AVENTICS™ Series AF2

The Smart Flow Rate Sensor To Improve Energy Optimization and Efficiency

Series AF2 Smart Air Flow Sensor

- Large measurement range and integrated pressure sensor enable a broad spectrum of applications.
- Wide range of customizable analog and switch outputs.
- Comprehensive communication options via IO-Link, Analog, OPC UA or MQTT enables ease of networking.

- Large OLED display for excellent readability.
- High flexibility for system integration.
- Easy assembly and handling.
- For installation in air preparation units or as standalone.
- Standalone high flow variants for installation in pipe systems.

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The Series AF2 flow rate sensor monitors air consumption in pneumatic systems, enabling fast action in case leaks are detected. It helps you optimize energy consumption, prevent machine downtime, and reduce maintenance costs.

Greater energy efficiency

- Advanced diagnosis: The AF2 determines not only the flow, but also the current pressure in the feed line.
- Modular technology: The flow ranges of the AF2 variants can be configured to our Series AS air preparation units. The the sensor/filter combination as well as the AF2 high flow versions for pipe systems can also be used separately.
- The large, configurable OLED display clearly conveys all operating data. Various visualizations for measurements as well as process curves and cumulative values are possible.
- Data is forwarded to the control either via standard switch or analog outputs, or through IO-Link.
- Ease of connectivity: Data can also be communicated directly via the Ethernet interface, allowing compressed air flow consumption to be passed directly to the relevant parent system without requiring the machine control. The AF2 represents a true IIoT component.

Mounted within air preparation units	Standalone Mounting	High flow version for pipe systems

AF2		
Pressure range	0 ... 16 bar	0 ... 232 PSI	
Flow range	3/8"	5 ... 1.060*/1.590 l/min **
		0.18 ... 37*/56 CFM**
	1/2"	8 ... 1.630*/2.445 l/min **
		0.28 ... 58*/86 CFM**
	1"	22 ... 4.326*/6.490 l/min **
		0.78 ... 153*/229 CFM**
	1.5"	38 ... 7.540*/11.310 l/min**
		1.34 ... 266* / 399 CFM**
	2"	59 ... 11.781*/17.672 l/min**
		2.08 ... 416* / 624 CFM**
Communication	Industrial: IO-Link, 2x analog, 2x switching, 1x frequency, 1x pulse output (configurable) Ethernet: WebServer / OPC UA / MQTT	
Measurement precision	+/- 3 % of the measured value + 0.3 % of the measurement range final value*+/- 8 % of the measured value + 1 % of the measurement range final value**	
	for 1,5" and 2": +/- 6% of measured value + 0,6% ...* +/- 8% of measured value + 0,8% ...**	
Repeatability	± 1.5% of the measured value	
Temperature range	-20 to +60°C / -4 to 140°F	
Operating voltage	for IO-Link 17 to 30 V DC PoE (IEEE802.3af) typ. 45 VDC for Ethernet	
Protection class	IP65 and IP67 (EN 60529) with approved connection cable	

* Standard measurement range

** Extended measurement range