

Calibration-Certificate

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Certificate No.: 20111011_154205_000000539_en

Product name: **SCHMIDT® Flow Sensor**

Instrument type: **SS 20.400**

Article number: 518210-31153

Serial number: 000000001

Measuring range: 0 ... 1 m/s

Output range: 4 ... 20 mA

Customer: Automatisch erstellt bei Programmende ...

Order No.: ...

We herewith declare that the measuring system, as specified above, has been calibrated under notice and adherence to a certified quality management system in compliance with the international quality standard DIN EN ISO 9001.

All test facilities and measuring instruments in use for the calibration procedure are controlled and calibrated on a regular basis. They are referable to the National Measuring Standards of the Physikalisch-Technische Bundesanstalt in Germany (PTB) or to other national standards.

In case of lack of national measuring standards, a calibration method is used in accordance with the existing regulations and practical standards.

All relevant measurement results are listed on the following pages of this calibration certificate.

Calibration date

Inspector

Supervisor

2011-10-11

Calibration-Certificate

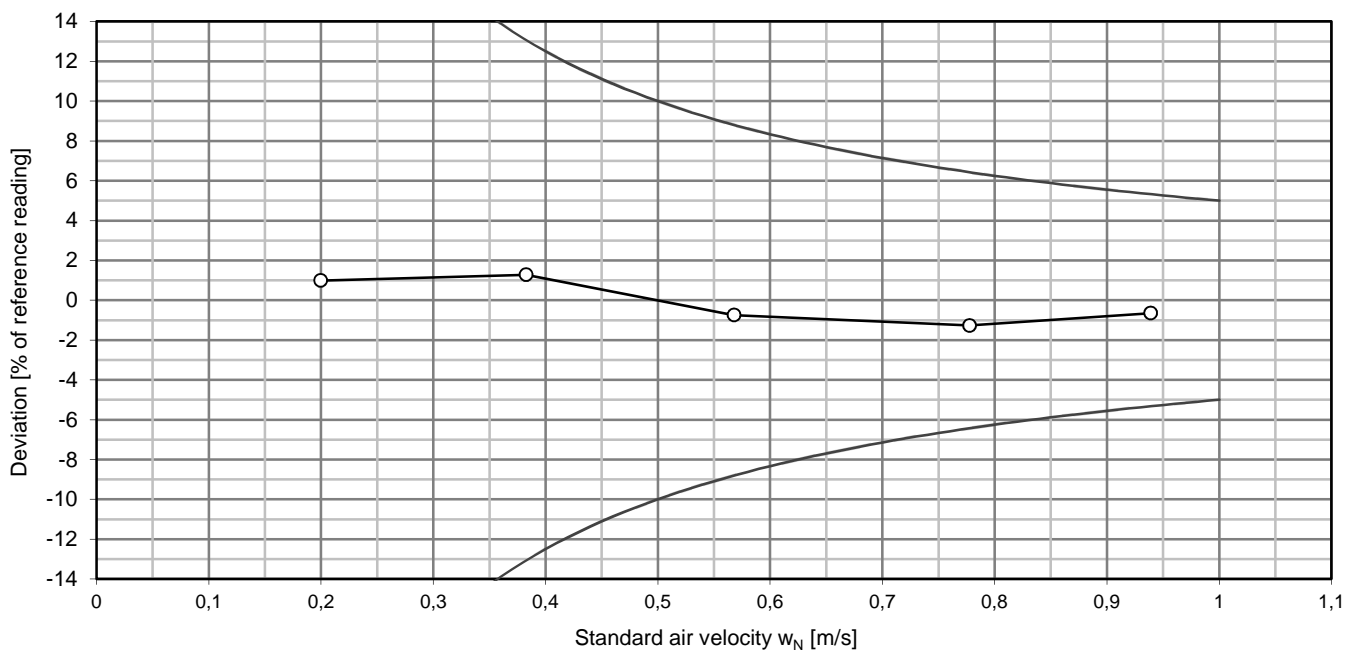
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Calibration method: Measurement of comparison in the jet-stream calibration wind tunnel with air recirculation. The uncertainty of measurement ranges within $\pm 1.5\%$ of measurement value or ± 0.04 m/s whichever is the greatest. The standard air velocity w_N is calculated from the tunnel velocity by conversion into the standard conditions $p_N = 1013.25$ hPa and $t_N = 20$ °C.

Measurement results:	Reference reading w_N [m/s]	Analog output		Switching outputs	
		reading [mA]	convert [m/s]	OC1 [0/1]*	OC2 [0/1]*
	0,00	3,99	0,00	0	0
	0,20	7,22	0,20	1	0
	0,38	10,20	0,39	1	0
	0,57	13,02	0,56	1	1
	0,78	16,28	0,77	1	1
	0,94	18,92	0,93	1	1

* [0] transistor conducting / [1] transistor non-conducting

Analog output calibration curve:



○ Calibration points
— Tolerance limit

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Used Measurement Standards:

Device: Anemometer, g.442.3.21
Manufacturer: Schiltknecht
Serial-No.: 54306 (Instrument) / 59935 (Sensor)
Calibration: SCS 046 Calibration Certificate 33025 dated 2011-01-28

Device: Pitot Static Tube, 305 x 4 mm
Manufacturer: Airflow
Serial-No.: PM 45 K 0009
Calibration: Calibration Certificate 000486/DKD-K-26901/2010-04 dated 2010-04-27

Device: Differential Pressure Meter, PM / PPM
Manufacturer: Dresser
Serial-No.: 43388 (Instrument) / 45576 (Module [4])
Calibration: Calibration Certificate 2011-0505 dated 2011-05-18

Device: Differential Pressure Meter, PM / PPM
Manufacturer: Dresser
Serial-No.: 43389 (Instrument) / 45019 (Module [40])
Calibration: Calibration Certificate 2011-0509 dated 2011-05-20

Device: Absolute Pressure Meter, PM / PPM
Manufacturer: Dresser
Serial-No.: 43389 (Instrument) / 45020 (Module [1600])
Calibration: Calibration Certificate 2011-0508 dated 2011-05-19

Device: Temperature Sensor WB-3.0-1PT-A-KAT-W
Manufacturer: Rössel Messtechnik
Serial-No.: 060209509
Calibration: Calibration Certificate C-10-20311 dated 2010-11-05

Device: System Multimeter 2000
Manufacturer: Keithley Instruments
Serial-No.: 0703827
Calibration: Calibration Certificate DKD-K-22401 10-2010 189 dated 2010-10-07

Device: System Multimeter 2000
Manufacturer: Keithley Instruments
Serial-No.: 0585733
Calibration: Calibration Certificate No. 101463 dated 2009-12-03

Device: System Multimeter 2000
Manufacturer: Keithley Instruments
Serial-No.: 0816715
Calibration: Calibration Certificate No. 116221 dated 2010-04-29

Device: Humidity Sensor PMU-V
Manufacturer: Galltec Mess- u. Regeltechnik
Serial-No.: 00696665
Calibration: Calibration Certificate A54324 dated 2009-12-03