

HYDRUS Type 171 A/B

Inspection instruction



General information

The volume test can be performed "manually" or by optical test pulses.

The remote control is used to activate the test mode with high-resolution volume display, and optical pulse output. It can be ordered under order number 3074045.

Storage mode:

The storage mode is activated if the meter is delivered. The meter must be filled with water for 1 minute to leave the storage mode. If the meter is installed in the network and permanently filled with water, the storage mode is finally left after 3 hours (field mode).

Volume test

Test mode:

The volume test is only possible if the meter is in test mode.

To put the meter into the test mode, you need the HYDRUS remote control. In the instruction of the remote control, the procedure is described step by step.

After activating the test mode, the display switches to „Out4“, and the value "high resolution volume". During the output of the optical test pulses, the optical button and the display power management are disabled. After testing, the test mode must be stopped via remote control.

Test-pulse values:

Q3	TEST-PULSE VALUES	PULSE DURATION OPTO HEAD
1.6	1 ml	0.1 ms/pulse
2.5	2 ml	0.1 ms/pulse
4	4 ml	0.1 ms/pulse
6.3	4 ml	0.1 ms/pulse
10	10 ml	0.1 ms/pulse
16	40 ml	0.1 ms/pulse
25	40 ml	0.1 ms/pulse

Test volume:

The following test volumes and -times are recommended:

Flying start/stop:	$q \leq 0.02 \times Q3$	180 seconds
	$q > 0.02 \times Q3$	60 seconds
Standing start/stop:	$q \leq 0.02 \times Q3$	600 seconds
	$q > 0.02 \times Q3$	120 seconds

If you shorten the test volumes and -times, the measurement inaccuracy increases.

Test procedure:

1. Important before testing is that the complete system and the meters are flushed over 90 seconds with nominal flow Q3 to be sure there are no air bubbles in the test bench.
2. Between the meters on the bench a distance in front and after the meters of 10 D is required.
3. The pipe inner diameters of all clamping and connecting pieces must have the same pipe inner diameter as the meters itself.
4. Set the meters with the remote control into the test mode on LCD "Out4" and the high-resolution volume display appear.
5. For the test we recommend to start with the high flow rates Q4 and Q3.
6. For the testing time we recommend 10 minutes for the low flow rates Q1 and Q2 and 3 minutes for the flow rate Q3.
7. After testing the meters has to be set to the normal mode by using the remote control.

Released software:

F01 – 001	CRC 50308
F01 – 001	CRC 28863
F01 – 001	CRC 18815
F01 – 001	CRC 50828
F01 – 001	CRC 49639
F02 – 002	CRC 13567
F02 – 003	CRC 39299
F03 – 003	CRC 53093
F04 – 005	CRC 7395
F06 – 006	CRC 7194