inspection in accordance with the implementing regulations for electrical systems and equipment (DGUV V3). This inspection may only be carried out by a qualified electrician (e.g. electrical engineer, electrical technician, master electrician, electrician).



Cleaning and maintenance work can affect the safety of the operating personnel and impair the functionality of the machine.

1. Stop the feed pump by operating the remote control switch or setting the main switch on the base unit to "Off".
2. Unplug the power cord.
3. Secure the machine against accidental restarting
4. Before cleaning with the water jet, cover all openings into which water must not penetrate for safety and functional reasons.
5. After cleaning, completely remove the covers previously installed to protect against water



Electrical voltage. Danger of death from electric shock.

- Only have work on the electrical control system carried out by a qualified electrician.
- Turn off the machine and unplug the power plug.
- Secure the machine against accidental Restart.

## 11.1 Maintenance plan

Checking the machine in a specialist workshop or at a service location	once a year (recommended)
electrical engineering test (DGVV V3) by a qualified electrician or at a service location	once a year  (Mandatory, specified by DGVV V3)
membrane and conveyor check the window for damage and cracks	daily
Check all electrical connections and supply lines ties	daily



Electrical voltage.  
Danger of death from electric shock.

- Only have work on the electrical control system carried out by a qualified electrician.
- Turn off the machine and unplug the power plug.
- Secure the machine against accidental Restart.



(1) Loosen the cap nut (M16) on the front of the feed pump.

To do this, use the 24mm combination wrench attached to the carriage.



(2) Remove the connection plate and make sure that the two O-rings on the connection plate do not fall out.

## 11.2 Checking all electrical connections and supply lines

Have defective, damaged or poorly insulated cables replaced immediately by a qualified electrician substitute.

## 11.3 Lubrication

The gearbox is filled with Panolin LT Grease 00 fluid grease and is designed for lifetime lubrication. This grease only needs to be replaced if material enters across the membrane is required.



(3) Remove the conveyor disc.



(4) Pull the membrane out by gently Leverage with a user out. install the new parts in reverse order.

**11.4 Check the membrane and conveyor disc** After daily cleaning, check the membrane and conveyor disc for damage and cracks. Replace these two wearing parts if necessary.

out of.

## 11.5 Replacing the membrane and conveyor disc



## 12 Faults and Troubleshooting

The PC30 peristaltic pump is designed for trouble-free operation. Should a fault occur, follow the instructions below to analyse, check and rectify the fault or contact Gemini GmbH Service at

+49 7541-98156-15.



Malfunctions can endanger the safety of the operating personnel and impair the functionality of the machine.

If a fault occurs, proceed as follows:

1. Disconnect the power supply in the event of a fault that poses an immediate danger to persons or represent material assets. To do this, set the main switch to "OFF".
2. Unplug the power cord.
3. Secure the machine against accidental restarting
4. Determine the cause of the problem.
5. Report the fault to the responsible person at the site.
6. Depending on the type of fault, either fix it yourself or have it fixed by a qualified technician.

The faults listed below contain recommendations as to who is authorized to remedy the fault.

symptom	Possible cause	inspection, correction	Staff-qualification
Pump does not pump.	The cap nut (M16) for flange fastening is not tightened correctly.	<ul style="list-style-type: none"> <li>• Tighten the cap nut using the 24 mm combination wrench attached to the trolley. Make sure that there is no gap between the flange and the pump housing.</li> </ul>	machine operator
	The operating pressure is set too low.	<ul style="list-style-type: none"> <li>• Turn the handwheel on the base unit to increase the operating pressure or flow rate. Position 0 corresponds to the lowest pressure. The maximum pressure corresponds to the scale value ~ 4.5</li> </ul>	machine operator
	The membrane or the conveyor discs are defective	<ul style="list-style-type: none"> <li>• Replace the two wearing parts.</li> <li>• To do this, loosen the cap nut (M16) on the front of the feed pump. To do this, use the 24 mm combination wrench that is attached to the carriage. Remove the connection plate. Remove the feed disk. Pull out the membrane by carefully levering it with a screwdriver. Assemble the new parts in reverse order.</li> </ul>	machine operator
	The O-rings on the connection plate are missing.	<ul style="list-style-type: none"> <li>• Loosen the cap nut with the 24 mm combination wrench. • Remove the connection plate and insert the two O-rings into the corresponding openings.</li> <li>• Replace the connection plate. • Tighten the cap nut using the 24 mm combination wrench attached to the carriage. Make sure that there is no gap between the flange and the pump housing.</li> </ul>	machine operator
Delivery capacity decreases.	The conveyor disc or the membrane are worn or cracked out of.	<ul style="list-style-type: none"> <li>• Replace the two wearing parts. • To do this, loosen the cap nut (M16) on the front of the feed pump. To do this, use the 24 mm open-end wrench that is attached to the carriage. Remove the connection plate. Remove the feed disk. Pull out the membrane by carefully levering it with a screwdriver. Assemble the new parts in reverse order.</li> </ul>	machine operators
Machine stops because the overload protection is triggered.	The material consistency is too thick or it is too a hose plugger.	<ul style="list-style-type: none"> <li>• Press the overload protection button to the right of the main switch. • Activate the return flow by setting the main switch to "ENTL". This will release the pressure in the material hose.</li> <li>• If necessary, dilute the material in the material container</li> </ul>	machine operator
	Power supply is faulty. Check the power supply.	<p>The machine must only be connected to a Plug-in device protected by an RCD (FI) <math>I_{\Delta n} \leq 30 \text{ mA}</math>.</p> <ul style="list-style-type: none"> <li>• Make sure that you use a cable reel with max. 40 m Use cable (at least 3 x 2.5 mm<sup>2</sup>)</li> <li>• Have damaged electrical connections or cables that are not properly insulated replaced by a qualified electrician.</li> </ul>	machine operator / electrical engineering power
Machine stops because the control fuse 24 V is triggered.	The remote control cable is faulty (e.g. due to a short circuit).	<ul style="list-style-type: none"> <li>• Turn the machine's main switch to "OFF" • Remove the remote control cable.</li> <li>• Press the control fuse button to the left above the main switch.</li> <li>• Have the defective remote control cable replaced by a qualified electrician. Check or repair the power or use a new remote control cable.</li> </ul>	machine operator / electrical engineering power

## 13 Dismantling, disposal

After the end of the machine's service life the device must be dismantled and disposed of in an environmentally friendly manner.

### 13.1 Security

- Only employ trained or instructed personnel to disassemble the PC30 peristaltic pump.
- Work on the electrical control system should only be carried out by a qualified electrician.



Risk of injury if disassembled improperly. Stored residual energy, sharp components, points and corners on and in the machine can cause injuries. tongues cause.

- Before dismantling, ensure that there is sufficient Place
- Wear gloves and safety shoes to avoid injuries. • Handle sharp-edged components carefully. • Make sure the work area is tidy and clean.

place.

- Components and tools lying loosely on top of each other or lying around are sources of accidents. •

Dismantle the components professionally. • Be aware of the high weight of the components.

- Secure the individual components so that they do not fall down or topple over.



Electrical voltage Danger of death from electric shock.

Switched-on electrical components can perform uncontrolled movements and cause serious injuries.

1. Turn off the machine. To do this, set the Main switch to "OFF".
2. Unplug the power cord and disconnect the Machine is finally disconnected from the electrical supply supply.

### 13.2 Disassembly

Clean and dismantle the machine before disposal in compliance with the applicable occupational health and safety and environmental protection regulations.

### 13.3 Disposal

According to the European Directive 2012/19/EU on waste electrical and electronic equipment and its implementation into national law, this machine must not be disposed of with household waste, but must be recycled in an environmentally friendly manner!



The PC30 peristaltic pump is made primarily of high-quality metal. If you permanently decommission the PC30 peristaltic pump, please note the following:

- Reuse the metal. • Dispose of the PC30 peristaltic pump via a scrap metal dealer or scrap metal collection point.

We will take back your old device and dispose of it in an environmentally friendly manner. In this case, please contact our service location.