



Flow Sensor SS 20.415LED

Flow meter / flow sensor for air according to the calorimetric principle (anemometer)

For monitoring of clean rooms



- Precise measurement of low air speeds
- Sensor version: Thermopile
- With direction detection
- With switching outputs
- Response time: from 0.01 s
- Disinfectable with alcohols and H₂O₂ (VHP suitable)
- Self-monitoring and output of error signals
- Special lengths up to 1,000 mm (straight version)

D-EN-SS20-415-20190405



Flow Sensor SS 20.415LED

Flow meter / flow sensor for air according to the calorimetric principle (anemometer)

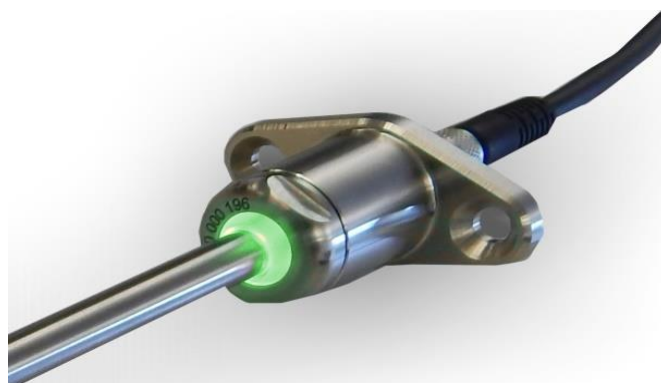
For monitoring of clean rooms

Features

- High-precision measurement of the flow rate
- Highest reproducibility of the measurement results
- Highly integrated evaluation electronics in the sensor tube - no further transducers required
- Integrated operating status display via LED light ring
- Optional LF status indicator "0.45 m / s ± 20%" via LED signal
- Cleanroom suitable, easy to clean
- Easy installation and commissioning (visual support during commissioning, LED signal)
- 5 mechanical fastening variants (straight wall and angled ceiling mounting possible)

Typical applications

- Precise measurement of the smallest air velocities
- Cleanroom and pharmaceuticals (laminar flow monitoring and control, laboratory systems and deductions)
- Packaging technology



Technical data	
Measured variable W_N	Standard velocity W_N based on normal conditions ($T_N= 20\text{ °C}$ and $\rho_N= 1.013.25\text{ hPa}$)
Medium	Clean air / nitrogen / other gases on request
Measuring ranges flow W_N	0...1/2,5/10 m/s
Max. display range W_N	+ 10% over measuring range
Lower detection limit W_N	0,05 m/s
Measurement accuracy	
Standard W_N	$\pm(3\%$ of measured value + 0,05 m/s) ¹⁾
High precision (optional) W_N	$\pm(1\%$ of measured value + 0,04 m/s) ¹⁾
Reproducibility W_N	$\pm 1\%$ of measured value
Start-up time $t_{90} W_N$	0,01...10 s (configurable), 1 s factory setting
Temperature gradient W_N	<2K/min at 5 m/s

D-EN-SS20-415-20190405



Flow Sensor SS 20.415LED

Flow meter / flow sensor for air according to the calorimetric principle (anemometer)

For monitoring of clean rooms

Technical data	
Operating temperature	
Operating temperature	0...60°C
Storage temperature	-20...+85°C
Material	
Sensor head	Stainless steel 1.4404
Sensor tube	Stainless steel 1.4404
General data	
Medium, surroundings	Non-condensing (up to 95% relative humidity)
Operating pressure	Atmospheric (700...1,300 hPa)
Supply voltage	24 V DC \pm 10%
Current consumption	typ. 30 mA / max. 150 mA
Analog output	0...10 V ($R_L \geq k\Omega$) or 4...20 mA/max. 21,6 mA ($R_L \leq 300 \Omega$); short circuit protected
Switching outputs	2 times open-collector, current limited and short circuit proof ($\leq 26,4$ V DC / 55 mA), configurable Channel 1 (OC1): direction or threshold Channel 2 (OC2): threshold switching hysteresis 5% of the threshold, min. $\pm 0,05$ m/s
Error signal	Only at 4 .. 20 mA output: 2 mA (according to NAMUR NE43)
Connection	Connector M9 screwed connection, 7 pins, male
Maximum cable length	Voltage signal : 10 m, current signal: 100 m
Mounting position	In downflow direction
Protection / Protection class	IP 65 / III (SELV or PELV EN 50178)
Sensor length	angled 270 x 300 mm, straight 300 mm / 301...1.000 mm
Weight	ca. 200 g (angled design)

1) Under reference conditions



Flow Sensor SS 20.415LED

Flow meter / flow sensor for air according to the calorimetric principle (anemometer)

For monitoring of clean rooms

Important instructions!

Technical changes and errors reserved.

Pictures can be similar.

The operating instructions belonging to this device must be observed! Download at www.schmidt-messtechnik.com.