## TECHNICAL SPECIFICATIONS

- **Supply voltage (Vs)**: 4.5V\textsubscript{DC} to 15.4V\textsubscript{DC} or 8V\textsubscript{DC} to 30V\textsubscript{DC}
- **Supply current (Is)**: 2.5mA max. (Vs = 15.4V\textsubscript{DC}) or 7.5mA max. (Vs = 30V\textsubscript{DC})
- **Output sink and source current (I\text{out})**: Up to 1A
- **Operating temperature**: -40°C to +125°C (-40°F to +257°F)
- **Storage temperature**: -40°C to +125°C (-40°F to +257°F)
- **Operating pressure**: 0 to 600bar (0 to 8700psi)
- **Housing material**: 316L Stainless steel with glass tip
- **Switch termination**: 20AWG, 250mm PVDF wires, or 22AWG PVC cable or M12 connector

## BENEFITS
- Liquid level switches that can detect the presence or absence of oil or water based liquids
- Corrosion resistant, 316L stainless steel housing with hardened glass tip; suitable for harsh environments
- Compact size, wide operating temperature and pressure, choice of mounting threads and terminal connections

## FEATURES

- **Liquid level switches** that can detect the presence or absence of oil or water based liquids
- **Corrosion resistant** 316L stainless steel housing with hardened glass tip; suitable for harsh environments
- **Compact size**; wide operating temperature and pressure, choice of mounting threads and terminal connections

## BENEFITS
- Direct high current switching
- Industrial supply voltages
- Direct load drive design
- High pressure
- High temperature

## APPLICATIONS
- Tank level control; fill/empty
- Leak detection
- Pump control
- Sump level switching
- Overfill protection

## OUTPUT VALUES

### Output Voltage (V\text{out})

- **I\text{out} = 1A**
  - **Vs = 4.5—15.4V\textsubscript{DC}**
    - Output High: V\text{out} = Vs - 1.5V max
    - Output Low: V\text{out} = 0V + 0.5V max
  - **Vs = 8—30V\textsubscript{DC}**
    - Output High: V\text{out} = Vs - 1.8V max
    - Output Low: V\text{out} = 0V + 0.7V max

Other sensor options available on request, email: technical@sstsensing.com

## DATA SHEET

**Optomax Industrial Glass Series**

**TECHNICAL SPECIFICATIONS**

**Supply voltage (Vs)**: 4.5V\textsubscript{DC} to 15.4V\textsubscript{DC} or 8V\textsubscript{DC} to 30V\textsubscript{DC}

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**Output sink and source current (I\text{out})**: Up to 1A

**Operating temperature**: -40°C to +125°C (-40°F to +257°F)

**Storage temperature**: -40°C to +125°C (-40°F to +257°F)

**Operating pressure**: 0 to 600bar (0 to 8700psi)

**Housing material**: 316L Stainless steel with glass tip

**Switch termination**: 20AWG, 250mm PVDF wires, or 22AWG PVC cable or M12 connector

**NOTES**

- Not suitable for use in freezing liquid or high condensing environments such as steam.
b) Recommended nuts and sealing accessories outlined within the Accessory Table.

c) Refer to mounting information on page 4.

d) When correctly sealed.

e) Do NOT over-tighten as this can permanently damage the switch.
In order to suit any application, these switches have been designed with various output circuit configurations. They are identified by the 3-digit output type code in the part number as shown in Order Information.

CAUTION: Take care when connecting loads. The minimum load impedance should not exceed Vs/max output current.

Note: Shorting the output to Vs or 0V will result in irreparable damage to the switch.

Note: Colours shown are for 3-wire version. See electrical interface table on page 2 for equivalent cable colours.
ORDER INFORMATION

Generate your specific part number using the convention shown below. Use only those letters and numbers that correspond to the sensor and output options you require — omit those you do not.

Other sensor options available on request, email: technical@sstsensing.com for details.

<table>
<thead>
<tr>
<th>Housing Thread</th>
<th>Output Logic</th>
<th>Supply Voltage</th>
<th>Output Type</th>
<th>Termination</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 M12x1</td>
<td>L Low in air</td>
<td>8-30VDC</td>
<td>001 N-Type</td>
<td>Blank</td>
</tr>
<tr>
<td>6 1/2”-20 UNF</td>
<td>Blank</td>
<td>4.5-15.4VDC</td>
<td>002 N-Type</td>
<td>M12 4-pin</td>
</tr>
<tr>
<td>7 1/4” NPT</td>
<td>High in air</td>
<td></td>
<td>003 N-Type</td>
<td>male connector</td>
</tr>
<tr>
<td>8 1/2” NPT</td>
<td></td>
<td></td>
<td>004 P-Type</td>
<td>C3 3m Cable</td>
</tr>
</tbody>
</table>

ACCESSORY TABLE

<table>
<thead>
<tr>
<th>Thread</th>
<th>Housing Type</th>
<th>Accessory</th>
<th>Material</th>
<th>Order Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12</td>
<td>2x0</td>
<td>Seal Washer</td>
<td>Nitrile</td>
<td>41000190-002</td>
</tr>
<tr>
<td>M12</td>
<td>2x0</td>
<td>Seal Washer</td>
<td>EPDM</td>
<td>41000190-003</td>
</tr>
<tr>
<td>M12</td>
<td>2x0</td>
<td>Seal Washer</td>
<td>VAMAC</td>
<td>41000190-004</td>
</tr>
<tr>
<td>M12</td>
<td>2x0</td>
<td>‘O’ Ring</td>
<td>As Required</td>
<td>Not Sold by SST</td>
</tr>
<tr>
<td>M12</td>
<td>2x0</td>
<td>Nut</td>
<td>Zinc-Plated Brass</td>
<td>LL-NUT-ZNC</td>
</tr>
<tr>
<td>M12</td>
<td>2x0</td>
<td>Nut</td>
<td>Stainless Steel</td>
<td>LL-NUT-STS</td>
</tr>
<tr>
<td>1/2”-20 UNF</td>
<td>6x0</td>
<td>‘O’ Ring</td>
<td>As Required - See SAE J1926-1</td>
<td>Not Sold by SST</td>
</tr>
<tr>
<td>1/4” NPT</td>
<td>7x0</td>
<td>Sealing Tape</td>
<td>PTFE</td>
<td>Not Sold By SST</td>
</tr>
<tr>
<td>1/4” NPT</td>
<td>7x0</td>
<td>Sealing Compound</td>
<td>Sealing Compound must be compatible with housing material</td>
<td>Not Sold By SST</td>
</tr>
</tbody>
</table>

CAUTION

Do not exceed maximum ratings and ensure sensor(s) are operated in accordance with their requirements.

Carefully follow all wiring instructions. Incorrect wiring can cause permanent damage to the device.

SST Sensing Ltd recommend using alcohol based cleaning agents. Do NOT use chlorinated solvents such as trichloroethane as these are likely to attack the sensor material.

Failure to comply with these instructions may result in product damage.

INFORMATION

As customer applications are outside of SST Sensing Ltd.’s control, the information provided is given without legal responsibility. Customers should test under their own conditions to ensure that the equipment is suitable for their intended application. Before use, check that the fluid in which you wish to use these devices is compatible with Stainless Steel and glass.

For technical assistance or advice, please email: technical@sstsensing.com

General Note: SST Sensing Ltd. reserves the right to make changes to product specifications without notice or liability. All information is subject to SST Sensing Ltd.’s own data and considered accurate at time of going to print.