

Launch Pulsation Damping Kit Overview for Liquid Flow Sensors

Introduction

In many applications liquid flow is delivered by a pump or valve that creates a non-continuous flow rate. Examples are peristaltic pumps, piston or (piezo) membrane pumps or valves. Besides the flow source, a fluidic system is made of several additional components. They all influence the way a generated pulse is dampened while propagating through the system. The particular combination of resistance and capacity, i.e. the specific design of a fluidic system, defines the damping of such a pulse up- or downstream of the flow source and therefore also the way the pulse arrives at and is measured by Sensirion's liquid flow sensor.

Key Benefits / Features:

The pulsation damping kit shall enable the customer to quickly and easily gather first experiences with the flow damping concept in case of pulsating flows. It contains all necessary components to dampen pulsating flows for the measurement with Sensirion liquid flow sensors.

The pulsation damping kit contains:

- Damping tube with ¼-28 flat bottom male-male, made from PU, 30 cm total length
- ¼-28 flat bottom fluidic restrictor male-female, 0.5 mm ID through hole, made from POM (black)
- ¼-28 flat bottom female-female union, made from POM (white)

Note: The pulsation damping kit does not contain a flow sensor. It is optimized for a plug-and-play usability and not for industrialization, chemical compatibility or cost.

Target Markets:

Any market that liquid flow sensors are sold to. For example:

- Medical
- Analytical instruments / laboratory
- Industrial automation
- Diagnostics and life sciences

Application:

Improve the liquid flow sensor performance under pulsating flows. Can be used with any liquid flow sensor from Sensirion (most suitable in the ml/min range, i.e. for the liquid flow sensors listed below).

Customers who use this might also use:

- Liquid flow sensors (SLF3x, SLI-1000/-2000, SLS-1500, LS32-1500, LG16-0430/-1000/-2000)
- Liquid flow meter kits (SLF3x, SLI-1000/-2000, SLS-1500)

Marketing Material

- Application Note: www.sensirion.com/file/app_note_damping_kit
- Instruction Flyer / Quick Start Guide: www.sensirion.com/file/quickstartguide_damping_kit
- Product Picture: <https://brand.sensirion.com/s/44/m559BFN2>
- Website Liquid Flow Sensors: www.sensirion.com/liquid