

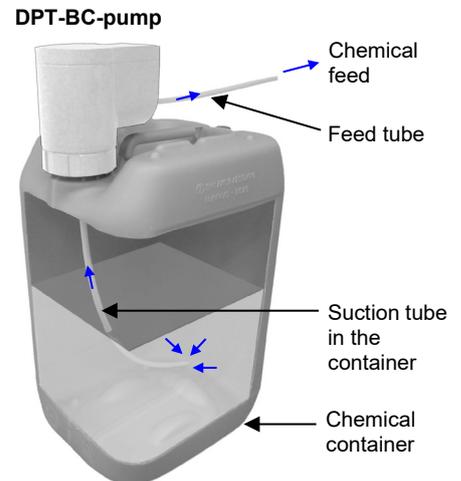
# Dosing pump DPT-BC, installation and operating manual

## 1. Purpose and operating principle of the dosing pump

DPT-BC –pump is an auxiliary device for dosing chemicals or other liquids. The pump mounts directly to a standard container/barrel in place of the original container/barrel cap without a need for any adapter. The pump is time based controlled and adjustable.

Actions:

- Time based feed: 12 feeds with the amount between 1-9999ml.
- Auto feed: with the amount of 1-9999ml repeated every 1min-23h59min.



## 2. DPT-BC –pump, technical specifications

- Pump yield denoted on the type label
- Input voltage: 24VDC, 12 VA
- External power supply: input 100...240VAC, 50/60Hz, output 24VDC, 15 VA max
- Dimension (WxDxH, mm): 85 x 145 x 150
- Weight: < 1 kg
- Protection class: IP 44
- Operating temperature range: +5...+40°C
- Storage temperature range: -10...+65°C

## 3. Delivered DPT-BC –pump parts

1. DPT-BC -pump
2. Adapter for 5/10 liter container
3. External power supply unit 230 VAC / 24 VDC
4. Suction tube
5. Feed tube
6. Installation and operating manual

## 4. Safety instructions

Before installing and using the Dosing pump, carefully read and review all health and safety warnings, precautions and instructions of this chapter. The manufacturer takes no responsibility of damages or injuries caused by a misinstalled or misused device.

### WARNINGS:

1. The device is aimed for dispensing only liquids supplied or recommended by the pump supplier. Dispensing of other chemicals is forbidden. If other chemicals are used, the device warranty becomes void and a device breakage or malfunction and/or danger for persons may occur.
2. Only a trained and qualified person is allowed to install the equipment.
3. Always apply necessary safety practices when installing and operating the device.
4. Dispensed chemical might be corrosive! Be aware of safety regulations of the chemical and wear protecting goggles and chemical-resistant gloves when dealing with corrosive substances.
5. The chemical container with the pump connected must be placed on a base which is suitable for the chemical used in the container.
6. Do not attempt to open the Dosing pump, otherwise a malfunction, danger or injury may occur. The pump cannot be opened at all.
7. To avoid malfunction, danger or injury the device must be unplugged from the mains voltage wall socket before any maintenance excluded the normal settings and/or programming of the pump.
8. Check the device regularly.

9. In the following situations the Dosing pump must be powered off by unplugging the power supply from the mains voltage wall socket:

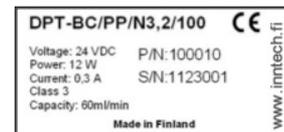
- If the ERROR light is continuously on the chemical container is empty. Replace the chemical container as explained in chapter 8.
- If the pump does not stop automatically in case of interference or malfunction.
- If other faults or interference occur during installation or normal operation so that the problem cannot be eliminated by instructions given in this manual.

**CAUTIONS:**

1. Use of controls or adjustments or performance of procedures other than those specified in this manual may result in device malfunction or damage.
2. The device shall always be installed into a dry environment.
3. Do not operate the device beyond specification ranges (eg. operating temperatures).
4. Do not use the device in a place where static electricity may exist. Static electricity may cause failure or malfunction of the device.
5. If chemical liquid leaks out from the device or if the device becomes otherwise defective, it cannot be repaired. It must be replaced by a new device. Take the defective Dosing pump properly away from use properly.

**5. Type label**

Type label is located on the Dosing pump housing rear panel.



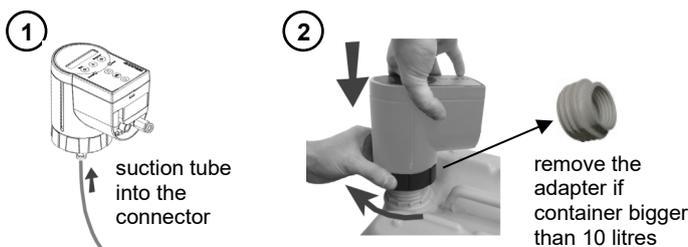
Warning label on the pump control panel



**6. Installation instructions** (consecutive numbers refer to the pictures, respectively)

Place the pump and the container close to chemical feed (eg. basin closet)

1. Install the suction tube into the instant connector located in the bottom of the pump. Push the tube end into the connector as long as it goes and test that it has locked properly. The tube must not come out if tried to pull.
2. Remove the original container cap and mount the pump in place of it: Hold the pump with one hand, screw the pump cap clockwise by your other hand until the cap is fixed tightly in the container. Note: The pump can still be rotated into desired direction, although its cap is tightened into the container. If the container is larger than 5/10 litres, remove the adapter from the cap by unscrewing it from the pump. Then mount the pump into the container.
3. Install the feed tube into the back part of the pump and the other end of the tube to the feeding point.
4. Connect the external power supply to the pump: CAUTION: The unit may power up.
  - a) Mount the power supply dc wire plug into the socket in the pump housing. Push the plug upwards to the socket. Bend the wire to go between two plastic strain relief taps of the pump housing as shown in the picture.
  - b) Plug the power supply unit into a standard wall socket (voltage 100...240 VAC). The device will now power up.
5. Make the eventual settings through the control panel as instructed in the chapter 10.
6. Press MANUAL FEED to test the pump. The pump should run and feed the chemical as long as the button is pushed. Note: at the beginning only air might come out because the tube is still empty. After a while the pump runs the chemical liquid.





## 7. Maintenance

- Regularly check that there is chemical liquid in the container. If the container is empty, unplug the power supply from the wall socket to power the device off. Remove the pump from the container (open the bottom cap), replace the container by a filled one, mount the pump into the container and power the unit on by plugging the power supply into the wall socket. If needed set the feed volume to a desired value.
- In the case the device does not feed the chemical though it should, check that power supply is connected properly in the pump and in the wall socket and that the tubes are properly mounted and fixed. Check the settings (chapter 10). Test the pump by pushing the MANUAL FEED. The pump should run and feed the chemical as long as the button is pushed.
- See the Safety instructions in chapter 4 of how to proceed in malfunction or fault situations. If the malfunction cannot be eliminated as instructed, unplug the power supply and contact the pump manufacturer.

## 8. Transporting and disposing the device

Before transporting the Dosing pump make sure that it contains no chemical. Rinse the pump by letting it pump air: remove the pump from the chemical container and press the MANUAL FEED button until no chemical liquid comes out from the feeding connector. Pack the pump properly to avoid transportation damages.

Dispose the Dosing pump according to local rules and laws concerning disposal of harmful problem waste. Never dispose the unit among normal waste, because it contains electrical components that may contain harmful materials.



## 9. DPT-BC pump control panel

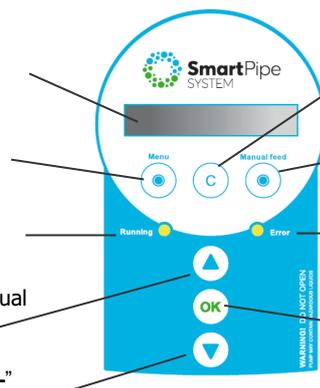
**LCD display** shows the menu, status of the device and eventual alarm information, reminders and alarms

**Menu:** Press to start setting

**Running led lamp:** When blinking: power is connected to the unit and feeding may start automatically. When steadily lighted: chemical pump is running: A programmed feeding or manual feeding is in function (if Manual feed pressed).

"next" / "+"

"previous" / "-"



**C:** Press to cancel (not accepting) a setting and to return to main menu level

**Manual feed:** Force to run the pump (manual feed of the chemical liquid)

**Error led lamp:** When blinking: Low chemical level or other alarm/error. When steadily lighted: chemical finished or other alarm/error situation

**OK:** press to confirm a selected action or value. E.g. Press to accept a setting and to return to main menu level.

## 10. DPT-BC pump operation, settings and alarms

As the Dosing pump is powered up, the device will make the internal initialization. The LCD display will first show the following message: "choose language". Choose the desired settings as shown in the chart. Later it's easy the change the settings by browsing the menu and choosing the item by pressing the OK button.



By default the first boot-up force to go through the steps 1,2 and 4. Later on these steps can be skipped by OK.

LCD basic view

12:30:05  
\*NO FEEDS\*

Browse for desired selection or numerical value by arrow keys and accept by **OK**.  
Press **OK** to proceed to the next selection  
**C** to cancel or to return  
**MENU** to scroll through the main menu steps  
Basic screen shows the selected pump mode

1 LANGUAGE:  
SUOMI

Choose the language by using the arrows and accepting by **OK**  
SUOMI / SVENSKA / ENGLISH

2 TIME:  
12:30

Set the hours/minutes with the arrow keys and accept with **OK**

3a PUMP MODE:  
TIME  
FEED

Select the option by browsing with the arrows and choose by pressing **OK**  
TIME FEED/AUTO FEED

12 feed times  
1...9999ml/feed time

TIME FEED  
01/12  
0ml 00:00

Press **OK**, set the feed volume, accept by **OK**, set the feed time and press **OK**  
Set the following time feed or cancel by pressing **C**

3b PUMP MODE  
AUTO FEED

Repeating feed  
1...9999ml / 1min-23h59min

AUTO FEED  
0ml / 00:00

Set the chemical volume  
0-1000 litres

4 SET CHEMICAL VOLUME  
10 LITERS

Set the chemical volume + **OK**, set the feed time + **OK**  
**Note! If chemical volume is set to 0, there will be no alarm.**

Alarms

CHEMICAL VOLUME  
LOW PRESS OK

Alarm when chemical volume less than 10% of set value  
Error led blinking. To set off press **OK**

CHEM BIN EMPTY  
PRESS  
OK

Alarm when the chemical is finished. Error led steadily lighted.  
Set off with **OK**, Set chemical volume.

Product Code :

161620

GTIN:

6429830105138

