

## Application Note Liquid Flow Sensors Sensor Selection Guide

This Application Note aims to help you in finding the right sensor for your application. This decision is

typically based on the flow rates, pressures and liquids used in your application.

	Model	Full Scale Flow Rates	Accuracy of Measured Value	Fluidic Connector Ports	Maximum Pressure	nl/min 100	µl/min 1	10	100	ml/min 1	10
SLG	SLG-0150	8 µl/min H <sub>2</sub> O	5%	Stainless steel, 10-32 coned port for 1/16" OD tubing	500 bar		█				
SLI	SLI-0430	80 µl/min H <sub>2</sub> O 500 µl/min HC	5%	¼-28 flat-bottom for 1/16" or 1/8" OD plastic tubing	50 bar		█				
	SLI-1000	1 ml/min H <sub>2</sub> O 10 ml/min HC			12 bar		█				
	SLI-2000	5 ml/min H <sub>2</sub> O 80 ml/min HC			12 bar		█				
SLS	SLS-1500	40 ml/min H <sub>2</sub> O	10%	¼-28 flat-bottom for 1/8" OD tubing	12 bar					█	

Calibrated flow rates for █ water (H<sub>2</sub>O) █ hydrocarbon (HC)

Figure 1: Sensors and their performance characteristics.

### 1 Flow rates

Sensors with full scale flow rates between 8 µl/min and 40 ml/min are available as Flow Meter Kits. Please pick the sensor that best suits your desired flow ranges.

### 2 Pressures

Liquid Flow Meter Kits are available for sensors with maximum pressure ratings between 12 and 500 bar. Please make sure that the sensor capillary is never subjected to pressures beyond their maximum pressure rating.

### 3 Calibration

All our Flow Meter Kits are calibrated with water. Additionally, some (the SLI range) offer a second calibration. This calibration is for IPA and will yield more accurate results if the main liquid components of your application are hydrocarbons.

### 4 Chemical Compatibility

While the sensing element is never in direct contact with the measured liquid, some chemical restrictions may arise from the wetted materials (fittings, seals and capillaries). Please see the datasheet of the sensor you have chosen for a list of the wetted materials and ensure their compatibility with your application.

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