



First page – application and main CVPs

Chemical dosing and dispensing

Precise control and validation of dosing

Chemical dosing applications such as car wash systems or soap dispensing are processes requiring precise dosing of chemicals to ensure the best process performance. This is especially important when using expensive chemicals. The procedure requires choosing the proper controls that are compatible with the chemistry while providing the accuracy and repeatability necessary for the process. There are many challenges associated with the chemicals being dosed, such as potential air bubbles and viscosity.

Target customers:

- Car wash equipment
- Soap dispensing device manufacturers

Target customers: Who are the ideal users of the application?



Application challenges

- 1 Dosing the right amount of chemical in solutions/mixtures
- 2 Handling of highly concentrated chemicals
- 3 Detecting bubbles and empty bottles/bags (reduced maintenance)

Sensirion's solutions

- 1 Precise flow measurement
- 2 Compatible with highly viscous liquids
- 3 Air in line and bubble detection flag

Challenges and solutions: Common pain points or problems that the application faces and how they can be solved with our sensor solutions.

SENSIRION

Second page – Product info and FAQs

Sensirion sensor solution:



SLF3S-4000B:
Flow rates up to 600 ml/min
Size (LxWxH): 48 x 15.5 x 8.6 mm³

Additional sensor features

- Liquid temperature sensing and temperature compensation
- Calibrated digital output
- Chemically robust material

Other applications

- Liquid flow applications
- Analytical instruments
- Coolant monitoring in CNC machines
- Commercial cleaning and laundry systems
- Carwashes

Further applications: A listing of other possible use cases or scenarios for the application.

FAQs

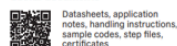
- Which fittings are available?
Barbed connectors for 6mm tubing (inner diameter).
- Which communication interfaces are available?
I²C protocol or RS485 with proprietary SHDLC protocol.
- Do I need to periodically calibrate the liquid flow sensor?
A correction factor for the different chemicals must be obtained.
- At which pressure range can the SLF4000b operate?
Up to 3bar.
- Which are the wetted materials?
PPS, stainless steel, epoxy.
- Is the SLF3x compliant with high (or low) pH liquids?
Yes.

Getting started



More information about our EK-SLF3S-4000B

Useful documents



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

Links to further documentation: Here you can find more details or technical specifications about the application and our sensors.

Related sensors

➤ SLF3x liquid flow sensors

For media recognition (at stop flow conditions):

➤ SLF3C liquid flow sensors

SENSIRION

Application description:

What is the main purpose and functionality of the application and where do our sensors come into play?

Ideal product: What is the best sensor for the application and why?

FAQ's: What are some frequently asked questions that the customer might have and how can you answer them confidently and convincingly?