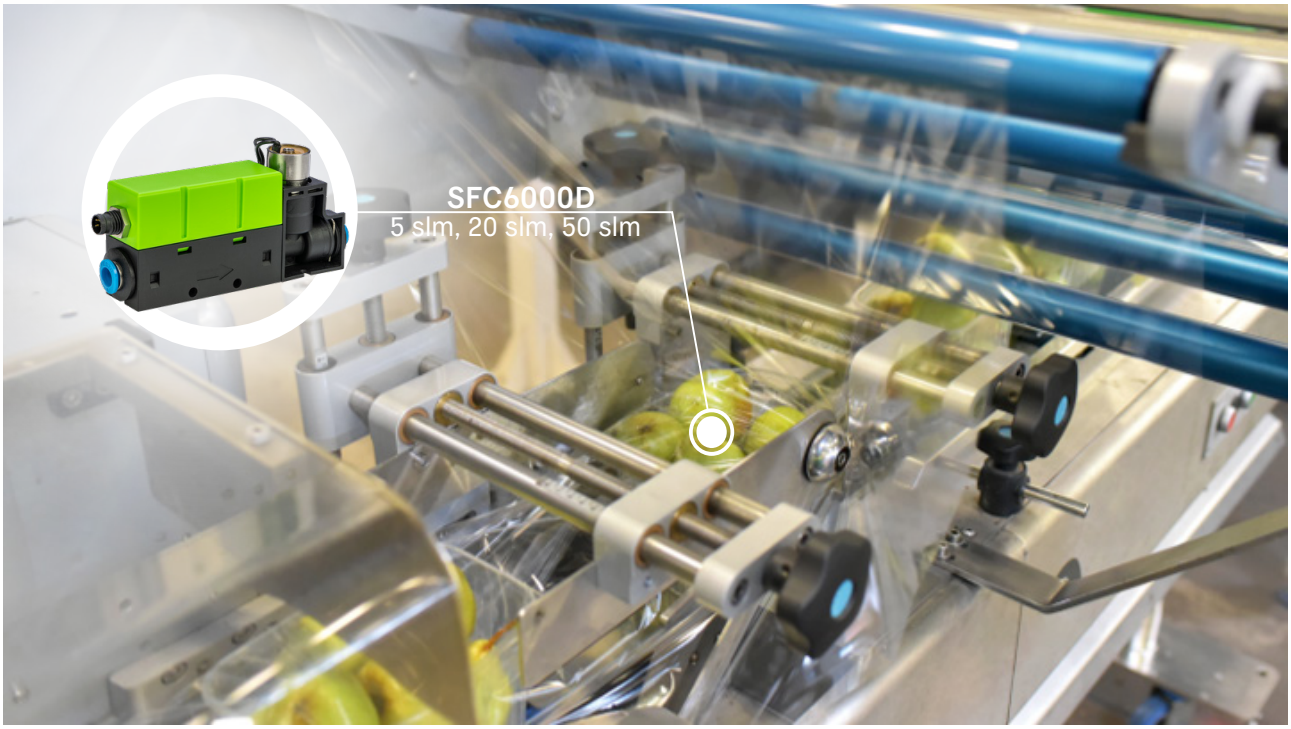
Inert gas purging in processing industries

Cost effective gas control for repeatable processes

In the processing industry, inert gases such as nitrogen and argon are used. For instance, in the food industry a controlled atmosphere is created to keep food freshness; in welding processes, argon or helium are used to displace gases like nitrogen or oxygen, that are detrimental for the quality of welds. Sensirion's products, owing to their small size, accuracy, and competitive price can be easily integrated into process automation to increase production speed and reduce costs.



Application challenges

1. Dispense the correct amount of protective inert gas
2. Ensure disinfection/protection from spoiling of food
3. Homogeneous and repeatable process to reduce costs

Sensirion's solutions

1. Exact, reliable, and rapid adjustment of inert gas
2. Precise, stable and fast regulation of the purged gas
3. Best repeatability on the market

SENSIRION

Sensirion sensor solution:

SFC6000D Mass Flow Controller with best price-performance ratio:

Size (LxWxH): 102 x 45 x 20 mm³

Additional sensor features

- Available as mass flow controller or mass flow meter
- Available in plastics or metal body

Other applications

- Analytical instruments
- FOUP
- Thin film deposition

FAQs

- **Which fittings are available?**
  Downmount, push-in
- **Which communication interfaces are available?**
  Analog voltage, RS485, Modbus RTU, I²C
- **Do I need to periodically calibrate the mass flow controller?**
  No, due to the excellent long-term stability of CMOS technology, recalibration is never required
- **Can humidity damage the mass flow controller?**
  The mass flow controller is fully operational when dealing with non-condensing humidity levels
- **At which pressure range can the SFC6xxx operate?**
  The operational pressure ranges are determined by the flow range of the mass flow controllers. The maximum allowed differential pressure between the inlet and outlet is 7 bar for the 5 slm version, 5.5 bar for the 20 slm version, and 4.0 bar for the 50 slm version. In all cases, the maximum allowed inlet overpressure is 10 bar.

Getting started

EK-F5x

Useful documents

Datasheets, application notes, handling instructions, sample codes, step files, certificates

Related sensors

↗ SFC54xx mass flow controller
↗ SFC53xx mass flow controller

SENSIRION