

Introduction

VeriMAG1 is a stand-alone smart field testing instrument, which has the capability to test the integrity of an installed flowmeter, for functionality of the connection between the sensor and transmitter, and all important internal components of the device.

The verifier checks the MAGB1 flowmeter towards its original calibration certificate hence it can detect any irregularity of its measurement status and confirm its accuracy within spectrum of $\pm 1\%$.

The operator is able to determine by, the certificate generated, any internal fault, inaccuracies or early signs of failure, which will help to reduce expensive maintenance jobs.



Transmitter test

The verification is carried out at the transmitter location. The test is not affected by liquid flow or cable length. The transmitter verification checks the whole electronic system from signal input to output.

- Performance check without interrupting the flowmeter installation
- Test of excitation current
- Test of AD converter performance
- Test of Pulse output
- Readout of Meter settings



Sensor test

- Flowmeter insulation test – coils and electrodes
- Coils resistance measurement

Time saving

- Fully automated – no manual setup or data input with predefined factory acceptance levels
- Results in less than 15 minutes
- Full verification report

The result of each test is displayed immediately on the display and also stored in the internal memory. These tests can be transferred to a computer for archiving or printing by connecting the device to the PC.

Technical specification:

Graphic display - 128x64 px

Touch buttons - control and navigation

Power - Battery Li-Ion 3.6V 4400mAh

Cable to connect the sensor

Cable to connect the transmitter

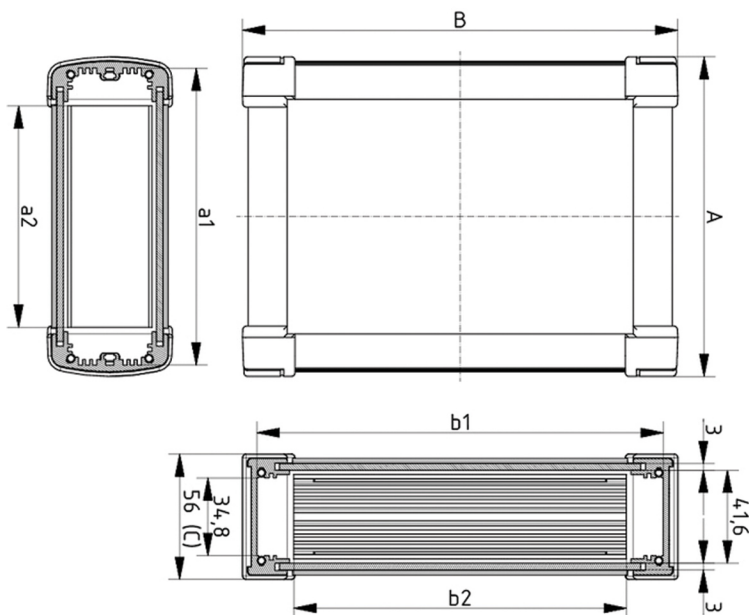
Charger

The verification results are stored in the device (up to 60 measurements)

Permissible operating temperature +5 to +40 °C

Permissible storage temperature -20 to +60 °C

Relative humidity ≤ 80%, moisture condensation not permissible



A	143	mm
B	145	mm
C	56	mm
a1	132,8	mm
a2	99	mm
b1	132	mm
b2	99	mm

Key Features

- ↳ Determines if the meter is within 1% of the original factory calibration
- ↳ Verifies the functionality of all of the meter's inputs and outputs
- ↳ Measures electrode insulation
- ↳ Measures coil resistance and integrity
- ↳ Measures coil insulation resistance
- ↳ Measures current and frequency at previously selected flow rate
- ↳ Evaluates the signal processing functionality
- ↳ Provides certified printout showing test results
- ↳ VeriMAG1 is capable of storing 60 meter tests in internal storage
- ↳ Very easy to operate with a user-friendly Windows-based software package

Software

- ↳ The software is able to generate a printout of the test results and at the same time store the information in a the database for future reference
- ↳ Vericator software for data evaluation in the PC, is compatible with Windows 95, 98, NT4 and 2000, XP, WINDOWS 7, WINDOWS 8

Flowmeter Verification Certificate		arkon flow systems
Certificate No: 942004140001 Test Date: 20000101		Arkon Flow Systems, s.r.o. Benkova 324/2, Brno 602 00 Workshop: Přízova 1-3, Brno 602 00 Czech Republic Tel: +420 543 21 48 22 Fax: +420 543 21 52 49 e-mail: office@arkon.co.uk
Meter: Type: MAGB1 Serial Number: 12200441 Diameter: 50 FW: 201 Error Minutes: 2 OK Minutes: 5998 Number of measurements: 6366 Meter Settings: Display Enable Time: 60 Remaining Battery Capacity: 85 Samples per Average: 4 Error Logger: Off Low Flow Cut Off: 2% Pulse Output Mode: Off Excitation Frequency: 1/30 Calibration Data: CPl: 2000, CD1: 101256 CP2: 10000, CD2: 503000 CPl: 0, CD3: 0 Totals: Total: 669587 Total: 0 Auxiliary: 669587	Verifier: Serial Number: 94200414 Calibration valid: 20000101 Test Results: Certificate No: 942004140001 Test Date: 20000101 Pulse Output: Pass Resistance of Coils: 99,6 Resistance of Coils Display: Pass Excitation Current: 40,1mA Electrode Insulation: Pass Battery/Power supply Voltage: 3,39V Amplifier zero test: Pass Amplifier slope test: Pass	
Based on the verification results stated above, this certificate confirms that there was not detected any irregularity of the measurement status the electromagnetic flowmeter is measuring within ±1% of the original factory calibration values.		
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