

FLOW MEASUREMENT TRANSMITTER – AF1

THE INEXPENSIVE MEASUREMENT TRANSMITTER

AIR VELOCITY MEASUREMENT MADE EASY

- High degree of stability and repeatability
- Compact design
- The outputs and measuring ranges can be configured using DIP switches
- Simple mechanical installation
- Outstanding price/performance ratio
- Ideal for HVAC applications
- Modbus RTU via RS485



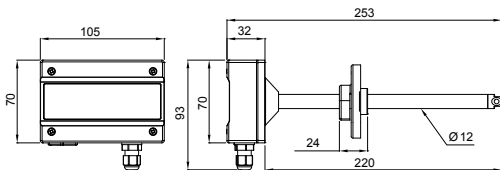
TECHNICAL INFORMATION

Air velocity measurement

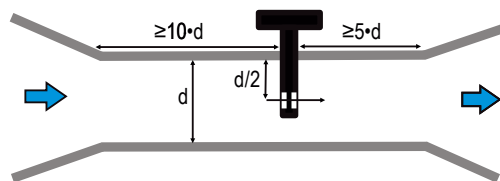
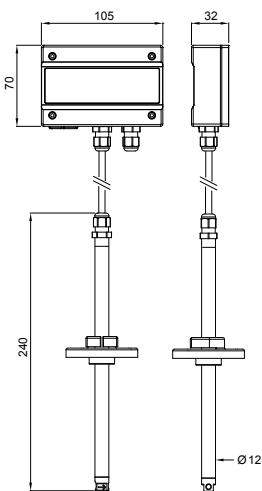
The AF1 series is a cost-effective, high-precision and stable transmitter for measuring air velocity and temperature. The devices have a calorimetric sensor and outstanding long-term stability. The measuring range and the output signal can be configured easily and without additional software using dip switches.

Dimensions (in mm)

Duct version



Wall version



General	
Device type	Transmitter
Parameter	Air velocity and temperature
Range of application	0...50 °C (housing) 0...80 °C (medium)
Storage conditions	-20 .. 60 °C
Power supply	8...35 VDC or 12...30 VAC 50/60 Hz
Current Consumption	<200 mA
Circuit type	3-wire
Mounting position	Sensor at 90° angle to flow
Configuration	Via integrated DIP switch
Air flow rate measurement	
Measurement technique	Calorimetric
Measurement range	2 m/s; 5 m/s; 10 m/s; 15 m/s; 20 m/s
Measuring medium	Air and non-aggressive gases
Accuracy	±3.0 %full-scale with 23 °C ±3 K, 45 %RH, 1013 mbar
Influence of installation position	<3 % of measurement with <10°
Measurement interval	1 s
Pressure resistance	10 bar
Jump response	τ90 after 3 s
Temperature measurement	
Measuring range	0... 50 °C
Analog Outputs	
Number	2
Analog output type	4...20 mA or 0...10 V
Maximum load	>10 kΩ (voltage output)
Minimum load	<500 Ω (current output)
Digital communication	
Interface	RS-485
Protocol	Modbus RTU
Conformity	
IP protection	IP65
CE / EMC compatibility	EMC Directive 2014/30/EU
Housing / Mechanical parts	
Housing material	Polycarbonate
Dimensions	105 x 70 x 32 mm
Electrical connections	Screw terminals
Cable gland	M12 x 1.5 (Ø cable 3...6.5 mm)
Weight	Duct version: 165 g Cable version: 260 g

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Would you like more information? A complete overview of the AF1 series can be found at www.rotronic.com