elma instruments

Calibration Certificate 210333203

1) Calibrated Instrument

Manufacturer: **SWEMA**
Type: **3000 with probe SWA-31E**
Device Designation: **Anemometer**
Device Serial Number: **679229**
Probe Serial Number: **385259**
Device ID: **112263**

2) Calibrating Conditions

Operator: **P.S.**
Date: **21-01-2021**
Ambient Temperature: **22 °C**
Relative humidity: **29 %HR**
Atmospheric Pressure: **980 hPa**
Calibrating Principles: **The point of calibration are realized with means of calibration according to : bench velocity WT180-500, measuring from 0,3 to 28 m/s controlled with flow transmitter CTV310, and two pressure transmitters CP301, CP303. All devices are held against the references instrument SWEMA 3000md sn: 676029 with probe SWA-31 sn: 386429 and pitot tube sn: 12972, which is traceable to national standard by SP certificates.**

3) Measurement results

Vr (m/s)	Vi (m/s)	Vi-Vr (m/s)	Uncertainty (m/s)
0,3	0,30	0,000	0,04
0,6	0,61	0,010	0,04
1,0	1,01	0,010	0,05
2,0	2,04	0,040	0,07
3,0	3,03	0,030	0,08
4,0	4,00	0,000	0,10
6,0	6,02	0,020	0,11
8,0	7,98	-0,020	0,13
10,0	10,02	0,020	0,14
15,0	15,28	0,280	0,17

Vr: value displayed by our reference instrument, Vi: valeur displayed by customer's instrument.

Comments: **The temperature checking give : Vr 21,5°C ; Vi 21,6°C**

the measurement uncertainty stated is a combination of laboratory and shot term contributions from calibration item. The uncertainty is given with a coverage factor of 2 corresponding to a coverage probability of approx. 95%.
the values stated are valid for the calibration item only and are mean values of 3 successive readings.
The measurement uncertainty is calculated in accordance with EA-4/02.

Laboratories manager