

**Installation Guide**

# Cubis<sup>®</sup> Dosing System



# How to install the Cubis® Dosing system

1. Install flask holder YFH01MS or YSH02



Flask Holder

2. Connect weighing unit to controller box



To controller box

3. Install YDP30

- Plug in LV power supply cable
- Connect printer with serial cable 69Y03295 to controller box (cable comes with YDP30)
  - For manual pipetting connect YDP30 to the standard serial port WP1 internal (COM A, peripherals)
  - If automatic dispensers are used connect YDP30 to the additional serial port WP1 DO slot (COM C)

- 3.1 Printer:



LV power supply To controller box

- 3.2 Printer connected to COM A



To printer To balance LV power supply

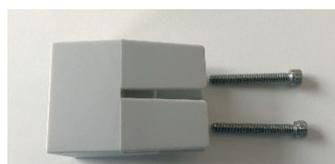
- 3.3 Printer connected to COM C



To printer To dispenser To balance LV power supply

4. If applicable: Install Hamilton Dispenser

- Install 25 ml syringe. First fasten syringe to valve, then fasten screw of dispenser arm to plunger
- Install dispensing tube to probe. Remove protective cap from dispensing tube, thread tube through eyelets of probe power cable, unscrew white cap at probe upper end, insert dispensing tube and push until the tube tip protrudes the probe tip as desired, fasten white cap to fix dispensing tube in position
- Install probe holder at dispenser. Use torx screwdriver to fasten the two screws. You may install the probe either on the left or on the right side of the dispenser.



- Fasten dispensing tube at front outlet of dispenser valve and plug in probe cable to power supply outlet at dispenser
- Fasten reservoir tube at side outlet of dispenser valve
- Plug in LV power supply cable
- Connect dispenser with serial cable 69Y03295 to standard serial port at controller box



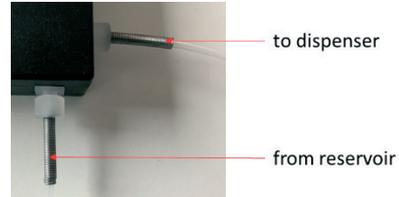
- Insert yellow ferrule into one of the borings at GL 45 safety lid (cone must face upwards), insert ~20 cm long tube (part number 20943), insert male valve coupling unit into boring and fasten the assembly
- Fasten filter unit to other boring of GL 45 lid



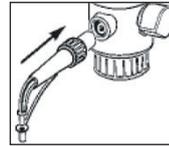
- Fasten female valve coupling unit to reservoir tube
- Screw safety lid on Youtility reservoir bottle. Put female valve coupling unit on male coupling unit at GL 45 safety lid.



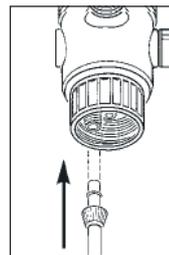
5. If applicable: Install Anton Paar density meter
  - The density meter is installed in between the reservoir bottle and the Hamilton dispensing unit.
  - Fasten the tube coming from the solvent reservoir at the density meter bottom side inlet
  - Fasten the tube leading to the dispenser at the density meter outlet at the right side



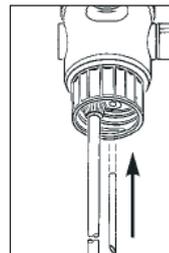
6. If applicable: Install Hirschmann opus titration unit
  - Push the ejection unit on up the stop
  - Tighten the union nut firmly and ensure that it is securely fitted



- Install suction tube. Cut suction tube to correct length, then tighten the union nut onto the suction valve.



- Insert the recirculation hose firmly into the recirculation opening in the valve block.



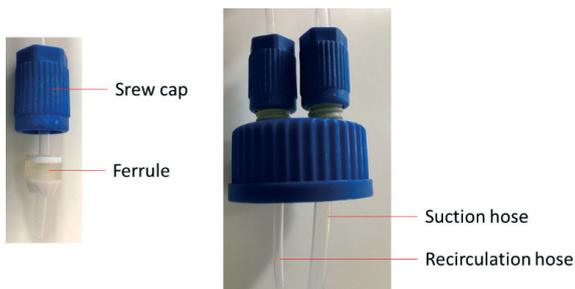
- For opus accessories set II: Screw the unit onto the reservoir bottle



- For opus accessories set I: Thread suction and return hose through adapter filler pipe
- Screw titration unit onto adapter
- Install opus stand foot



- Fasten suction and recirculation hose at GL 45 safety lid using ferrules and screw caps



- Screw GL 45 safety lid onto reservoir bottle
- Place reservoir bottle into opus system platform



- Connect dispensing unit to opus controller box (blue plugs)
- Plug in serial cable (red plug) to opus controller box
- Connect dispenser serial cable to serial cable 69Y03295 (9 pin male onto 9 pin female plug)
- Plug in 25 pin adaptor of serial cable 69Y03295 at standard serial port of MSA controller box
- Plug in LV power supply to opus controller box



## 7. Configure the serial ports

- ▶ Admin login, menu, settings, device parameters
- ▶ Configure ports
- ▶ Configure serial ports

### 7.1 If YAPP16 is used with manual pipetting printer YDP30 is installed to the standard serial port.

**WP1 internal    Operating mode = Printer**

**Printer type = YDP30**

WP1 USB    Operating mode = SBI  
[standard setting]  
Protocol = no protocol  
[standard setting]

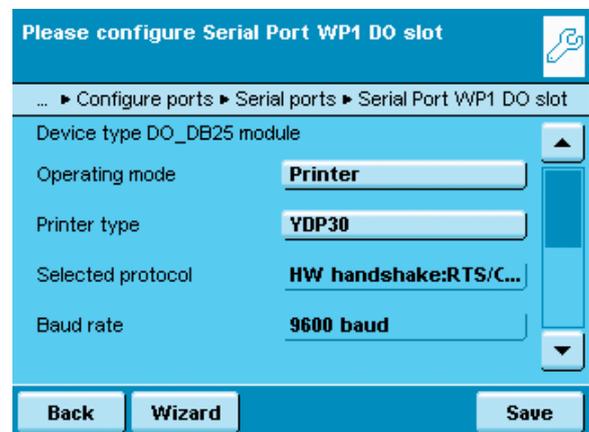
### 7.2 If YAPP16 is used with an automatic dispenser plus printer YDP30 the dispenser is installed to the standard serial port and the printer to the additional serial port (IR version).

**WP1 internal    No function assigned**

WP1 USB    Operating mode = SBI  
[standard setting]  
Protocol = no protocol  
[standard setting]

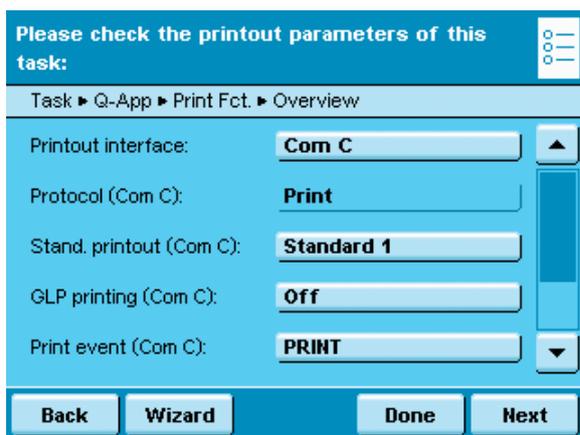
**WP1 DO slot    Operating mode = Printer**

**Printer type = YDP30**



8. Install YAPP16

- ▶ Import | export data
- ▶ Import Q-App option from SD
  - select YAPP16 for import
- ▶ Press TASK
- ▶ Create
- ▶ Individual Q-App Workflow
  - select YAPP16 for installation
  - Please make sure that COM A for manual pipetting or COM A and COM C for automatic dispensers plus YDP30 are listed under "Printout interface". If you installed the serial ports properly as described under point 1 the port settings should be automatically ok.



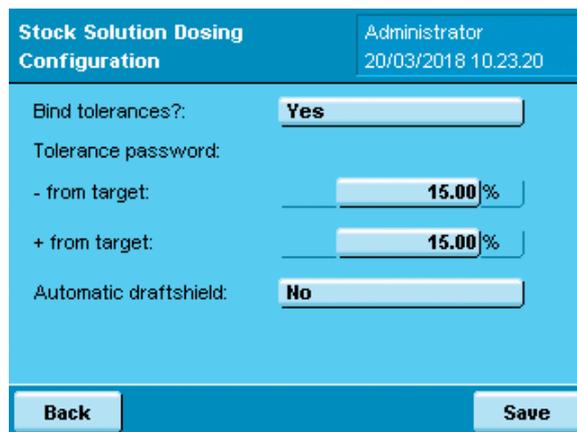
- ▶ Device parameters
- ▶ Software activation codes
  - Activate YAPP16 by entering activation code. To receive an activation code send an e-mail to holger.densow@sartorius.com, sebastian.weber@sartorius.com or steffen.gloth@sartorius.com including the balance serial number

9. Start YAPP16

In the admin menu configure at least the following points:

9.1 General configuration

- Select if the user should be forced to keep tolerances. If desired, the admin can select "No, with password" and set a password to control out of tolerance values
- Tolerances are set the default values of  $\pm 15\%$ . Modify the tolerances as desired
- For balances with an automatic draft shield, please activate automatic draft shield function



9.2 Dosing device

- Select dosing method
  - For the Hamilton dispenser please set the following values:
    - 25 ml syringe
    - 16 sec/stroke
  - For the Hirschmann dispenser please set the following values:

Volume	Max. speed
10 ml	2.000 $\mu\text{L/s}$
20 ml	4.000 $\mu\text{L/s}$
50 ml	10.000 $\mu\text{L/s}$

9.3 For Chromeleon users only: Chromeleon configuration

- Set Chromeleon control to enabled
- Select if the user should be forced to enter a comment for rejected samples
- Optional: Activate special bootscreen

9.4 For non-Chromeleon users

- Define at least one compound, one solvent and one sample
- A sample always consists of one solvent and one or more compounds

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