

## Sample Loop Installation Settings for Vanquish™ Split Samplers

Observe the safety messages and precautionary statements presented in the *Operating Manual for Vanquish Split Samplers*.

**Note:** These instructions refer to Chromeleon™ CDS version 7.3.1 or higher and 7.2.10 MUE or higher and Sampler firmware version 2.04 and all successors.

For installation instructions of the sample loop, refer to chapter 7.9 of the *Operating Manual for Vanquish Split Samplers*.

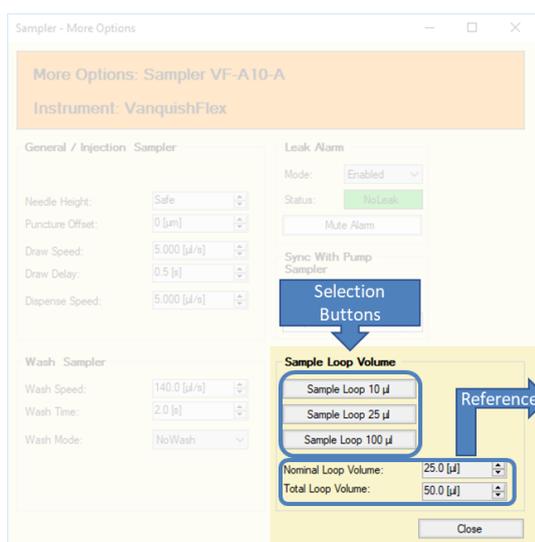
After the sample loop was installed, adapt the parameters for the sample loop volume in Chromeleon. These include the parameters **Nominal Loop Volume**, **Total Loop Volume** and **Idle Volume**. The property **Nominal Loop Volume** was introduced with Sampler firmware 1.23 and Chromeleon 7.2.10.

Property	Purpose
Nominal Loop Volume	Defines the allowed maximum injection volume for the installed loop.
(Total) Loop Volume	Represents the geometric volume of the installed loop. It is defined by length and inner diameter of the capillary. It is typically between 1.3x and 2.3x the maximum injection volume to ensure the metering device is not contaminated with sample during the draw step of the injection cycle.
Idle Volume	Refers to the idle position of the metering device and allows for fine tuning of the system gradient delay volume for method transfer.

**Nominal Loop Volume** and **Total Loop Volume** are printed on the label of the sample loop as shown in the figure below.



- 1) Open the Chromeleon Console.
- 2) Go to the **Sampler ePanel** and open the “**More Options...**” box.
- 3) Click on the button for the installed loop or enter the values for nominal loop volume and total loop volume manually. The set values are shown for reference. Hit “**Close**”.



Part no.	Description	Nom. Loop Volume	Total Loop Volume
6850.1915	Sample loop, 10 µL, MP35N, left		
6850.1919	Sample loop, 10 µL, MP35N, right	10 µL	23 µL
6851.1960	Sample loop, 10 µL, SST		
6850.1911	Sample loop, 25 µL, MP35N, left		
6850.1917	Sample loop, 25 µL, MP35N, right	25 µL	50 µL
6851.1940	Sample loop, 25 µL, SST		
6850.1913	Sample loop, 100 µL, MP35N, left		
6850.1918	Sample loop, 100 µL, MP35N, right	100 µL	130 µL
6851.1950	Sample loop, 100 µL, SST		
6850.1970	Sample loop, 250 µL, MP35N, left		
6850.1975	Sample loop, 250 µL, MP35N, right	250 µL	325 µL
6851.1970	Sample loop, 250 µL, SST		
6850.1980	Sample loop, 1000 µL, MP35N, left		
6850.1985	Sample loop, 1000 µL, MP35N, right	1000 µL	1300 µL
6851.1980	Sample loop, 1000 µL, SST		

- 4) Open the **Command** window in Chromeleon (for example, by pressing **F8** on your keyboard).
- 5) Right-click in the window and select **Expert** to change the display filter level to the **Expert** user level.
- 6) To adapt the **Idle Volume** setting:
  - a) Select **Sampler Module\* > Sampler\* > Idle Volume**.
  - b) Enter the recommended **Idle Volume** for the installed sample loop as follows:

Part no.	Description	VH-A10-A(-02)	VH-A40-A-02	VC-A12-A-02
		VF-A10-A(-02)	VF-A40-A-02	VC-A13-A-02
6850.1915	Sample loop, 10 µL, MP35N, left	10 µL	10 µL	-
6850.1919	Sample loop, 10 µL, MP35N, right	-	10 µL	-
6851.1960	Sample loop, 10 µL, SST	-	-	25 µL
6850.1911	Sample loop, 25 µL, MP35N, left	25 µL	25 µL	-
6850.1917	Sample loop, 25 µL, MP35N, right	-	25 µL	-
6851.1940	Sample loop, 25 µL, SST	-	-	25 µL
6850.1913	Sample loop, 100 µL, MP35N, left	75 µL	75 µL	-
6850.1918	Sample loop, 100 µL, MP35N, right	-	75 µL	-
6851.1950	Sample loop, 100 µL, SST	-	-	25 µL
6850.1970	Sample loop, 250 µL, MP35N, left	75 µL	75 µL	-
6850.1975	Sample loop, 250 µL, MP35N, right	-	75 µL	-
6851.1970	Sample loop, 250 µL, SST	-	-	230 µL
6850.1980	Sample loop, 1000 µL, MP35N, left	75 µL	75 µL	-
6850.1985	Sample loop, 1000 µL, MP35N, right	-	75 µL	-
6851.1980	Sample loop, 1000 µL, SST	-	-	230 µL

**Note:** The idle volume of VH-A10-A(-02), VF-A10-A(-02), VH-A40-A-02 and VF-A40-A-02 equipped with old injection valve design (P/N 6036.1500) can be set between applied injection volume and 100 µL, for the new valve design (P/N 6036.2510) between 0 µL and 100 µL.  
The idle volume of VC-A12-A-02 and VC-A13-A-02 can be set between 0 µL and 230 µL.

- c) Click **Enter**.

**\*TIP** The default device names stated can differ if they were adapted in the instrument configuration.