FEATURES
· Solid state technology, no moving parts
· Miniature size, easy to install
· TTL compatible or transistor output versions
· 100 mA or 1 A output current
· Trogamid housings
· High media compatibility
· Fast response, electrically robust

WETTED MATERIALS
Tip and housing: Trogamid

SPECIFICATIONS

Maximum ratings
Supply voltage
OLT01..., OLT25X... 4.5...15.4 V
OLT25U... 8...30 V
Supply current
OLT01..., OLT25X... 2.5 mA
OLT25U... 7.5 mA
Output current
OLT01... 100 mA
OLT25... 1 A
Operating temperature range
OLT01... -25...80°C
OLT25... -40...125°C
Pressure range
OLT...F 20 bar
all others 7 bar
Dielectric strength 4 kV
Protection class IP 67

ELECTRICAL CONNECTION

Red $V_S$
Green Output
Blue GND
OLT Series
Trogamid optical liquid level switches

OUTPUT VOLTAGE

<table>
<thead>
<tr>
<th>Part no.</th>
<th>Condition</th>
<th>Output voltage (V_{out})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>OLT01...</td>
<td>(V_s = 4.5\ldots15.4) (V), (I_{out} = 100) mA</td>
<td>(V_{out} = V_s - 1.0) (V) max</td>
</tr>
<tr>
<td>OLT25X...</td>
<td>(V_s = 4.5\ldots15.4) (V), (I_{out} = 1) A</td>
<td>(V_{out} = V_s - 1.5) (V) max</td>
</tr>
<tr>
<td>OLT25U...</td>
<td>(V_s = 8\ldots30) (V), (I_{out} = 1) A</td>
<td>(V_{out} = V_s - 1.8) (V) max</td>
</tr>
</tbody>
</table>

PERFORMANCE CHARACTERISTICS

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeatability</td>
<td>(\pm 1)</td>
<td></td>
<td></td>
<td>mm</td>
</tr>
<tr>
<td>Hysteresis (depending on liquid)</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response time rising liquid</td>
<td>50</td>
<td></td>
<td></td>
<td>(\mu s)</td>
</tr>
<tr>
<td>Response time falling liquid (ethanol)</td>
<td>1</td>
<td></td>
<td></td>
<td>s</td>
</tr>
</tbody>
</table>

ELECTRICAL CONNECTION (cont.)

TTL compatible

- Red \(+V_s\)
- Green \(\) Output
- Blue \(\) GND

Push-Pull (current sinking and sourcing)

- Red \(+V_s\)
- Green \(\) Output
- Blue \(\) GND
- \(R_L\)

Note: All OLT... devices are supplied with lead wires. The wire lengths are 200 mm -0, +30 mm measured from the back of the housing. Wire diameters are 0.511 mm (AWG 24) for all OLT01... devices and 0.812 mm (AWG 20) for all OLT25... devices.
OLT Series
Trogamid optical liquid level switches

OUTLINE DRAWING

M10 thread
(Housing type OLT...F...)

- Ø 12
- Mass: 5 g
- Dimensions in mm: 18.70, 16.70

M12 thread short
(Housing type OLT...K...)

- Ø 10.40
- Mass: 6 g
- Dimensions in mm: 19.40, 14.70

M12 thread long
(Housing type OLT...L...)

- Ø 10.40
- Mass: 10 g
- Dimensions in mm: 29.70, 14.70

Note: Do not mount the sensor with prism pointing downwards. The prism should be at least 10 mm away from any infrared-reflecting surface.
## ORDERING INFORMATION

### TTL compatible output devices

<table>
<thead>
<tr>
<th>Options</th>
<th>Series</th>
<th>Output</th>
<th>Housing type</th>
<th>Termination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OLT 01T</td>
<td>Current: 100 mA, Type: TTL compatible</td>
<td>Function: 0 Low in air, 1 High in air</td>
<td>F M10 thread, K M12 thread short</td>
</tr>
</tbody>
</table>

Example: OLT 01T 0 F 3

### Transistor output devices

<table>
<thead>
<tr>
<th>Options</th>
<th>Series</th>
<th>Output</th>
<th>Housing type</th>
<th>Termination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OLT 25X</td>
<td>Current: 1 A, Type: Push-Pull (V&lt;sub&gt;s&lt;/sub&gt; = 4.5...15.4 V)</td>
<td>Function: 0 Low in air, 1 High in air</td>
<td>L M12 thread long</td>
</tr>
</tbody>
</table>

Example: OLT 25U 0 L 3

### Accessories (please order separately using the following order numbers)

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Description</th>
<th>Use with</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZA000910</td>
<td>M12 x 1, nickel plated brass</td>
<td>OLT...K... (standard temperature devices)</td>
</tr>
<tr>
<td>ZA000911</td>
<td>M12 x 1, stainless steel (303, clear passivated)</td>
<td>OLT...L... (high temperature devices)</td>
</tr>
<tr>
<td>ZA000912</td>
<td>M10 x 1, plastic</td>
<td>OLT...F...</td>
</tr>
</tbody>
</table>

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