



Process sensors

# Precise compressed air measurement from its generation to the consumer



Flow sensors / flow meters



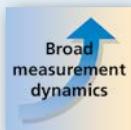
**Exact allocation of energy costs due to precise consumption measurement**

**Improvement of energy efficiency via leakage monitoring**

**The basis for an energy management system according to EMAS or DIN EN ISO 50001**

**Pressure monitoring thanks to the integrated pressure sensor**

**↻ Different process values being indicated simultaneously removes the need for multiple instruments**



## “All-in-one sensor” reduces costs

The SDG compressed air meter is a real all-rounder. Thanks to the additionally integrated sensors for pressure and temperature, the user can see four process values (flow rate, pressure, temperature and total consumption) at a glance, which provide information about the energy efficiency of his system. Offering a wide portfolio of precise inline sensors from DN8 to DN250, ifm covers the complete range of applications.

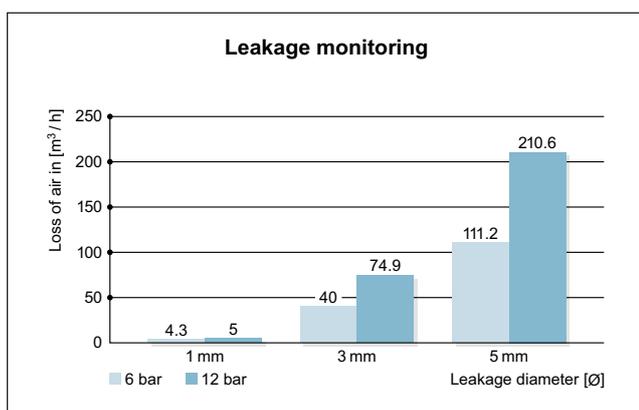
## Energy monitoring at a glance

The process values can be effectively monitored at all times via the integrated TFT display, which allows for selection between four individually adjustable graphic layouts with flexible orientation. What is more, all process values can be transmitted quickly and easily via IO-Link.

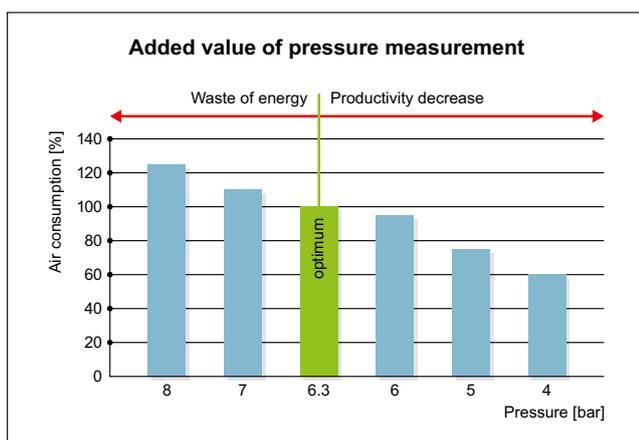


## Improvement of energy efficiency due to the integrated leakage monitoring in the installation

The 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.



Due to the integrated pressure measurement our compressed air sensors offer the possibility to monitor the general operating pressure of the compressed air system. By creating a pressure difference from generator to consumer, the pressure drop of the pipe system can also be monitored and optimised. But also a falling pressure, for example caused by dirty filter systems, is continuously detected.



## The basis for a consistent energy management system according to EMAS or DIN EN ISO 50001

Following EU directives on energy efficiency, all member states have undertaken to achieve energy savings. The requirement for obtaining energy tax reductions is the implementation of an energy management system. Combining the new compressed air meter with regular calibrations provides the optimum basis for this.

Measuring range [m <sup>3</sup> /h]	Medium	Process connection	Order no.
8...2011	Air	Flange DN65	<b>SDG350</b>
12...2769	Air	Flange DN80	<b>SDG450</b>
19...4667	Air	Flange DN100	<b>SDG550</b>
43...10320	Air	Flange DN150	<b>SDG750</b>
73...17480	Air	Flange DN200	<b>SDG850</b>

### Common technical data Type SDG

#### Flow

Measuring range	[m <sup>3</sup> /h]	8...17480
Accuracy:		
Class 141	[%]	± (3.0 MV + 0.3 VMR)
Class 344	[%]	± (6.0 MV + 0.6 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]	-1...16
Linearity error	[%]	<± 0.5 (BFSL)
Repeatability	[%]	± 0.2
Response time	[s]	0.05

#### Output signal

Switching output,  
analogue output,  
pulse output,  
IO-Link (configurable)

MV = value of the measuring range,  
VMR = final value of the measuring range