SONOTEC

Technical Note
Using the SONOFLOW CO.55 SD V3.0 Touch Display

With the non-contact **SONOFLOW CO.55 SD V3.0** flow meter, SONOTEC offers the first ultrasonic flow sensor with stainless steel housing and built-in color touch display for instant data monitoring at the point-of-use. Designed for measurements in small scale process development as well as GMP manufacturing, the clamp-on sensor allows accurate and reliable flow measurement without any media contact.

Easy to Operate and User Friendly
The highly accurate SONOFLOW CO.55 SD V3.0 flow meter offers maximum user-friendliness with its intuitive color touch display.

The display features three sections that can easily be tapped with bare hands, latex or nitrile gloves, or a touch pen. Thus, you can quickly tap through the content pages to monitor or reset data or to perform certain adjustments.

Display Configuration
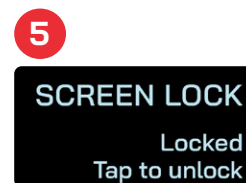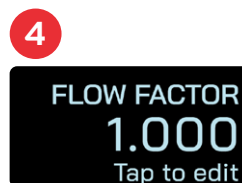

Three sections of the touch display

Via the Flow Monitor Software, you can easily activate or deactivate the touch function of the display, which can be necessary for certain applications. It is also possible to deactivate the entire display function, if viewing the measurements on a PCS monitor is preferred.

The color touch display has five different pages, which can conveniently be sorted via the Flow Monitor Software.

The following display pages are currently available:

→ **Flow data in different units**
→ **Volume data in different units**
→ **Status information**
→ **Flow factor adjustments**
→ **Screen lock**

Improve Your Processes with Point-of-Use Information

Flow and Volume Data

In the color touch display, flow rate, flow direction, and volume flow can be shown with up to 3 decimal places for instant data monitoring.

A colored bar indicates the current sensor status:
- → Green - Clear measurement without error
- → Red - Error which disrupts the measurement
- → Yellow - Warning, the measurement continues
- → Blue - Severe hardware issues

These units are available for the flow rate: μl/s, ml/s, l/s, ml/min*, l/min, l/hr, m³/hr, US gallons/s, UK gallons/s, US gallons/min, UK gallons/min, US gallons/h, and UK gallons/h.

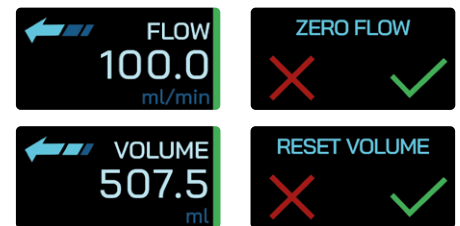For flow volume, select from: μl, ml*, l, m³, US gallons, and UK gallons.

The arrow shows the default flow direction. As the sensor is bi-directional, the flow direction can be reversed using the Flow Monitor Software.

Zeroing the flow sensor before each use can be performed directly on the touch screen, without the need to connect a further zero switch or wire the digital I/O bit. The optional confirmation command can be disabled in the Flow Monitor Software.

The volume counter can also be reset by tapping the touch screen. If desired, the optional confirmation command can also be deactivated.

*standard

Status Information

The status page provides information about the sensor, the current measurement, any warnings, and/or errors. By tapping on the display, further details about each message are shown.

Adjusting the Flow Correction Factor

In some cases, it is necessary to adjust the flow data with a correction factor, e.g., due to change in fluid composition or temperature. This can also be done via the touch display on the Flow Factor page. The flow correction factor applies a linear adjustment to the calibration curve and can thus adapt the flow data to the new conditions.

Screen Lock

For security reasons, it may be necessary to lock the display. In this case, it is still possible to navigate through the individual pages to check and monitor data, but adjustments can no longer be performed. The display is locked with a 4-digit PIN. You can configure your PIN in the Flow Monitor Software.

Select the page SCREEN LOCK and tap on the display to activate the feature. To unlock the display enter the PIN by using the + and - on the display to select the number. Tap on OK to confirm and swap to the next number. The screen lock feature may also be disabled if desired.