

ADDITION TO INSTALLATION AND OPERATION INSTRUCTION

FlowCon FAC6HP with optional software

Please see operation instruction for **FlowCon FAC6HP** (1F95600) to learn how the commissioning meter is connected to a valve and how to measure relevant values.

Installing the software.

The software can be installed on Windows XP/ Vista/7 operating systems.

Install the software thus:

1. Install the drivers for the FlowCon FAC6HP:

- 1.a. Insert the CD in a CD drive of a computer (not supplied by FlowCon), and if prompted to, choose not to install the program.
- 1.b. Open the folder "cp210x" (to find the folder choose to "explore" the CD) and start the program inside this folder.
- 1.c. Please follow the steps on the screen to complete the installation and launch the program.
- 1.d. Click "Install" on the pop up window "Silicon Laboratories CP210x USB to UART Bridge Driver Installer" when prompted.

2. Install the software for the FlowCon FAC6HP:

- 2.a. Go to the root folder of the CD and start the program "setup.exe". If prompted, choose to trust / install it (PcomPRO).
- 2.b. At the end of the installation (when the program PcomPRO is first started), you will be asked to connect a FAC6HP to the computer. Please turn on the FAC6HP (by pressing any button), then connect the computer and FAC6HP with the USB cable. The USB port on the FAC6HP is located inside the battery box at the back of the device inside the rubber cover.

3. Import a valve list:

- 3.a. When a new FAC6HP is connected to the computer, the program will prompt a need to create a reference file for that particular FAC6HP (the program will identify each FAC6HP from its serial number). Please accept the creation of the reference file and await the process (this usually takes 4-5 minutes).

It is not necessary to have a FAC6HP connected to the computer all the time working with the software. However the list of available valves will be imported from the FAC6HP and thus it is important to connect it initially.

The program will wish to import the valve list from each commissioning meter connected and by default only use valves for projects intended for a specific commissioning meter included in the list from that particular device.

Creating and editing projects.

The quick start offers either import of the current project on any connected FAC6HP, creation of a new project or opening a recent project located in the program's default folder. When creating or editing any project, the program window is by default divided into 3 main parts, please see figure 1. The buttons will be explained if the mouse is kept over the button, besides table 1 consists of a total list of buttons.

Please start all new projects by choosing the units that you wish to use for that project (see the upper left part of figure 1).

After choosing the units, the setup of the project should be defined in the project tree. The project tree is shown in the middle part of the screen

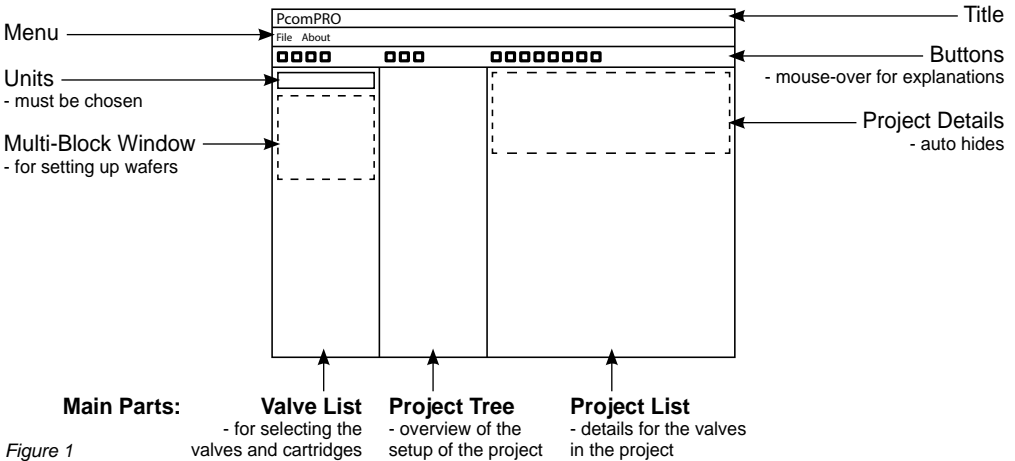


Figure 1

(slightly left) - this is the overview of the project. All valves must be listed under a group/level/area and thus even large projects with many valves can be sorted by dividing them into obvious groups/levels/areas.

To add/remove more groups/levels/areas or valves click the buttons just above the project tree. By default, the naming of the groups/levels/areas are "Level 1", "Level 2", "Level 3" and so on, and the naming of the valves are "Valve 1-1", "Valve 1-2", "Valve 1-3" and so on, where the first number corresponds to the group/level/area number so that valves in Level 2 will be named "Valve 2-1", "Valve 2-2", "Valve 2-3" and so on.

Each group/level/area and valve can be renamed in the project tree by clicking 2 times on the current name (please be sure not to double click). The recommended maximum name length of the group/level/area and valve in total is 18 characters, so abbreviations are recommended.

Note 1: However in the default project the levels are named "Group 1", "Group 2", "Group 3" etc.

Depending on the system, it is recommended to include one or two extra valves in each group/level/area to deal with valves not specified on the drawings/plans.

Both the defined valves and their settings can be altered on the commissioning meter if necessary, but no new valves can be added (thus the above recommendation).

All the valves imported from the FAC6HP are shown in the valve list on the left side of the screen, where they are divided into maker, then type/series, then model and lastly size. To find fx. a FlowCon Green.0, choose FLOWCON, then Green, then Green.0 and lastly 15-25mm.

To define each valve in the project tree, find the respective valve in the left side of the screen, click on it (the size) and then drag and drop it onto the valve in the project tree to define that particular valve. To change an already defined valve, just repeat the procedure of defining it (click, then drag and drop). If an already defined valve is defined again, the previous valve and settings will be overwritten by the new valve. To undo a defined valve, right-click it and choose "clear".

The right side of the screen is the project list, where the details for every valve can be seen. The cells with green background can be edited and thus the settings (of valves with adjustable settings) can be changed to reflect the specified maximum flow. After changing settings please press the reset button (2 green arrows) to update the cells.

To save the project press the save button, which will turn green when everything is saved and be red when there has been changes to the project since the last save.

Setting up wafers.

To make a wafer consisting of several stainless steel cartridges, please use the multi-block window by clicking the button with the circle and several dots. Add a new multi-block for every new wafer configuration. The multi-blocks can be named in the same way as levels and valves (clicking twice).

Cartridges are added to a multi-block in the same way that they are to valves (click, then drag and drop). However, you will be prompted for how many of this particular cartridge you wish to add to the wafer and the summarized flow of the cartridges will be added to the wafer. The multiplied cartridges will function as one, so in case of alterations of numbers, the old cartridges will need to be deleted (right-click and choose delete) and new cartridges must be added. Adding another cartridge to a wafer will not overwrite the old cartridge(-s), but simply add the new cartridge to the list and the flow of the cartridge to the total flow of the wafer.

When the wafer is finished, it can be added to a valve in the project tree like every other valve (click then drag and drop). However as soon as a wafer is added to a project, it is locked for further alterations.

By clicking on each cartridge (type) in the wafer, the cartridges can be checked to verify the flow (which is shown in the lower part of the multi-block window).

Exporting to/importing from FAC6HP.

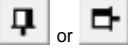



















When the project is ready to use, you can export it to a commissioning meter thus:

1. Have the relevant project open in the program.
2. Turn on the commissioning meter and connect it with the USB cable.
3. Press the export button (with the red arrows) and choose "Yes" when prompted.
4. Wait while the project is transferred, then press "OK".
5. Now you can turn off the commissioning meter and remove the USB cable.

To use the project in the memory of the commissioning meter, please follow the notes in the general instruction for the FAC6HP commissioning meter in the chapter on memory and the section about repeating measurements.

A project can also be imported from the commissioning meter thus:

1. Have the program open.
2. Turn on the commissioning meter and connect it with the USB cable.
3. Press the import button either from the quick start or from the button with the blue arrow (above an open project).
4. When prompted, choose a name for the project.
5. The setup will now be the same as for projects made in the program, but the column "D.P." will be updated with the measured differential pressures and the column "Auto Flow" with the subsequent flow rate.

Valve List	
 or 	Hide/show the valve list
	Metric: Change all sizes to mm
	Imperial: Change all sizes to inches
Multi-Block	
 or 	Show/Hide the multi-block (wafer) window
	Add a new multi-block (wafer) * only available when the multi-block window is visible
Project Tree	
	Add group/area/level
	Add valve
	Delete group/area/level or valve
Project List	
 or 	Hide all except the project list or show more than the project list
	Show quick start
	Start a new project
	Save project
	Show/Hide project details
	Reset: Update the manually altered cells
	Export project to device
	Import project from device
	Export project to a .csv file

Warranty obligation.

Failure to abide by all recommendations as per this installation and operation instruction will void warranty.

Table 1: List of buttons.