**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

**BENEFITS**

- High power
- Industrial supply voltage
- Direct load drive design

**APPLICATIONS**

- Tank level control; fill/empty
- Leak detection
- Pump control
- Sump level switching

**TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Supply voltage (Vs)</th>
<th>4.5V DC to 15.4V DC or 8V DC to 30V DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply current (Is)</td>
<td>2.5mA max. (Vs = 15.4V DC) or 7.5mA max. (Vs = 30V DC)</td>
</tr>
<tr>
<td>Output sink and source current (Iout)</td>
<td>Up to 1A</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-40°C to +125°C (-40°F to +257°F)</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-40°C to +125°C (-40°F to +257°F)</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>0 to 600bar (0 to 8700psi)</td>
</tr>
<tr>
<td>Housing material</td>
<td>316L Stainless steel with glass tip</td>
</tr>
<tr>
<td>Sensor termination</td>
<td>20AWG, 250mm PTFE wires, 8mm tinned, potted back end</td>
</tr>
</tbody>
</table>

**NOTES**

- a) Not suitable for use in freezing liquid or high condensing environments such as steam.
- b) Voltages applicable to output value stated.

**OUTPUT VALUES**

<table>
<thead>
<tr>
<th>Output Voltage (Vout):</th>
<th>lout = 1A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vs = 4.5—15.4V DC</td>
<td>Output High: Vout = Vs - 1.5V max</td>
</tr>
<tr>
<td></td>
<td>Output Low: Vout = 0V + 0.5V max</td>
</tr>
<tr>
<td>Vs = 8—30V DC</td>
<td>Output High: Vout = Vs - 1.8V max</td>
</tr>
<tr>
<td></td>
<td>Output Low: Vout = 0V + 0.7V max</td>
</tr>
</tbody>
</table>
**NOTES**

- Hex nut and O-ring sold separately
- NPT version can be sealed with a curing type thread sealant such as “Loctite 565” with primer “N”. Do NOT use PTFE tape.
- When correctly sealed.
- Do NOT over-tighten as this can permanently damage the sensor.

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**OUTLINE DRAWING**

All dimensions shown in mm. Tolerances = ±1mm.

**HOUSING SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Housing Series</th>
<th>G2x0</th>
<th>G6x0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thread</td>
<td>M12x1x8g with hex nut(^a)</td>
<td>1/2” SAE with O-ring(^a)</td>
</tr>
<tr>
<td>Pressure(^c)</td>
<td>100 bar / 1450 psi maximum</td>
<td></td>
</tr>
<tr>
<td>Tightening Torque(^d)</td>
<td>3 Nm / 26.5 in-lbs maximum</td>
<td></td>
</tr>
</tbody>
</table>

**G2x0 Series**

- Thread: M12x1x8g with hex nut\(^a\)
- Pressure: 100 bar / 1450 psi maximum
- Tightening Torque: 3 Nm / 26.5 in-lbs maximum

**G6x0 Series**

- Thread: 1/2” SAE with O-ring\(^a\)
- Pressure: 100 bar / 1450 psi maximum
- Tightening Torque: 3 Nm / 26.5 in-lbs maximum

**G7x0 Series**

- Thread: 1/4” NPT\(^b\)
- Pressure: 100 bar / 1450 psi maximum
- Tightening Torque: 3 Nm / 26.5 in-lbs maximum

**G8x0 Series**

- Thread: 1/2” NPT\(^b\)
- Pressure: 600 bar / 8702 psi maximum
- Tightening Torque: 3 Nm / 26.5 in-lbs maximum

**MOUNTING SPECIFICATIONS**

**G2x0 & G6x0 Series**

- Fixing nut
- O-ring gasket
- Red wire = Vs
- Green wire = Output
- Blue wire = 0V

**G7x0 & G8x0 Series**

- Socket
- Red wire = Vs
- Green wire = Output
- Blue wire = 0V
In order to suit any application, these sensors have been designed with various output circuit configurations. They are identified by the 3-digit code at the end of 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 sensor.
**ELECTRICAL INTERFACE**

<table>
<thead>
<tr>
<th>Wire</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Vs</td>
</tr>
<tr>
<td>Green</td>
<td>Output</td>
</tr>
<tr>
<td>Blue</td>
<td>0V</td>
</tr>
</tbody>
</table>

**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.

```
921L G X 1 0 D 3 X X - X X
```

<table>
<thead>
<tr>
<th>Housing Material</th>
<th>Housing Type</th>
<th>Output Logic</th>
<th>Supply Voltage</th>
<th>Output Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>2</td>
<td>L</td>
<td>24</td>
<td>001</td>
</tr>
<tr>
<td>Glass tip</td>
<td>2x0 series M12x1</td>
<td>Output Low in air</td>
<td>8-30VDC</td>
<td>N-Type with flyback</td>
</tr>
<tr>
<td>6</td>
<td>Blank</td>
<td>Blank</td>
<td>4.5-15.4VDC</td>
<td>002</td>
</tr>
<tr>
<td>6x0 series 1/2&quot; SAE</td>
<td>Output High in air</td>
<td>Blank</td>
<td>Blank</td>
<td>N-Type with 10kΩ pull-up</td>
</tr>
<tr>
<td>7</td>
<td>7x0 series 1/4&quot; NPT</td>
<td>Output Blank</td>
<td>Blank</td>
<td>003</td>
</tr>
<tr>
<td>8</td>
<td>8x0 series 1/2&quot; NPT</td>
<td>Output Blank</td>
<td>Blank</td>
<td>004</td>
</tr>
</tbody>
</table>

**Sensorik**
- Halteffektsensoren
- Magnetfeldsensoren
- Stromsensoren
- Wegesensoren
- Speedsensoren
- Thermoelemente
- Widerstandsthermometer
- Sauerstoffsensoren
- IR-Sensoren
- Feuchtesensoren
- Drucksensoren
- Kraftsensoren
- Flowsensoren
- Füllstandssensoren
- Zähleranzeigen
- Ultraschallsensoren
- Lichtschranken
- Fiberoptik
- Drehgeber
- mech. Schalter

**Leistungsangebot**
- Distribution
- Sensorkonfektion
- Sensormodifikation
- Kabelkonfektion
- Leiterplattenbestückung