



# Set-up Procedure of the MicroPolar Brix LB 565 in conjunction with a Container Probe in the Evaporative Crystallization of the Sugar Production Process

For Software Version  $\geq 1.50$ .

Remark: The product temperature is not usually compensated in the evaporation crystallization, so it is not dealt with here.

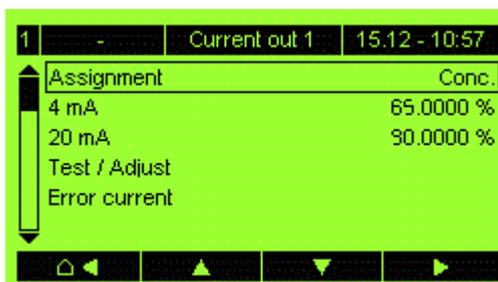
### Prerequisites

- The components of the system are properly installed according to the User Manual.
- The system was powered on for at least 45 minutes before calibration (acclimatization).
- The evaluation unit is set to factory settings i.e. settings as delivered from the factory or after a general reset.



**The Main Screen** (see left picture), all other screens are accessible via the main screen.

### 1. Steps I/O settings



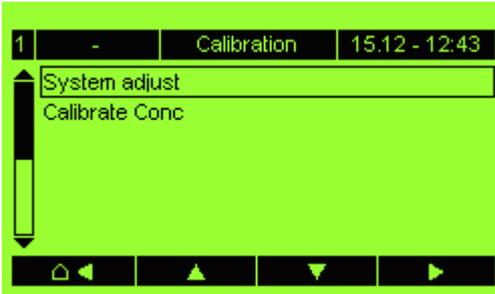
Configure the **current output** for the measurement signal (Brix-/Concentration). In the Screen: *Setup | Input/Output | Current output | Current out 1 |* enter upper and lower range for 4 mA and for 20mA respectively (see left picture).

If a PT100 is connected, the **PT100 input** should be activated under Screen:

*Setup | Input/Output | Pt100 |*. This is always the case for container probes with the integrated PT100.



**2. Step: Perform the System Adjustment**



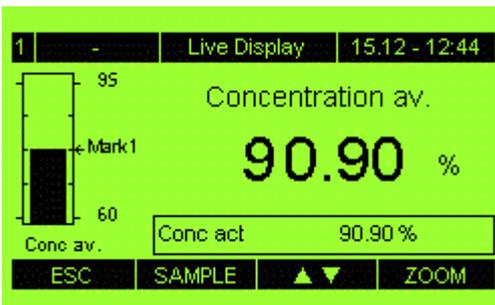
Perform the system adjustment (reference measurement) in the solution phase, just before the seeding point. Perform the system adjustment by selecting “System Adjust” in the Screen:

*Setup | Calibration | System adjust |* (see left picture).

Start the measurement by pressing RUN in the Main Screen.

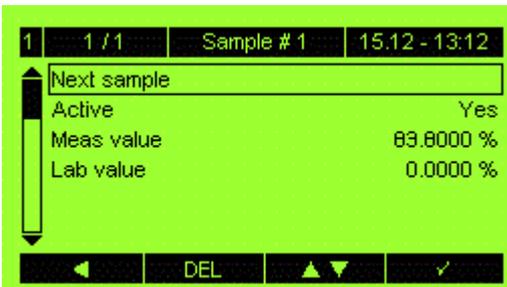
Alternatively if no calibration values from the laboratory can be obtained determine the concentration with e.g. a hand held device at the “System Adjust” point and enter this values C.

**3. Step: Sampling**

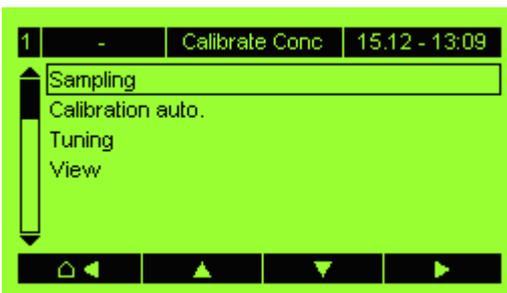


Take as many samples as possible over the entire crystallization process. Press “SAMPLE” in the Live Display (see left picture) and confirm the message on the screen after approximately 4s.

**4. Step: Calibration**



After the concentrations of the samples were determined by the laboratory these values have to be entered into the Evaluation Unit. Go into the Screen *Setup | Calibration | Calibrate Conc | Sampling |* (see left picture) and enter the laboratory values after pressing “Lab value”. Press “Next sample” to get to the next sample.



In the last step the calibration parameters have to be calculated. This is done automatically. Go to the screen *Setup | Calibration | Calibrate Conc | Calibration auto. | Start Calibration |* to start the calculation (see left picture). The calibration results are available in the Screen: */View /*. If individual samples are not plausible, deactivate them and perform the automatic calculation again.