Test Instruction for the sonico® NANO

1. General

The volume test can be carried out manually via the display or by using an additional pulse module. The test mode is activated via the NFC communication interface and the GWF LIFE application, which can be downloaded from the Google Play Store.

2. Test Mode

The volume test is only possible in test mode. This can be activated with the GWF LIFE application under Configuration → Profile. Once activated, the display shows a high-resolution volume reading and "TEST" on the LCD. After the test, the test mode must be deactivated again with the application.

The pulse weight can be changed with GWF LIFE. After reading, you can switch to pulse mode under Configuration → Pulse Module. In addition, the pulse weights, pulse width, and pulse modes can be selected.

3. Pulse Values

The recommended values are listed in the table below.

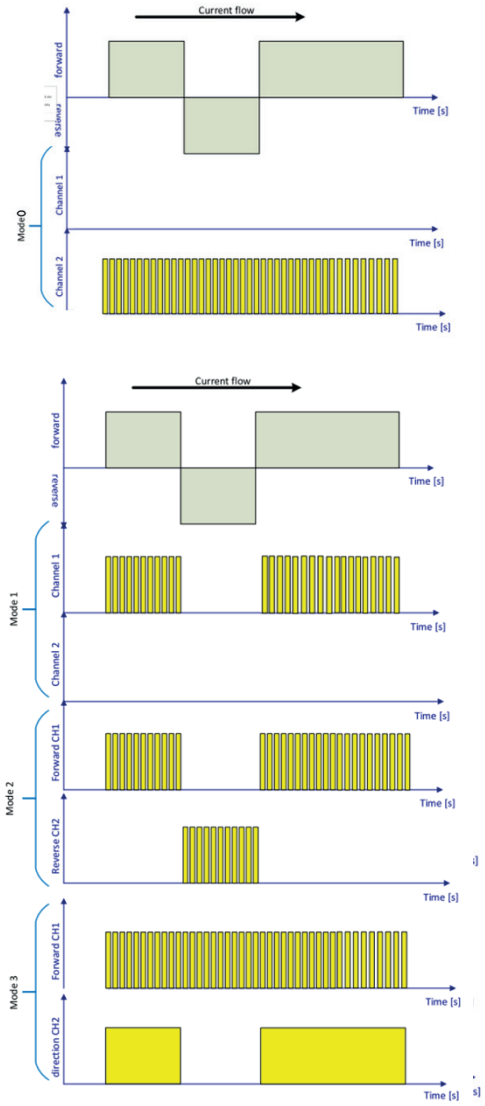
	Weighting [ml]	Pulse length [ms]	Test time [sec]	
			Low flow < Q_3 / 50	High flow ≥ Q_3 / 50
DN15	10	1	900	180
DN20	10	1	600	180
DN25	20	1	600	180
DN32	20	1	360	180
DN40	20	1	300	180

sonico® NANO with pulse module

4. Operating Modes

Operating Mode	Channel 1 (white)	Channel 2 (yellow)
Mode 0	No Signal	
Mode 1	Forward pulses	Error message (empty pipe or communication error)
Mode 2	Forward pulses	Reverse pulses
Mode 3	Forward or reverse pulses	Forward or reverse pulses

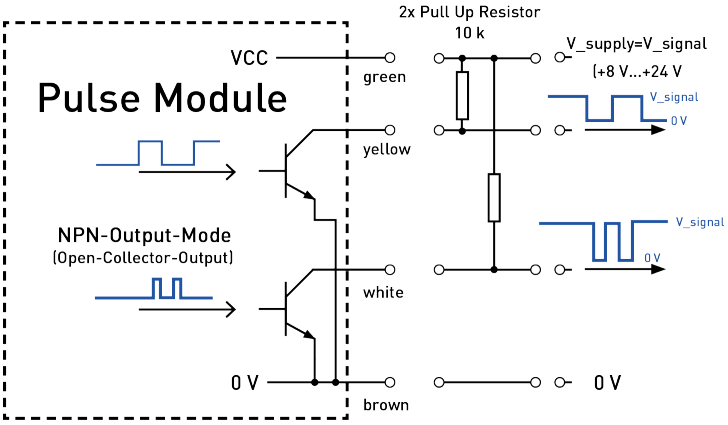
4.1 Pulse mode signal representations:



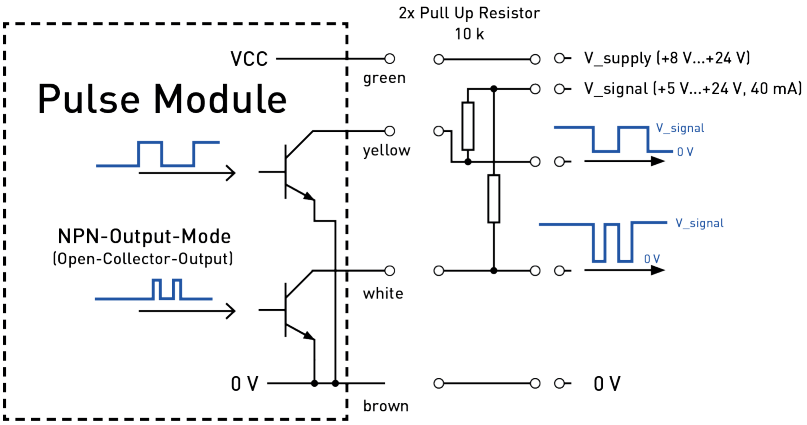
5. Connection

Signal	Color
Vcc	Green
GND	Brown
Channel 1	White
Channel 2	Yellow

5.1 NPN connection (single voltage, signal active low)



5.2 NPN connection (dual voltages, signal active low)



6. Test Procedure

1. Flush the system with Q_3 for 90 seconds to remove air bubbles.
2. Maintain a distance of 10 D before and after each meter on the test bench.
3. Ensure a uniform inner pipe diameter for all connectors.
4. Activate test mode via communication interface.
5. Start with high flows Q_4 and Q_3.
6. Test duration: 10 minutes for Q_1/Q_2, 3 minutes for Q_3.
7. Deactivate test mode after completion.

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