Reliable performance
The new SA Series flow sensors are designed to detect and measure the flow and temperature of oil, water, glycol and air in large internal pipe diameters up to 16 inches. These volumetric flow sensors operate using the calorimetric measuring principle. The sensor tip houses two RTD elements and a heat source. When power is applied, the tip of the sensor is heated. The flow rate is determined as these RTDs react to the physical effect of a flowing medium conducting heat energy away from the sensor tip. This temperature-based operating principle can reliably sense the flow of virtually any liquid or gas.

Quick setup
A simple pushbutton menu allows the sensor to be programmed to fit your application setpoints. Switching, frequency or analog outputs are also selectable. Designed with an integrated digital display, values may be set in green or red for indicating if process values are within range or if limits have been exceeded. Parameters may also be set via ifm’s LineRecorder software or IO-Link.

Various mounting options
ifm’s SA Series flow sensors are available in various probe lengths and process connections to fit most mounting requirements.
## Technical Specs

- **Operating voltage:** 18…30 VDC
- **Current consumption:** < 100 mA
- **Current rating:** 250 mA
- **Accuracy flow measurement:** ± (5 % of measured value + 2 % of full range) for water
- **Accuracy temp monitoring:** ± 1.8 °F (1 °C)
- **Protection:** IP65 / IP67
- **Housing materials:** 316L stainless, steel, PBT
- **Response time:** 0.5 sec. (water)

## Process Connection

<table>
<thead>
<tr>
<th>Display Units</th>
<th>Measuring Range (Water)</th>
<th>Measuring Range (Air)</th>
</tr>
</thead>
<tbody>
<tr>
<td>%, fps, g/m, cfm, °F</td>
<td>0.15…9.8 ft/s</td>
<td>6.5…328 ft/s</td>
</tr>
<tr>
<td>%, mV, l/min, m³/h, °C</td>
<td>0.04…3 m/s</td>
<td>2…10 m/s</td>
</tr>
</tbody>
</table>

## Required Accessories

- **Type:** Compression fitting 1/2" NPT
  - **Part No.:** E40261
  - **List Price:** $22.00
- **Type:** Compression fitting 1/4" NPT
  - **Part No.:** E40262
  - **List Price:** $22.00

## Required Accessories (for SA5xxx)

- **Type:** 1/4" NPT adapter
  - **Part No.:** E40106
  - **List Price:** $22.00
- **Type:** 1/2" NPT adapter
  - **Part No.:** E40107
  - **List Price:** $24.00
- **Type:** 3/4" NPT adapter
  - **Part No.:** U40085
  - **List Price:** $45.00

## Cordsets

- **Type:** M12 Micro DC (4-pin) 2 m, PUR cable
  - **Part No.:** EVC001
  - **List Price:** $9.95
- **Type:** M12 Micro DC (4-pin) 5 m, PUR cable
  - **Part No.:** EVC002
  - **List Price:** $13.50
- **Type:** M12 Micro DC (4-pin) 2 m, PUR cable
  - **Part No.:** EVC004
  - **List Price:** $9.95
- **Type:** M12 Micro DC (4-pin) 5 m, PUR cable
  - **Part No.:** EVC005
  - **List Price:** $13.50

## Optional Accessories

- **Type:** USB IO-Link master cable for parameter setting
  - **Part No.:** E30390
  - **List Price:** $357.00
- **Type:** Memory plug, parameter memory for IO-Link sensors
  - **Part No.:** E30398
  - **List Price:** $51.00
- **Type:** LINEREORDER DEVICE, software for parameter setting
  - **Part No.:** QA0011
  - **List Price:** $110.00