

# P200 Cartridge Electric Pump



Grease



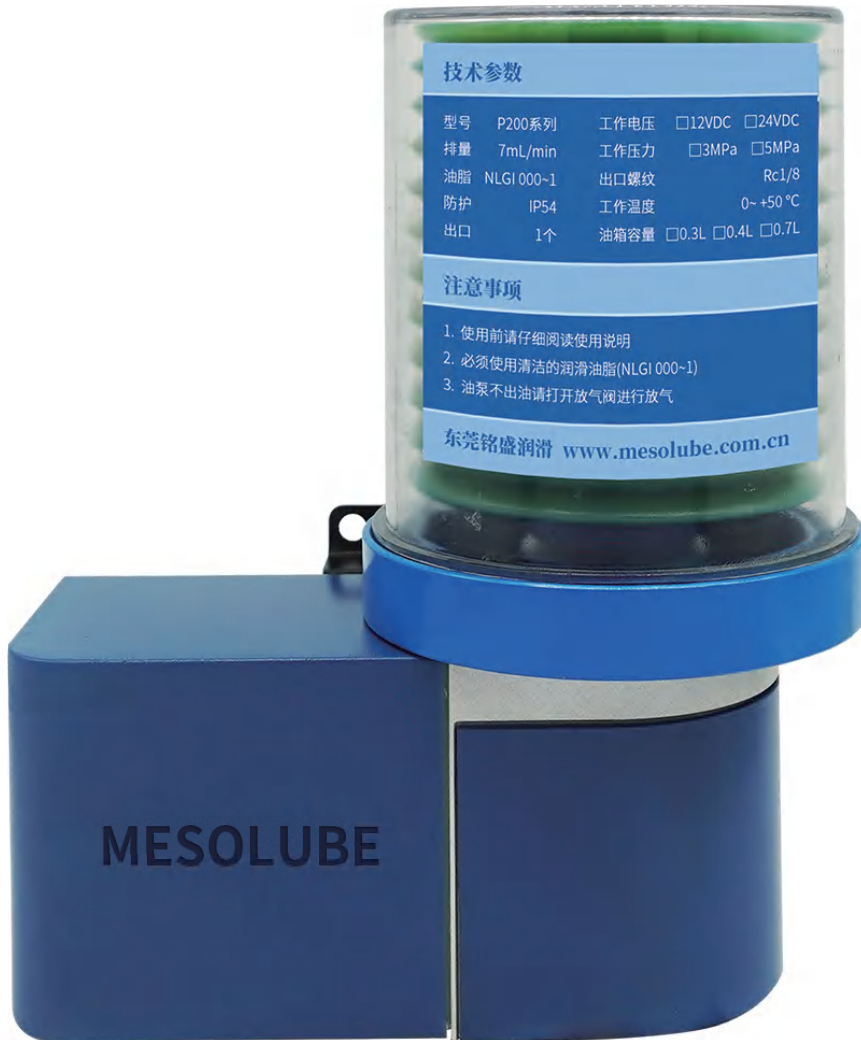
8MPa



+0~50°C



Small medium equipment



# Instructions

## P200

P200 series are equipped with lubrication metering devices to accurately lubricate equipment at multiple points. This product is small in size, light in weight, wide range of applications.

## Precautions

In this manual, the use of the following markings provides safety precautions to prevent accidents that may cause injury to the human body. Before operating the pump, be sure to read these safety precautions carefully to fully understand the contents.



Indicates a potentially hazardous situation that, if ignored, could result in death or serious injury.



Indicates information that should be paid special attention to when operating the pump. If ignored, the pump or the machine may be damaged.



Indicates a potentially dangerous situation that, if ignored, may cause minor or moderate injury.



Indicate reference information or points that can help you deal with the pump.



Indicates a reference clause.

## About the manual

All illustrations and specifications in this manual are subject to change without notice. When reselling, renting or lending the pump to a third party, be sure to include the relevant manual of the pump and any other documents accompanying the pump.

# Precautions

## Safety Precautions



1. Before handling the pump, please read this manual carefully and understand its contents.
2. Only technicians with relevant installation knowledge can operate this pump.
3. Without our consent, the pump is not allowed to be modified or replaced.

## Label type

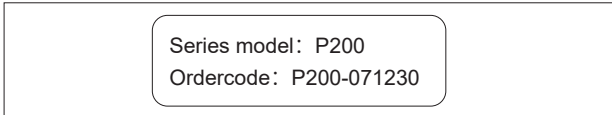


The label is attached to the pump. If any label is damaged or becomes illegible, please contact us immediately. Strictly follow the instructions on the label on the pump.

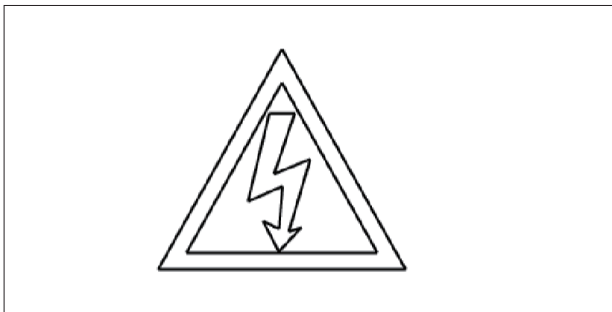
## Trademark label



## Serial number label



## Electricity warning sign

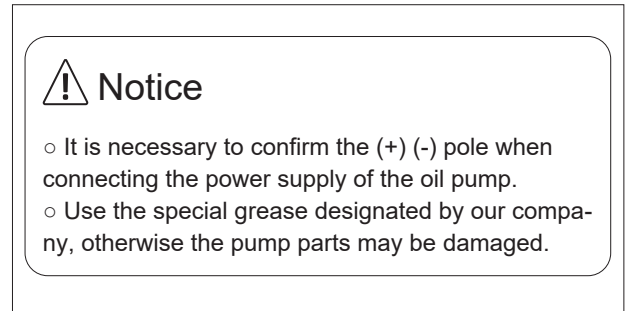


## Specification label

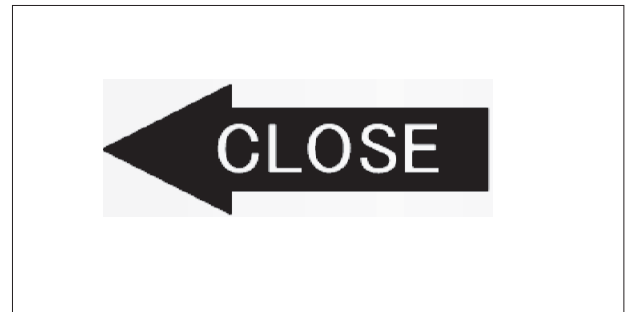
Technical Data			
Mode	P200	Voltage	□12VDC □24VDC
Outlets	1	Pressure	□3MPa □5MPa
Lubricant	NLGI 000~1	Reservoir	□0.3L □0.4L □0.7L
Protection	IP54	Operating temperature	0~+50 °C
Outlet thread	Rc1/8	Metering quantity	7mL/min

MESOLUBE [www.mesolube.com](http://www.mesolube.com)

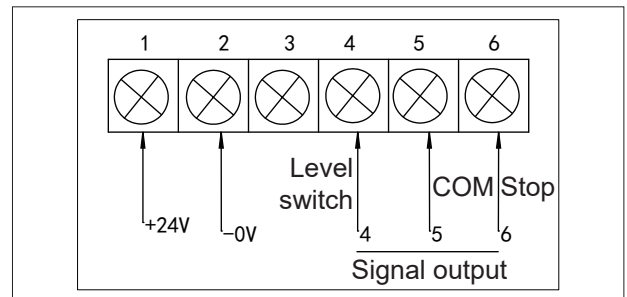
## Warning label



## Direction label



## Terminal wiring label



# Technical data

## Specifications

Item	Specifications
Voltage	12VDC, 24VDC $\pm$ 10%
Total power capacity	1.2A
Motor Rated voltage	24VDC $\pm$ 10%
Motor No-load current	0.5A
Motor Rated current	3.0A or lower <sup>※1</sup>
Pump Metering quantity	7mL/min
Pump Max pressure	3MPa or 5MPa <sup>※2</sup>
Pump Cartridge	Designated
Abnormal output ※1 Contact rating	125VAC, 0.5A 24VDC, 1.0A
(Level switch)※4 Contact type	N.C.
Pump Contact rating	125VAC, 0.5A 24VDC, 1.0A
Stop signal ※3 Contact type	N.C.
Protection class	IP54
Certification	CE

※1. When the voltage of the pump power supply is unstable, it is recommended to install a voltage stabilizer to prevent the unstable voltage from damaging the pump.

※2. This may fluctuate due to factors such as tube material and length, ambient temperature.

※3. This signal is only output when the pump is energized.

※4. The specifications of the external pressure switch can be customized.

## Order Code

P200 -

### Pump type

P200 series electric grease pump

### Capacity size

- 03C = 0.3L with cartridge
- 05C = 0.5L with cartridge
- 07C = 0.7L with cartridge
- 03 = 0.3L without cartridge
- 05 = 0.5L without cartridge
- 07 = 0.7L without cartridge

### Operating voltage

- 12 = 12VDC
- 24 = 24VDC
- 110 = 110VAC
- 220 = 220VAC

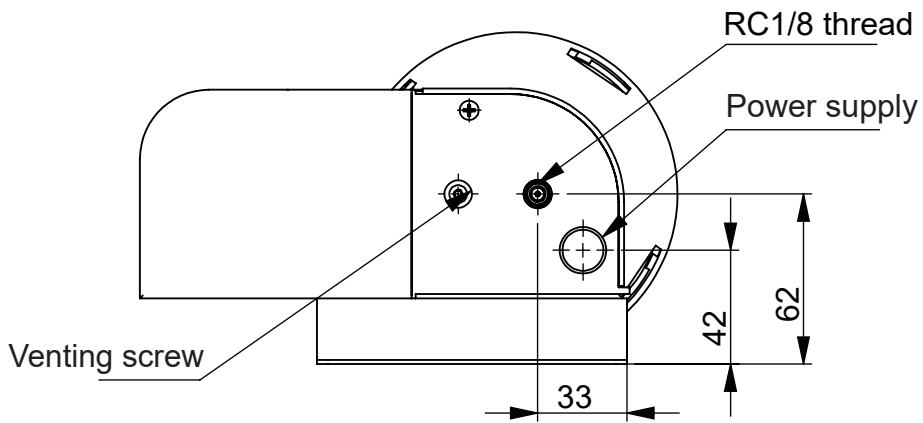
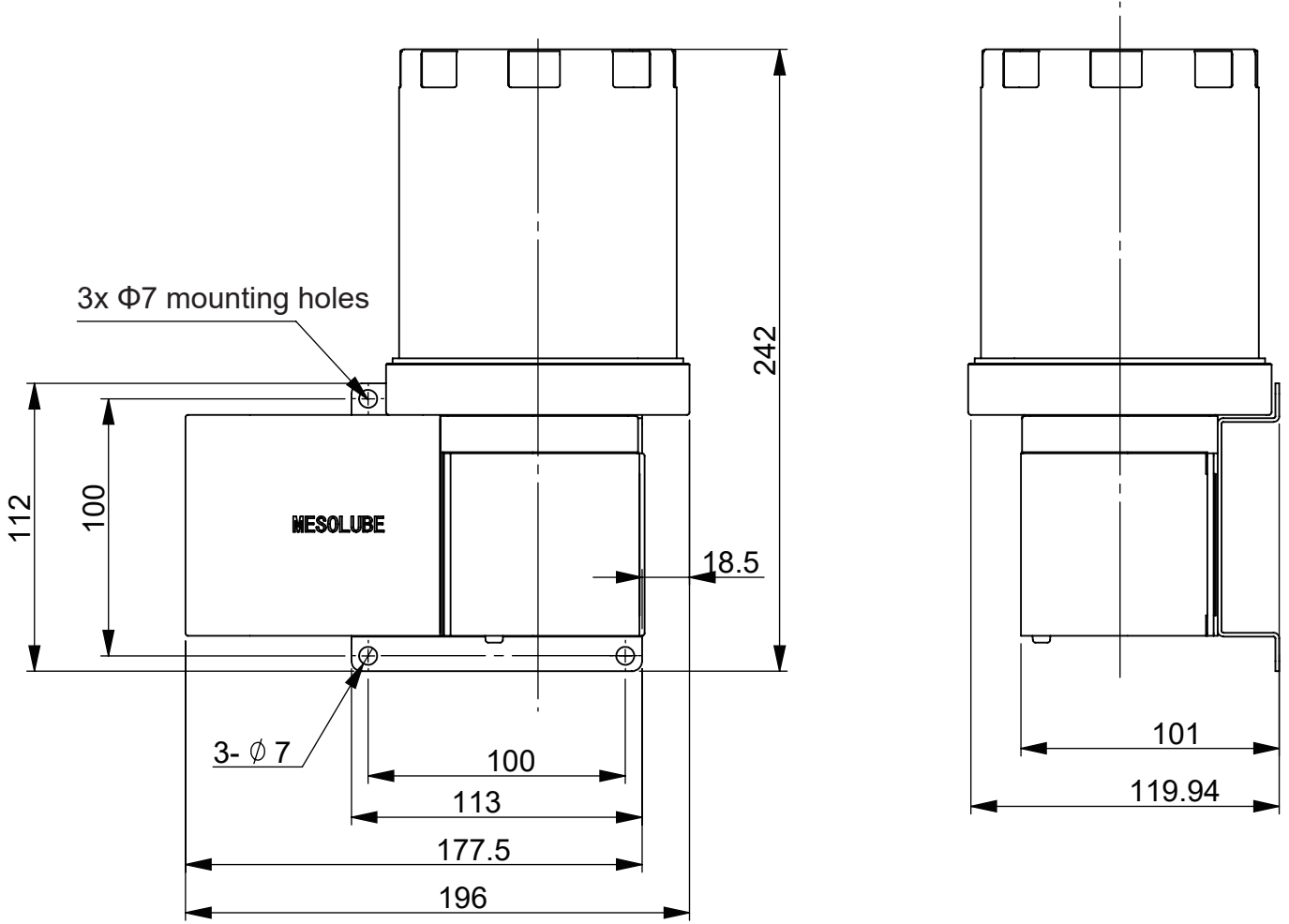
### Operating pressure

- 3 = 3MPa
- 5 = 5MPa

### Pressure-relief

- 1 = with pressure-relief
- 0 = without pressure-relief

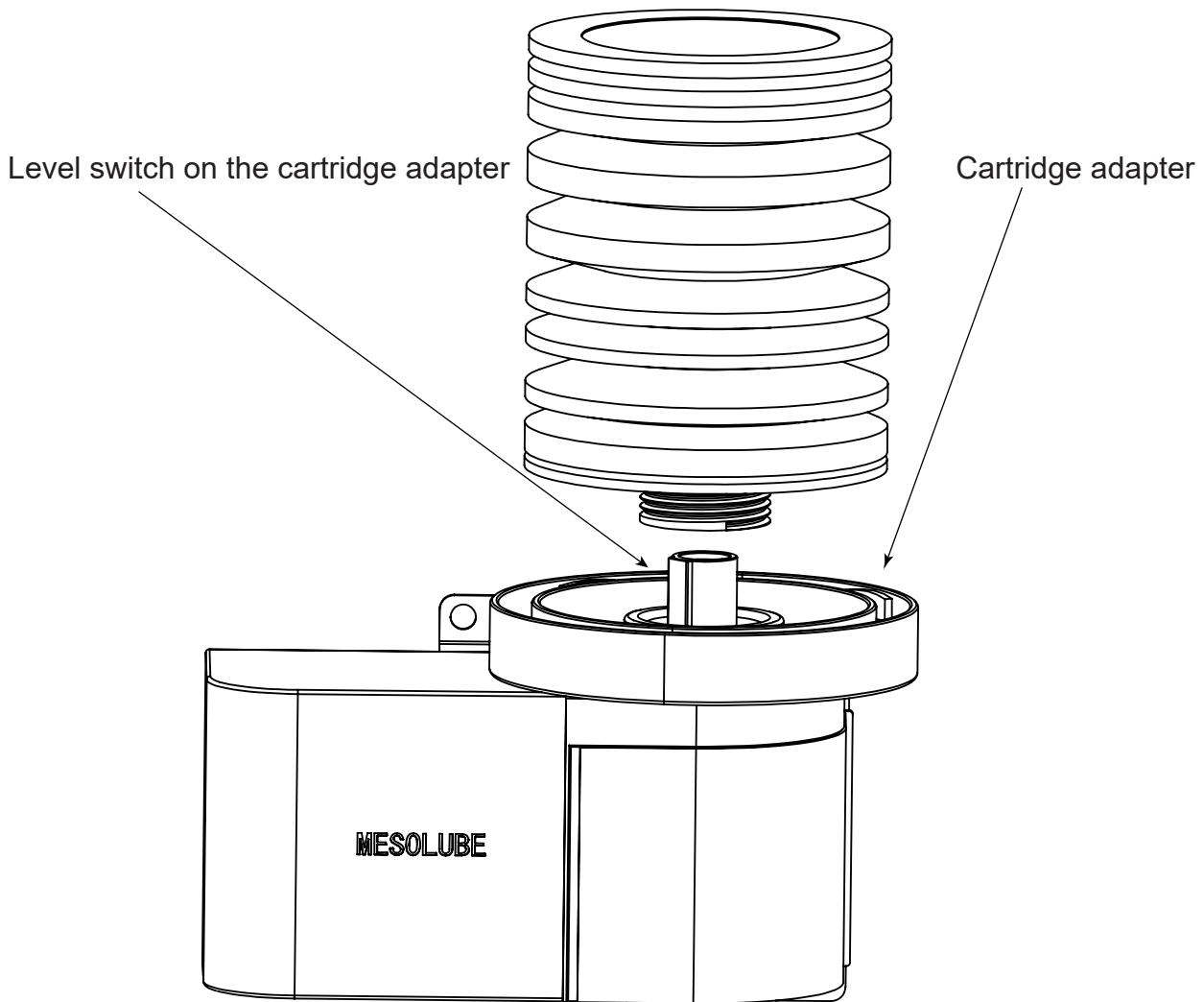
# Dimensions



# Level switch



The level switch is in the cartridge adapter. When the level switch is working, the pump will stop working before the cartridge runs out of grease to prevent air from entering. For this product, when the level switch is working, the work light flashes. The level switch only outputs a signal when the pump power is on. Since the pump stops when the liquid level switch is working, the pressure switch may not work, so it will output a normal pressure value.



# Mounting requirements

## Operating environment

Please ensure that the ambient temperature: +0~+50℃, humidity: 35~85%RH

## Mounting details



- ◆ Don't drop the product to cause injury or property damage.
- ◆ When mounting tubing and related moving parts, please keep a safe distance and follow local regulations to prevent accidents.



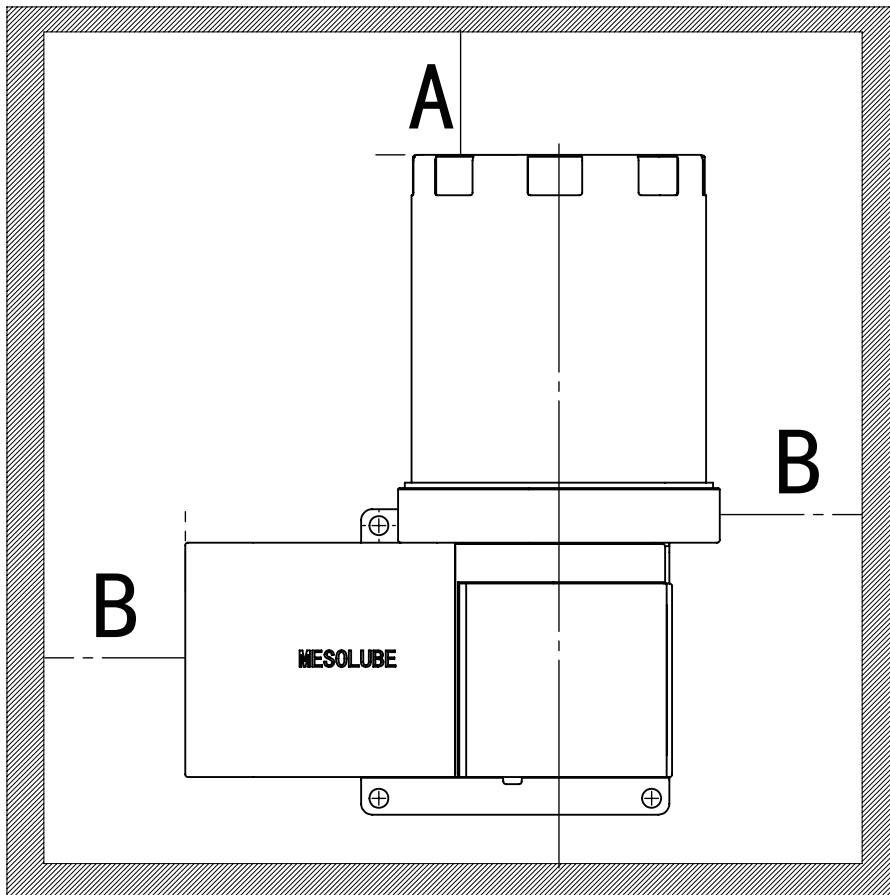
- ◆ Be sure to fix the pump on a vertical and flat surface so that it can fully bear the weight of the pump.
- ◆ Mount and fix the pump with three M6 bolts through the 7mm hole.
- ◆ It is recommended to apply anti-vibration glue when the pump is subjected to vibration.
- ◆ Install the pump in a location isolated from water, oil, chips and dust.
- ◆ Vibration: 9G (88m/s<sup>2</sup>) or less.



- ◆ Be careful not to drop the main unit.
- ◆ Do not pick up the pump by holding the cartridge cover, because the main unit may detach from the cover and fall.
- ◆ Do not put your feet on the main unit, otherwise it will cause damage.
- ◆ Make sure to leave the necessary space around the pump for operation and maintenance.



The weight of the pump and the necessary space (700mL)



Model	Order code	Required space(mm)	Weight (kg)
P200	P200-072431	A: 250, B: 200	1.6

### Lubrication line connection



Connect tube to the pump outlet (Rc1/8), use 5 MPa or higher tube, fix the connector, and then tighten it with a wrench 2.5 to 3 turns.



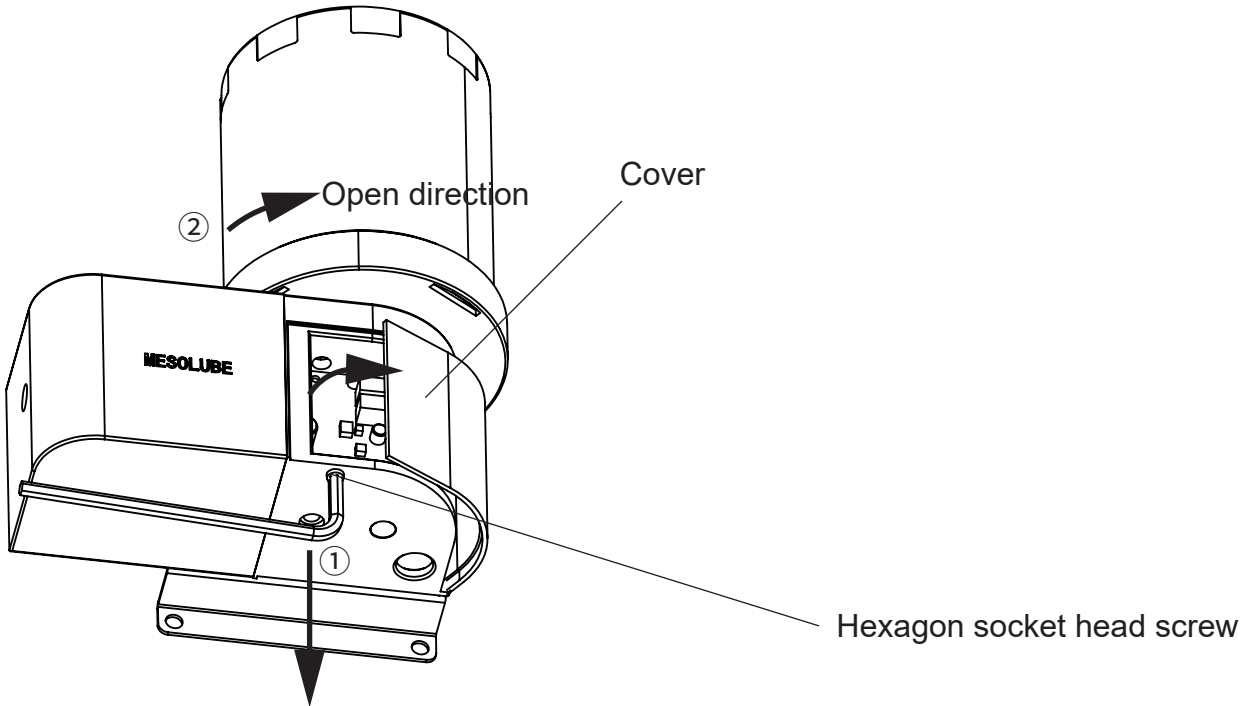
Tightening torque: 10N.m. After connecting, make sure that there is no leakage at the connector of cartridge. For P200, make sure to exhaust air from the tube and pump after connection.



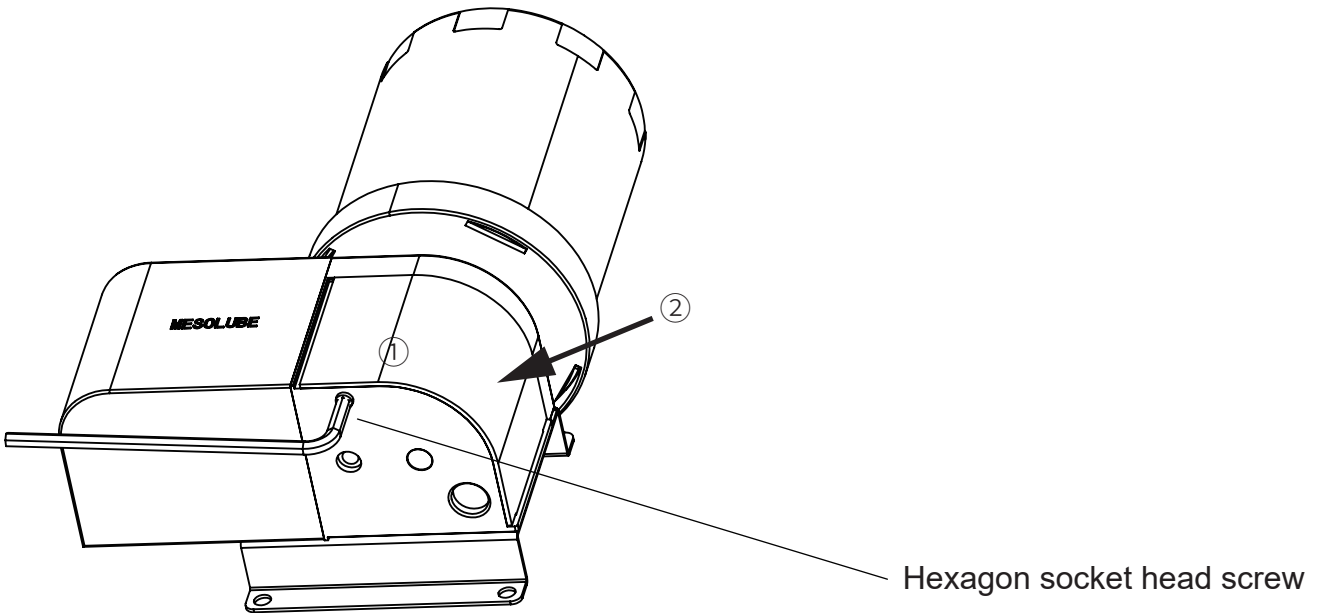
If the main tube is short, the pressure may reach 8 Mpa or higher, but there is no problem during use.

## Disassembly and wiring

When removing the cover. ① Remove the hexagon socket head screw at the bottom of the main body. ② Push the cover down in the direction shown below.



When mounting the cover. ① Part of the cover is hung on the main body. ② Press down in the direction shown in the figure below, and fix the hexagon socket head screw with bolts.



When the pump is operating, please do not remove the cover and motor cover. It may cause personal injury and damage to the circuit base.

# Refilling

## Filling method

Please make sure that under this condition: +0~+50°C, humidity: 35~85%RH

Model	Order code	Filling method
P200 series	P200-071231	Designated disposable cartridge

## Precautions



If the oil bag is removed when the grease is not used up, air will enter the oil bag and cause malfunction, so before replacing the oil bag, make sure that the oil bag is completely used up.

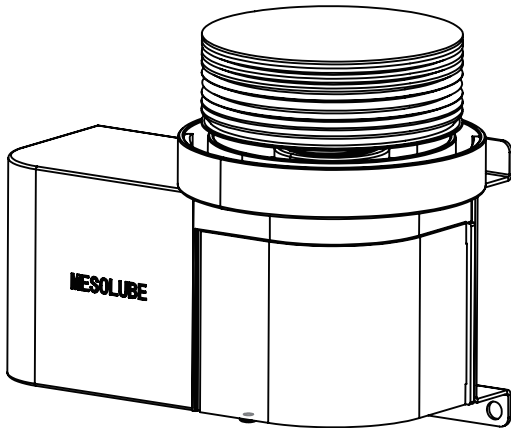


- ◆ Make sure that the grease is completely consumed before changing the cartridge.
- ◆ Do not turn on the power without cartridge, otherwise the pump will suck in air or foreign matter and cause its failure.
- ◆ When replacing the cartridge, do not wipe around the inlet of the pump with a dirty cloth. This will cause the pump to suck in foreign matter and cause its failure.
- ◆ Only standard LHL oil bag is supported. Using other grease may cause system failure and damage important parts of the equipment.
  - Do not inject grease into an empty cartridge and reuse it, as this may cause the cartridge to rupture or cause the pump to malfunction due to the entry of air or foreign objects.

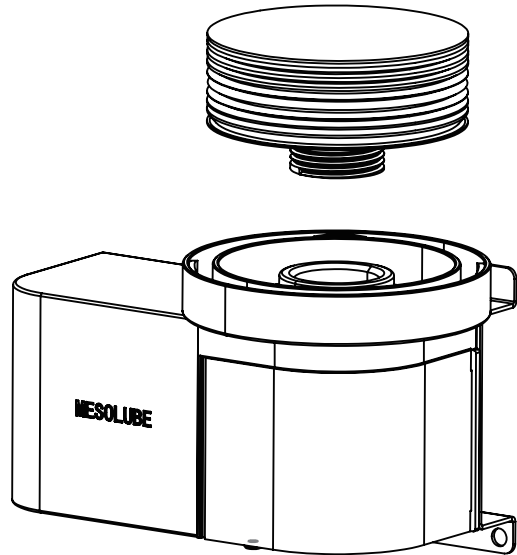
## Replacement steps

If the grease level switch works, or the cartridge shrinks when the grease runs out, follow the steps below to replace cartridge.

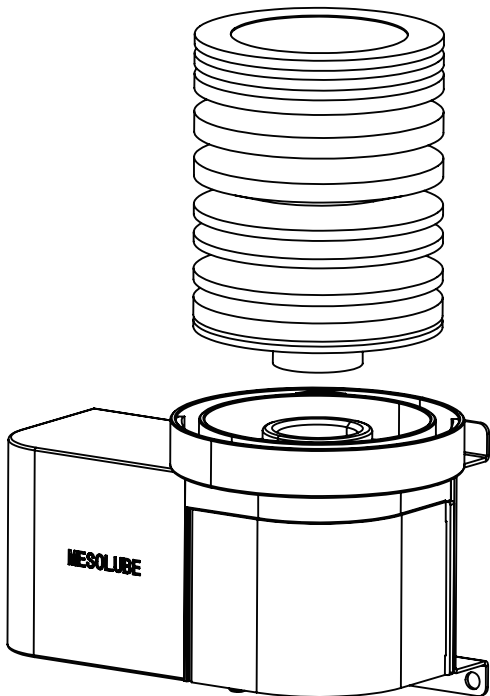
(1) Rotate the transparent cover counterclockwise to remove it from the pump



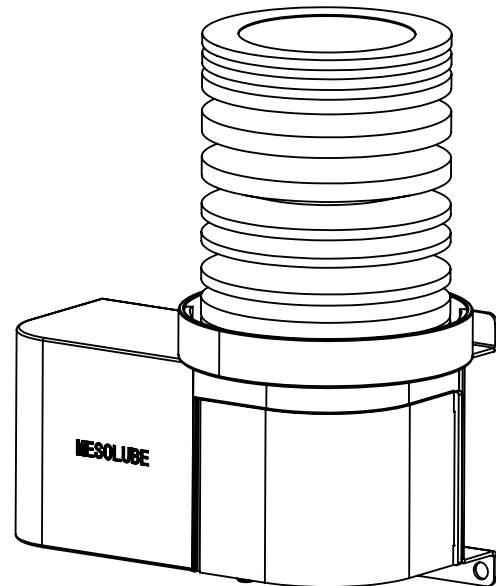
(2) Turn the empty cartridge counterclockwise and remove it



(3) When mounting a new cartridge, tighten the threads on cartridge and the adapter clockwise



(4) After mounting the cartridge, put the cover back and turn it clockwise to tighten



When cartridge is tightened, stop, otherwise the thread will be damaged



When mounting, avoid air or foreign objects from entering

# Warranty

## Warranty period

The warranty period of this product is one year from the date the product is delivered to the customer's designated address.

## Warranty scope

(1) If the product fails to operate within the warranty period, we will replace it free of charge, but it does not apply to the following situations:

- ① Failure caused by improper conditions, environmental pollution, or uses not described in the instruction manual, quick manual, or separately agreed specifications.
- ② Failure caused by customer equipment, software or any other products not manufactured by our company.
- ③ Failure caused by modification or repair not performed by us.
- ④ If the consumable parts specified in the manual or quick manual are properly maintained or replaced, the failure should be avoided.
- ⑤ Failure caused by technically unpredictable problems when delivering this product.
- ⑥ Failures caused by disasters such as fires or floods, or any other external causes that are not attributable to us, such as unstable voltage.

(2) This warranty covers the limited scope of the matters mentioned in section (1) above, and does not include secondary damages (equipment damage, loss of opportunity or loss of income) caused by our products to customers, nor any other types Damage.

## Applications

Our products are designed and manufactured as general-purpose products for general industrial use. Not suitable for the applications described below.

- ① Equipment that has a potentially significant impact on human life and property, such as nuclear generators, airplanes, railway equipment, marine vessels, and medical equipment.
- ② Public facilities such as electricity, gas and clean water supply.
- ③ Use outdoors or under similar environmental conditions.

However, if the customer consults us in advance, confirms the product specifications, agrees to the technical requirements, and takes the required safety measures, this warranty can be used. In this case, the warranty coverage is the same as above.