VISUAL LEVEL INDICATORS

LV...
The level indicators series is available for both static and mobile applications; the construction materials used make it possible to guarantee service with wide temperature variations and compatibility with all hydraulic fluids. Series LV... level indicators are available with fixing centre distance from 76 to 1000 mm.

LVK
This level indicator series is available with electric alarm and visual and electrical temperature switches, level indicators are available with fixing centre distance from 76 to 254 mm.

LC...
LC... series sight plugs allow visibility of the fluid contained in the reservoirs, showing the level and also any changes in transparency and emulsion.

These indicators are available in three configurations, with transparent plastic body and with black body, and an aluminium body version. Fixing to reservoirs with unthreaded holes or reduced thickness can be achieved using series LCC/T equipped with expansion kit.

Temperature
- LVA: from -25 °C to +80 °C
- LVU: from -25 °C to +70 °C
- LVU: from -25 °C to +100 °C (only with pyrex lens)
- LVK/LC...: from -20 °C to +80 °C

Compatibility
LVA/LVK/LVU
- NBR seals and Cork Gasket, compatible with:
  - Mineral oils to ISO 2943 - aqueous emulsions
  - Synthetic fluids, glycol water.
- FPM seals, compatible with:
  - Synthetic fluids type HS-HFDR-HFDS-HFDU.
LC...
- Mineral oils to ISO 2943 - aqueous emulsions
  - Synthetic fluids, glycol water.
LVA (Materials)
1 - Cover: Polyamide
2 - Screws: Galvanised Steel
3 - Seals: NBR/FPM
4 - Lens: Polyamide
5 - Nameplate: Painted Aluminium
6 - Terminal cap: Nylon
7 - Nuts: Galvanised Steel

Weight
LVA10: 0.13 Kg
LVA20: 0.18 Kg
LVA30: 0.23 Kg

Screw tightening torque: 15Nm

Quantity per pack
Number of Parts
LVA 10

Dimensions

Type
LVA......M10
LVA......M12
LVA......U38
LVA......U12

B
M10 10.5
M12 12.5
3/8" UNC 10
1/2" UNC 13.5

C

Weight
LVA10: 0.13 Kg
LVA20: 0.18 Kg
LVA30: 0.23 Kg

Ordering information

LVA20T.....S01

Level indicator
LVA
Example: LVA

1 - Size
20 20 30

2 - Accessories

3 - Seal

A NBR

V FPM

4 - Cover

P Cover Polyamide

5 - Connection

M10 Screws M10
M12 Screws M12
U38 Screws 3/8" UNC
U12 Screws 1/2" UNC

6 - Options

S01 With nuts - Tag MP Filtri
S02 Without nuts - Tag MP Filtri
**Series LVK**

**Description**
Visual/electric level indicator with temperature controls for both static and mobile applications. Completely transparent, it provides a view of the fluid over the entire length, both from the front and on both sides. The quality and thickness, 4 millimetres, of the construction material provides the utmost dependability and mechanical strength without any need for additional protection.

**LVK (Materials)**
1. Body: Polyamide
2. Screws: Nickel Plated Brass (Standard) AISI 316 (Option)
3. Seals: NBR (Standard) FPM (Option)
4. Float: Polyamide
5. Sensor thermometer: Screw + thermometer

**Temperatures:** from -20°C to +80°C
**Screw tightening torque:** 10Nm

**Compatibility**
- NBR seals, compatible with:
  - Mineral oils to ISO 2943 - aqueous emulsions
  - Synthetic fluids, glycol water.
- FPM seals, compatible with:
  - Synthetic fluids type HS-HFDR-HFDS-HFDU.

**Dimensions**

**Reservoir holes**

**Sensor thermometer**

**Weight**
- LVK10: 0,14 Kg
- LVK20: 0,17 Kg
- LVK30: 0,25 Kg

<table>
<thead>
<tr>
<th>Size</th>
<th>Type</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>LVK10</td>
<td>M10</td>
<td>10,5</td>
<td></td>
</tr>
<tr>
<td>LVK20</td>
<td>M12</td>
<td>12,5</td>
<td></td>
</tr>
<tr>
<td>LVK30</td>
<td>M12</td>
<td>12,5</td>
<td></td>
</tr>
</tbody>
</table>

**Weight (Kg)**
- TV12 0,100 Kit Sensor thermometer + Screw M12
Combination of available electrical contacts

**Electrical contact with no liquid**

<table>
<thead>
<tr>
<th>Normally open N.O.</th>
<th>Normally closed N.C.</th>
<th>Switch SPDT</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>Level</th>
<th>Level</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
</table>

**Electrical contact with no liquid + thermostat**

<table>
<thead>
<tr>
<th>Normally open N.O.</th>
<th>Normally closed N.C.</th>
<th>Switch SPDT</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>Level</th>
<th>Level</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
</table>

**Electrical contact with no liquid + PT 100**

<table>
<thead>
<tr>
<th>Normally open N.O.</th>
<th>Normally closed N.C.</th>
<th>Switch SPDT</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>Level</th>
<th>Level</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
</table>

**Dimension screw + electrical contact + thermostated or PT 100**

**Thermostat electrical specifications**

- Voltage: 250 V Switchable
- Frequency: 50 Hz
- Load values: 4.0 A. cos $\varphi$ 0.6 (IMOT)
  - 6.3 A. cos $\varphi$ 1 (IN)
- Max load: 10 A. cos $\varphi$ 1
- Switching temperature: 50°C - 60°C - 70°C
- Tolerances: ± 5°C

**Electrical specifications**

- Contact with no liquid
  - N.O.
  - N.C.
- Switch
  - D.C. Switchable Power: 40 W, 20 W
  - D.C. current intensity - A.C.: 40 V.A., -
  - Switchable voltage: 2 A, 1 A
  - Voltage switchable: 230 V, 150 V

Protection degree: IP65

**Ordering information**

**Level indicator**

- LVK
- Example: LVK 20 A M12 1 S S P01

**Level**

1 - Size

<table>
<thead>
<tr>
<th>10</th>
<th>20</th>
<th>30</th>
</tr>
</thead>
</table>

2 - Seal

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>S</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
</table>

3 - Connection

<table>
<thead>
<tr>
<th>M10</th>
<th>M12</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Screws M10</th>
<th>Screws M12 (Standard)</th>
</tr>
</thead>
</table>

**4 - Electrical contacts with no liquid**

- N.O.
- N.C.
- Switch SPDT

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
</table>

**5 - Style**

- Standard
- Thermostat
- Only for connection

<table>
<thead>
<tr>
<th>S</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>M12</th>
</tr>
</thead>
</table>

**6 - Thermostat**

- Standard without
  - 50° N.O.
  - 60° N.O.
  - 70° N.O.
- Only for style T
  - 50° N.C.
  - 60° N.C.
  - 70° N.C.

**8 - Options**

<table>
<thead>
<tr>
<th>P01</th>
<th>MP Filtri standard</th>
</tr>
</thead>
</table>

**Accessories/Options**

<table>
<thead>
<tr>
<th>TV12</th>
<th>Kit w/ Sensor thermometer Screw M12</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>M10 X</th>
<th>Kit w/ Screws M10 stainless steel AISI 316</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>M12 X</th>
<th>Kit w/ Screws M12 stainless steel AISI 316</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>02050432</th>
<th>Kit w/FPM seals</th>
</tr>
</thead>
</table>

* All the accessories are supplied separately from code LVK
**Series LVU**

LVU (Materials)
1 - Head: Nylon
2 - Connection G 3/8": Nickel Plated Brass
3 - G 3/8" valve: Steel
4 - Seal: NBR
5 - Pipe Seal: NBR
6 - Pipe: Acrylic
7 - Float: Nylon
8 - Protection: Aluminium
9 - Clamps MIN - MAX: Nylon

<table>
<thead>
<tr>
<th>Weight</th>
<th>Version U</th>
<th>Version S</th>
</tr>
</thead>
<tbody>
<tr>
<td>LVU 0500</td>
<td>0.780 kg</td>
<td>0.580 kg</td>
</tr>
<tr>
<td>LVU 1000</td>
<td>1.150 kg</td>
<td>0.790 kg</td>
</tr>
<tr>
<td>LVU 1500</td>
<td>1.550 kg</td>
<td>1.100 kg</td>
</tr>
<tr>
<td>LVU 2000</td>
<td>1.950 kg</td>
<td>1.400 kg</td>
</tr>
</tbody>
</table>

Open the valve completely.

Allows the oil to flow from the reservoir to the level tube.

**ATTENTION** - The intermediate valve opening or closing position allows the oil to flow from the reservoir to the exterior.

Close the valve fully.

Stops the oil flow from the reservoir to the level tube.

Allows the oil to be discharged from the level tube to an external container.
Spare parts LVU

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Q.ty</th>
<th>LVU</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Seals kit</td>
<td>1</td>
<td>02050130</td>
</tr>
<tr>
<td>4</td>
<td>O-Ring</td>
<td>4</td>
<td>OR 4181</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ø 20.22 x 3.53</td>
</tr>
<tr>
<td>2</td>
<td>Fixing element kit series 10</td>
<td>1</td>
<td>02049014</td>
</tr>
<tr>
<td>2</td>
<td>G 3/8” connection</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Fixing element kit series 20</td>
<td>1</td>
<td>02049015</td>
</tr>
<tr>
<td>3</td>
<td>G 3/8” connection</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>G 3/8” bibcock</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Dimensions**

<table>
<thead>
<tr>
<th>Size</th>
<th>A (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0500</td>
<td>500</td>
</tr>
<tr>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>1500</td>
<td>1500</td>
</tr>
<tr>
<td>2000</td>
<td>2000</td>
</tr>
</tbody>
</table>

**Ordering information**

1 - Size
- 0500: Dimension “A” in mm
- 1000: Dimension “A” in mm
- 1500: Dimension “A” in mm
- 2000: Max. dimension “A” in mm
- xxxx: Dimension “A” in mm (on request)

2 - Variants
- S: Standard
- U: “U” protection
- P: “U” protection + Pyrex lens (max size 1500)

3 - Seal
- A: NBR

4 - Connection
- 10: 2 G 3/8” connections
- 20: 1 G 3/8” connection + 1 valve

5 - Options
- P01: MP Filtri standard