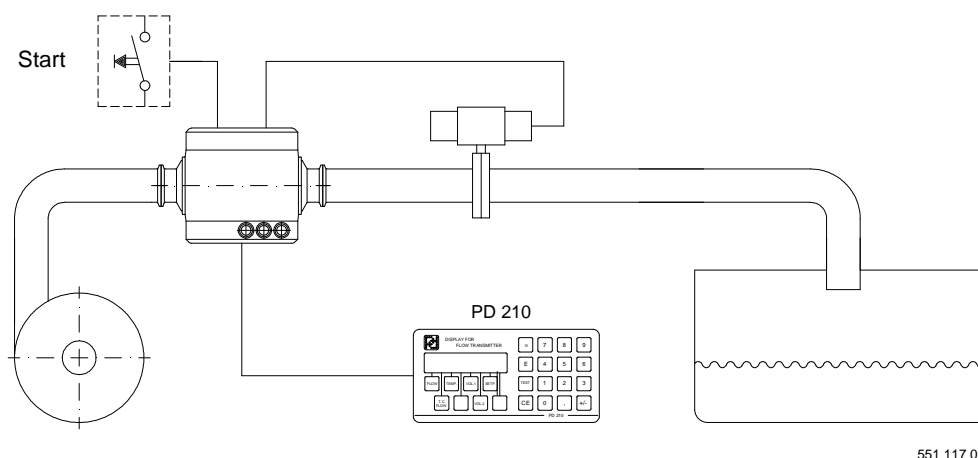
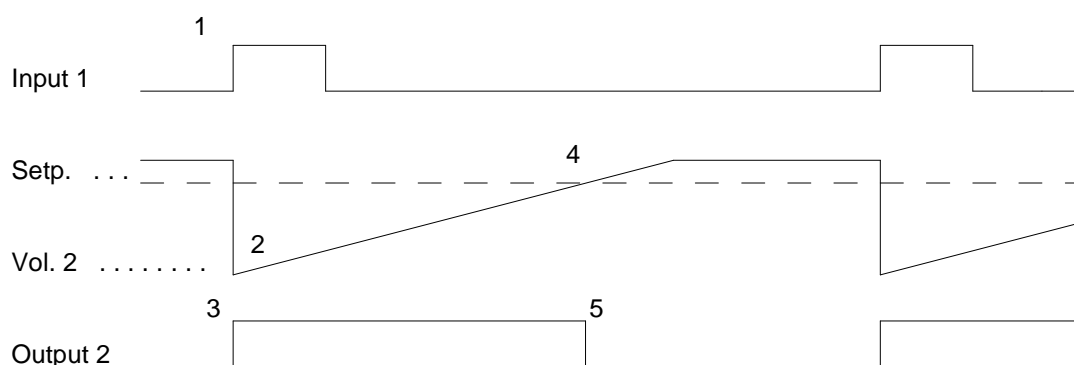


Batch control with PD 340 Flow Transmitter and PD 210 Display



The PD 340 flow transmitter has a built-in batch control function, and can therefore easily be used to control the dosing of a specified volume. The requested volume is keyed into "SETPOINT" on the PD 210. Input 1 on PD 340 is used to start the batch control. Output 2 controls the dosing valve or pump. The Volume 2 counter shows the dosed volume. When the batch control function is used, the built-in flow regulator cannot be used.



The function of the system

At first the requested volume is keyed into "SETPOINT". The dosing will start when input 1 is activated. This will clear the volume 2 counter and output 2 goes on. The valve or pump controlling the flow must be activated by the relay. When the liquid starts to flow, "Volume 2" will count up and when it is equal to the setpoint, output 2 will switch off. Because of the reaction time of the valve or pump, the flow will not stop immediately after output 2 is switched off. Consequently the actual dosed volume is a little higher than the setpoint. This after-flow is fairly constant if the reaction time and the flow rate are constant, and therefore it is possible to compensate for that by reducing the setpoint with the volume of the after-flow. The volume of this after-flow can be calculated as [volume 2 – setpoint].

Programming the batch control

To obtain the requested functions the PD 340 must be programmed as shown below. When programming the flow transmitter the Program Enable Switch on the terminal board must be in position ON. Digits marked with * are not used for the batch control function, but should be programmed according to meter size and other working conditions. The manual describes the programming procedure.

E1: *****	E5: *****
E2: *****	E6: *****
E3: 000000	E7: **2106
E4: *****	E8: 3024**

When programming is done, the Program Enable Switch should be put back to position OFF. The value in setpoint register before the program enable switch was switched off will be used as a power-up value after a power-cut.

Electrical connection:

