

### 3.6 Digital Communication via I<sup>2</sup>C-Bus

The SLS-1500 liquid flow meter has been designed for use with the SCC1 interface cables. For special applications, direct communication with the flow meter via the standard I<sup>2</sup>C-interface is possible. The physical interface consists of two bus lines, a data line (SDA) and a clock line (SCL) which need to be connected via pull-up resistors to the bus voltage of

the system. By default, the I<sup>2</sup>C address is set to 64 (hexadecimal: 40, binary: 1000000).

These lines can be used on 3.3 V or 5.0 V levels with a recommended clock frequency of 100 kHz. For the detailed specifications of this I<sup>2</sup>C communication, please refer to specific I<sup>2</sup>C Application Notes from Sensirion.

## 4 Fluidic Connection

Table 3: Fluidic Specifications and Pressure Rating

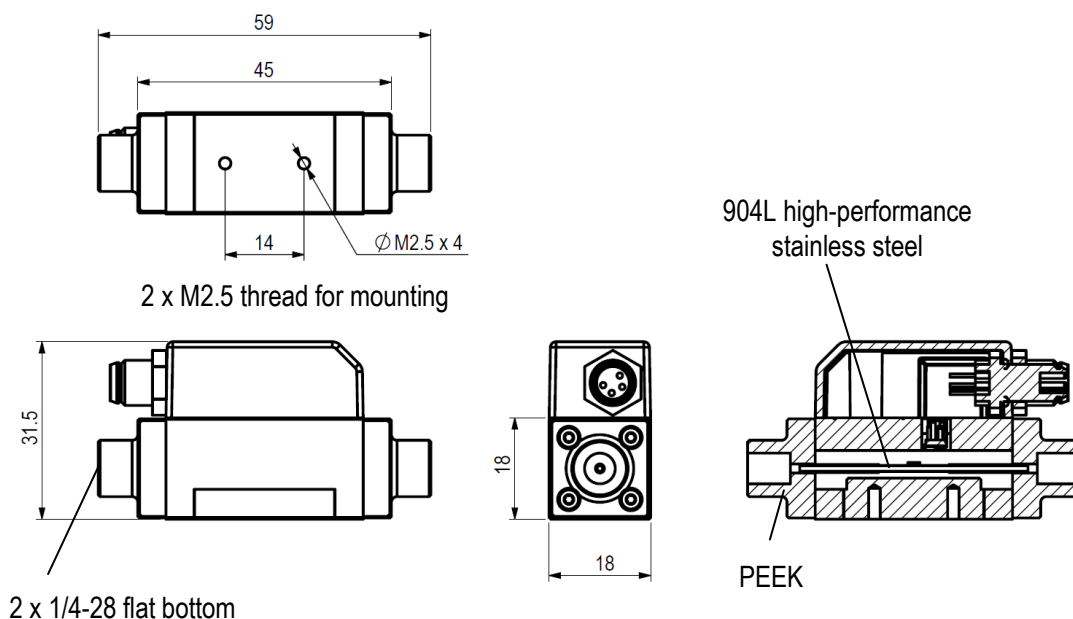
Parameter	SLS-1500
Wetted materials:	
<ul style="list-style-type: none"> <li>Internal sensor tube material</li> </ul>	904L high-performance stainless steel
<ul style="list-style-type: none"> <li>Fitting material</li> </ul>	PEEK
<ul style="list-style-type: none"> <li>Sealing material</li> </ul>	PTFE
Fluid connector ports (fittings)	1/4-28 flat bottom 1/8" OD tubing (recommended: min 2mm ID)
Pressure drop (at 40 ml/min, H <sub>2</sub> O, 23°C)	2.15 mbar
Total internal volume	~70 µl

For more information on the fluidic connection please find: "Application Note Sensor Ports and Tubing Connections" in the Download Center on our homepage.

## 5 Mechanical Specifications

Table 4: Mechanical Specifications

Parameter	SLS-1500
Largest dimensions	59 x 31.5 x 18 mm
Total mass	~40 g
Inner diameter sensor tube	1.5 mm
Protection class	IP54



All dimensions in mm

## 6 Ordering Information

Standard shipment includes only the sensor, neither cables nor fluidic connection material. For optimum performance, Sensirion recommends using the SLS-1500 flow meter in combination with the SCC1 interface cables.

For laboratory use and technology evaluation, the Flow Meter Kit SLS-1500 can be ordered.

This laboratory-package contains:

- Liquid Flow Meter SLS-1500
- PC Software (Viewer & Data Export Tool);
- SCC1-USB Sensor Cable with USB connector for plug-and-play connection to a PC
- SCC1-Analog Sensor Cable with 0-10 V voltage output.
- Fluidic connection material for 1/4-28 flat bottom ports.

Product	Article No
SLS-1500 40 ml/min	1-101216-01
Flow Meter Kit SLS-1500	1-101154-01

Interface Cables:

SCC1-RS485 Sensor Cable Pigtail 2m	1-100804-01
SCC1-RS485 Sensor Cable Pigtail 5m	1-101122-01
SCC1-ANALOG Sensor Cable Pigtail 2m	1-101072-01
SCC1-ANALOG Sensor Cable Pigtail 10m	1-101219-01
SCC1-USB Sensor Cable 2m	1-101007-01