Thermal compressed air meter of the highest level

Flow sensors / flow meters

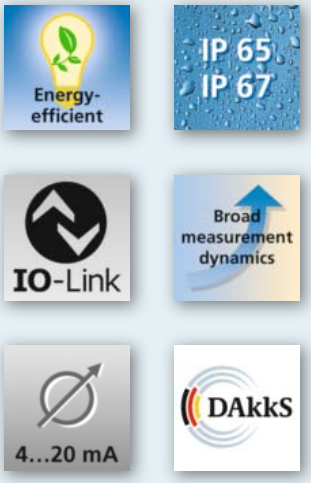
Exact allocation of energy costs due to precise consumption measurement

Improvement of energy efficiency via leakage monitoring

Reduction of installation, maintenance and hardware costs

The basis for a comprehensive energy management system according to DIN EN ISO 50001

Pressure monitoring thanks to the integrated pressure sensor



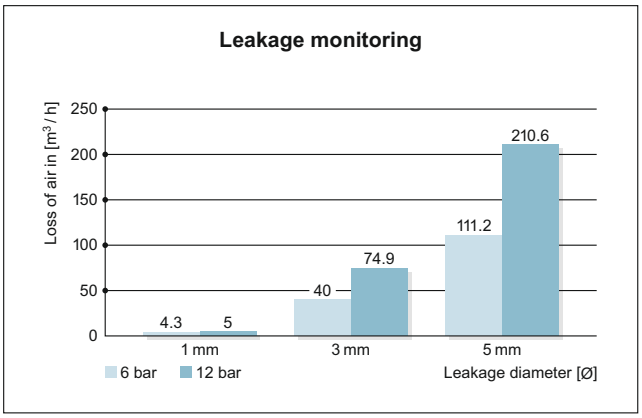
"All-in-one sensor" reduces costs

This new thermal compressed air meter for compressed air in industrial use distinguishes itself as a real all-rounder. It does not only have an integrated temperature sensor but it also features a pressure sensor, allowing the user to read four process values at once (volumetric flow, pressure, temperature, totaliser = total quantity meter) and optimise the production.

Compressed air monitoring at a glance

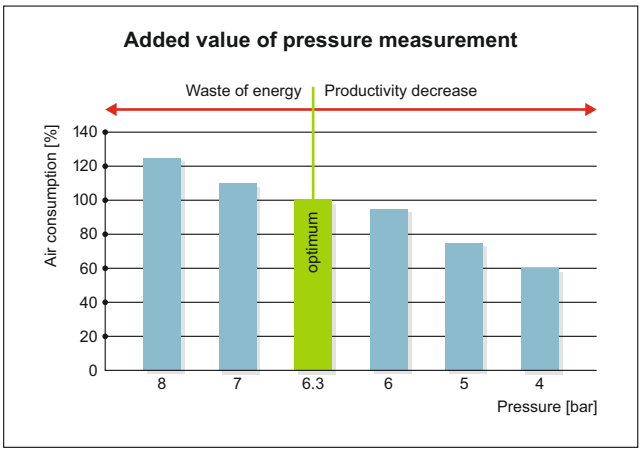
Integration of the SD compressed air meter into the maintenance unit of existing or new installations provides additional advantages. Now the process values of compressed air in industrial use can be effectively monitored in common compressed-air networks via the integrated TFT display, which allows for selection between four different and individually adjustable graphic layouts. The process values can also be transmitted via IO-Link.

Improvement of energy efficiency due to the integrated leakage monitoring in the installation



The SD's precise flow monitoring allows for leakage detection and energy cost savings. In addition, the unit's high repeatability enables exact allocation of the costs of compressed air to the respective production line as well as optimised product cost calculation.

Efficient monitoring of the operating pressure



Thanks to the integrated pressure measurement, both the pressure drop on the polluted filter systems and the compressed air system's general operating pressure can be optimally monitored which is quite important because if the installation comprises actuators that are operated at 5 bar instead of the ideal 6.3 bar, load speed is already reduced by 25%, with productivity decreasing.
On the other hand, an excessive operating pressure does not increase the performance but generates increased consumption of compressed air and increased wear of the unit.

* Applies to the specified article(s) and must be requested when ordering the sensor. Subsequent orders are only possible if the device is returned.

Measuring range [Nm³/h]	Medium	Process connection	Order no.
0.05...15	Air	G 1/4 (DN8)	**SD5500**
0.25...75	Air	R 1/2 (DN15)	**SD6500**
0.8...225	Air	R 1 (DN25)	**SD8500**
Calibration certificate for flow sensors (SD)*			
ISO calibration (6 calibration points)			**ZC0020**
DAkkS calibration (6 calibration points)			**ZC0075**

Common technical data Type SD		
Flow		
Measuring range	[m³/h]	0.04...700
Accuracy	[%]	± (2.0 MV + 0.5 VMR)
Repeatability	[%]	(0.8 MV + 0.2 VMR)
Response time	[s]	0.1
Temperature		
Measuring range	[°C]	-10...60
Accuracy	[K]	± 0.5
Response time T09	[s]	0.5
Pressure		
Measuring range	[bar]	0...16
Deviation of the characteristics	[%]	< ± 0.5 (BFSL)
Repeatability	[%]	± 0.2
Response time	[s]	0.05
Output signal		switching output, analogue output, pulse output, IO-Link (configurable)

The basis for a comprehensive energy management system according to DIN EN ISO 50001

Following the EU directive on energy efficiency DIN EN ISO 50001, all Member States have undertaken to achieve energy savings. The requirement for obtaining energy tax reductions is the implementation of an energy management system. The standard requires records on measurement equipment calibration to ensure correctness and repeatability of the measured data. Combining the new SD compressed air meter with regular DAkkS calibrations provides the optimum basis for a reliable energy management system.

Reduction of installation, maintenance and hardware costs

Integration of several measuring parameters in just one sensor does not only save considerable hardware costs (pressure sensor, temperature sensor, wiring and input cards) but also installation and maintenance costs.

For further interesting information go to:
ifm.com/gb/compressed-air-meter