A WORLDWIDE LEADER IN THE FIELD OF HYDRAULIC FILTRATION EQUIPMENT.

Our company started life in 1964, when Bruno Pasotto decided to attempt to cater for the requests of a market still to be fully explored, with the study, design, development, production and marketing of a vast range of filters for hydraulic equipment, capable of satisfying the needs of manufacturers in all sectors. The quality of our products, our extreme competitiveness compared with major international producers and our constant activities of research, design and development has made us a worldwide leader in the field of hydraulic circuit filtering. Present for over 50 years in the market, we have played a truly decisive role in defining our sector, and by now we are a group capable of controlling our entire chain of production, monitoring all manufacturing processes to guarantee superior quality standards and to provide concrete solutions for the rapidly evolving needs of customers and the market.
Our customer-oriented philosophy, which enables us to satisfy all customer requests rapidly and with personalized products, makes us a dynamic and flexible enterprise. The possibility of constantly controlling and monitoring the entire production process is essential to allow us to guarantee the quality of our products.
WORLDWIDE PRESENCE

Our foreign Branches enable us to offer a diversified range of products that allow us to successfully face the aggressive challenge of international competition, and also to maintain a stable presence at a local level.

The Group boasts 9 business branches
TECHNOLOGY

Our constant quest for excellence in quality and technological innovation allows us to offer only the best solutions and services for applications in many fields, including general industry, test rigs, lubrication, heavy engineering, renewable energies, naval engineering, offshore engineering, aviation systems, emerging technologies and mobile plant (i.e. tractors, excavators, concrete pumps, platforms).
AND PRODUCTION

Our high level of technological expertise means we can rely entirely on our own resources, without resorting to external providers. This in turn enables us to satisfy a growing number of customer requests, also exploiting our constantly updated range of machines and equipment, featuring fully-automated workstations capable of 24-hour production.
LOW & MEDIUM PRESSURE FILTERS

- Flow rates up to 3000 l/min
- Pressure up to 80 bar
- Mounting:
  - In-Line
  - Parallel manifold version
  - In single and duplex designs

HIGH PRESSURE FILTERS

- Flow rates up to 750 l/min
- Pressure from 110 bar up to 560 bar
- Mounting:
  - In-Line
  - Manifold
  - In single and duplex designs

SUCTION FILTERS

- Flow rates up to 875 l/min
- Pressure up to 20 bar
- Mounting:
  - Tank immersed
  - In-Line
  - In tank with shut off valve
  - In tank with flooded suction

RETURN FILTERS

- Flow rates up to 3000 l/min
- Pressure up to 20 bar
- Mounting:
  - In-Line
  - Tank top
  - In single and duplex designs

RETURN / SUCTION FILTERS

- Flow rates up to 300 l/min
- Pressure up to 80 bar
- Mounting:
  - In-Line
  - Tank top

SPIN-ON FILTERS

- Flow rates up to 365 l/min
- Pressure up to 35 bar
- Mounting:
  - In-Line
  - Tank top

SUCTION FILTERS

- Flow rates up to 365 l/min
- Pressure up to 35 bar
- Mounting:
  - In-Line
  - Tank top
PRODUCT RANGE

MP Filtri can offer a vast and articulated range of products for the global market, suitable for all industrial sectors using hydraulic equipment.

This includes filters (suction, return, return/suction, spin-on, pressure, stainless steel pressure) and structural components (motor/pump bell-housings, transmission couplings, damping rings, foot brackets, aluminium tanks, cleaning covers).

We can provide all the skills and solutions required by the modern hydraulics industry to monitor contamination levels and other fluid conditions.

Mobile filtration units and a full range of accessories allow us to supply everything necessary for a complete service in the hydraulic circuits.
TANK ACCESSORIES
# INDEX

## COMPANY

- 1 COMPANY
- 6 PRODUCT RANGE

## PRODUCT RANGE

- 13 STR & MPA - MPM Submerged suction filter, with bypass or magnetic column

## INTRODUCTION

- 9

## STRAINERS

- 10 page

## AIR BREATHERS AND FILLER PLUGS

- 20 page

## FILLER AND DRAIN PLUGS

- 72 page

## VISUAL OIL LEVEL INDICATORS

- 86 page

## ELECTRICAL OIL LEVEL INDICATORS

- 100 page

## ACCESSORIES

- 120 page

---

### AIR BREATHERS AND FILLER PLUGS

<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>SAP 054-075 - SA Air breathers</td>
</tr>
<tr>
<td>29</td>
<td>SAW 115 Moisture control desiccant air breathers</td>
</tr>
<tr>
<td>33</td>
<td>SCS Metal air breathers with interchangeable filter element</td>
</tr>
<tr>
<td>39</td>
<td>SME 1 - SMF 1 - SML 1 Risers for breathers and filler caps installation</td>
</tr>
<tr>
<td>45</td>
<td>TA 46 - TAP 50 - SAP 50 Filler plug and air filter up to 200 l/min</td>
</tr>
<tr>
<td>53</td>
<td>TA 80 Steel filler plug and air filter up to 500 l/min</td>
</tr>
<tr>
<td>57</td>
<td>TAP 90 Filler plug and polyamide air filter up to 550 l/min</td>
</tr>
<tr>
<td>63</td>
<td>TAP 114 Filler plug and polyamide air filter up to 1600 l/min</td>
</tr>
<tr>
<td>67</td>
<td>TAP 115 &amp; SAP 115 Filler plug and polyamide air filter up to 3000 l/min</td>
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### FILLER AND DRAIN PLUGS

<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>TC 50 Polyamide filler plug</td>
</tr>
<tr>
<td>79</td>
<td>TKT - TSD - TKM Filler and draining plugs</td>
</tr>
</tbody>
</table>

### VISUAL OIL LEVEL INDICATORS

<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>89</td>
<td>LCP - LCC Visual oil level indicator - round shape</td>
</tr>
<tr>
<td>95</td>
<td>LVA - LVU Visual oil level indicator - vertical shape</td>
</tr>
</tbody>
</table>

### ELECTRICAL OIL LEVEL INDICATORS

<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>103</td>
<td>LEN - LEG - LET - LEM - LEU Electric oil level indicator</td>
</tr>
<tr>
<td>115</td>
<td>LVK Visual and Electric oil level indicator</td>
</tr>
</tbody>
</table>

### ACCESSORIES

<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>123</td>
<td>EM1 Pressure gauge isolator</td>
</tr>
<tr>
<td>129</td>
<td>SVM Gauge selector valve</td>
</tr>
<tr>
<td>133</td>
<td>FTA - FTR Oil tank fixing flange</td>
</tr>
<tr>
<td>137</td>
<td>MULTIFIT SFT Fixing clamps</td>
</tr>
<tr>
<td>143</td>
<td>OB Cleaning covers</td>
</tr>
<tr>
<td>149</td>
<td>SE10LT Aluminium tanks</td>
</tr>
</tbody>
</table>
Electromagnetic float level indicators use the action of a magnet fixed to the float to change the electrical status of a reed switch mounted inside the tube.

As the fluid level in the tank changes, the float moves together with the magnet that, connected with the reed switch, move the contacts thereby tripping an alarm signal.

The movement of the float is normally limited by mechanical stops because once the magnet exceeds the point at which it activates the reed switch, the switch reverts to its original status.

To invert the contact status from N.O. to N.C. and vice versa, it is sufficient to invert the float.
LEN - LEG - LET - LEM - LEU series

Electrical oil level indicators
LEN GENERAL INFORMATION

Technical data

Electrical Oil Level Indicators

LEN is a range of electrical fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank. The float moves through the rod while the fluid level changes. A magnet, fitted into the float, turns a reed sensor fixed into the rod.

Available features:
- G 1” male threaded or flanged connections
- Adjustable size on request, to meet every size of tank
- 1 or 2 floats, to monitor the minimum level, the maximum level or both of them

Common applications:
- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:
LEN 1 float

1: Common
2: Level

LEN 2 floats
1: Min. level
2: Max. level
3: Common

Note: to invert the contact status from NC to NO and vice versa, simply invert the float.

Materials
- Flange/Threaded body: Aluminium
- Tube: Brass
- Float: Polyamide foam
- O-Ring: NBR
- Circlip: Phosphor bronze
- Contact: N.C. (Normally Closed)

Electrical data
- Protection rating: IP65
- Max switching capacity: 80 W
- Max switching current: 1 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

Temperature
From -15 °C to + 80 °C

Weight
LEN 1 float 0.185 kg
LEN 2 floats 0.230 kg

Designation & Ordering code

| COMPLETE ELECTRICAL OIL LEVEL INDICATORS |
|-------------------------------|-------------------|
| Configuration example: LEN A |

<table>
<thead>
<tr>
<th>Series</th>
<th>( \text{LEN} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube material</td>
<td>A Brass</td>
</tr>
<tr>
<td>Length</td>
<td>150</td>
</tr>
<tr>
<td>Number of floats</td>
<td>1</td>
</tr>
<tr>
<td>Float material</td>
<td>A Polyamide foam</td>
</tr>
<tr>
<td>Electrical switch</td>
<td>1 N.C. (Normally Closed)</td>
</tr>
<tr>
<td>Seals</td>
<td>A NBR</td>
</tr>
<tr>
<td>Connections</td>
<td>G G 1”</td>
</tr>
<tr>
<td>Electrical connection</td>
<td>S EN 175301-803 connector</td>
</tr>
<tr>
<td>Execution</td>
<td>P01 MP Filtri standard</td>
</tr>
<tr>
<td>Pxx Customized</td>
<td></td>
</tr>
</tbody>
</table>
**Dimensions**

### LEN

#### Nr. 1 float

<table>
<thead>
<tr>
<th>Length [mm]</th>
<th>H1 [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>150</td>
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<tr>
<td>200</td>
<td>200</td>
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<tr>
<td>250</td>
<td>250</td>
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<tr>
<td>350</td>
<td>350</td>
</tr>
<tr>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>500</td>
<td>500</td>
</tr>
</tbody>
</table>

- **Connection “G”**
  - Cable clamp PG09, cable cross section 6÷8 mm
  - O-Ring seal
  - Ø30

- Holes on the tank
  - M4 - #8 UNC
  - Nr. 3 holes

- A/F 34

- **Connection “F”**
  - Cable clamp PG09, cable cross section 6÷8 mm
  - O-Ring seal
  - Ø30

- Holes on the tank
  - M4 - #8 UNC
  - Nr. 3 holes

- A/F 34

### LEN

#### Nr. 2 floats

<table>
<thead>
<tr>
<th>Length [mm]</th>
<th>H1 [mm]</th>
<th>H2 [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>200</td>
<td>95</td>
</tr>
<tr>
<td>250</td>
<td>250</td>
<td>105</td>
</tr>
<tr>
<td>350</td>
<td>350</td>
<td>115</td>
</tr>
<tr>
<td>400</td>
<td>400</td>
<td>115</td>
</tr>
<tr>
<td>500</td>
<td>500</td>
<td>125</td>
</tr>
</tbody>
</table>

- **Connection “G”**
  - Cable clamp PG09, cable cross section 6÷8 mm
  - O-Ring seal
  - Ø30

- Holes on the tank
  - M4 - #8 UNC
  - Nr. 3 holes

- A/F 34

- **Connection “F”**
  - Cable clamp PG09, cable cross section 6÷8 mm
  - O-Ring seal
  - Ø30

- Holes on the tank
  - M4 - #8 UNC
  - Nr. 3 holes

- A/F 34

---

**Electrical Oil Level Indicator**

- Connection “G”
- Connection “F”
- Holes on the tank
- A/F 34
- O-Ring seal
- Ø30

---

**Tank**

- Holes on the tank
  - Ø30
  - Ø55
  - Ø42
  - Ø35
**Electrical Oil Level Indicators**

LEG is a range of electrical fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank side. The float moves through the rod while the fluid level changes. A magnet, fitted into the float, turns a reed sensor fixed into the rod.

### Available features:
- Flanged connections
- Adjustable size on request, to meet every size of tank
- Floating monitor for oil level check

### Common applications:
- Hydraulic systems
- Mobile machines
- Industrial equipment

### Electrical symbol:

1. Common
2. Level

**Note:** to invert the contact status from NC to NO and vice versa, simply invert the float.

---

**Materials**
- Flange/Threaded body: Aluminium
- Tube: Brass
- Float: Polyamide foam
- O-Ring: NBR
- Circlip: Phosphor bronze
- Contact: N.C. (Normally Closed)

**Electrical data**
- Protection rating: IP65
- Max switching capacity: 80 W
- Max switching current: 1 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

The electrical properties indicated are referred to resistive loads; for capacitive and inductive loads and incandescent lamps, use protection circuits.

**Temperature**
From -15 °C to + 80 °C

**Weight**
- LEG A 102: 0.19 kg
- LEG A 200: 0.22 kg

---

**Designation & Ordering code**

**COMPLETE ELECTRICAL OIL LEVEL INDICATOR**

<table>
<thead>
<tr>
<th>Configuration example:</th>
<th>LEG</th>
<th>A</th>
<th>200</th>
<th>1</th>
<th>A</th>
<th>1</th>
<th>A</th>
<th>F</th>
<th>S</th>
<th>P01</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Series</strong></td>
<td>LEG</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>Tube material</strong></td>
<td>Brass</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Length</strong></td>
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<td>200</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of floats</strong></td>
<td>1</td>
<td></td>
<td>Nr. 1 float</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Float material</strong></td>
<td>Polyamide foam</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Electrical switch</strong></td>
<td>N.C. (Normally Closed)</td>
<td></td>
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</tr>
<tr>
<td><strong>Seals</strong></td>
<td>NBR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Connections</strong></td>
<td>Nr. 3 holes flange</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Electrical connection</strong></td>
<td>EN 175301-803 connector</td>
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</tr>
</tbody>
</table>

**Execution**
- P01 MP Filtri standard
- Pxx Customized
Note: for installation onto OB Cleaning covers see page 147
**LET GENERAL INFORMATION**

**Technical data**

**Electrical Oil Level Indicators**

LET is a range of electrical fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank. The float moves through the rod while the fluid level changes. A magnet, fitted into the float, turns a reed sensor fixed into the rod. The integrated thermostat allows to get a remote monitoring of the temperature.

**Available features:**
- G 1" male threaded or flanged connections
- Adjustable size on request, to meet every size of tank
- Floating monitor for oil level check

**Common applications:**
- Hydraulic systems
- Mobile machines
- Industrial equipment

**Electrical symbol:**

![Electrical symbol diagram](image)

**Note:** to invert the contact status from NC to NO and vice versa, simply invert the float.

**Materials**
- Flange/Threaded body: Aluminium
- Tube: Brass
- Float: Polyamide foam
- O-Ring: NBR
- Circlip: Phosphor bronze
- Contact: N.C. (Normally Closed)

**Electrical data**
- Protection rating: IP65
- Max switching capacity: 80 W
- Max switching current: 1 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

**Temperature**
From -15 °C to + 80 °C

**Weight**
- LET A 200 0.20 kg
- LET A 300 0.23 kg
- LET A 400 0.28 kg

**Designation & Ordering code**

<table>
<thead>
<tr>
<th>Series</th>
<th>Configuration example:</th>
<th>LET</th>
<th>A</th>
<th>300</th>
<th>A</th>
<th>1</th>
<th>A</th>
<th>1</th>
<th>A</th>
<th>F</th>
<th>S</th>
<th>50</th>
<th>P01</th>
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<tbody>
<tr>
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<td>LET A</td>
<td>Brass</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
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<td>A</td>
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<td>Electrical switch</td>
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<td></td>
<td></td>
<td></td>
<td>1</td>
<td>N.C. (Normally Closed)</td>
</tr>
<tr>
<td>Seals</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
<td>A</td>
<td>NBR</td>
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<tr>
<td>Connections</td>
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<td></td>
<td>S</td>
<td>EN 175301-803 connector</td>
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<tr>
<td>Thermostat setting</td>
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<td>50</td>
<td>50°C N.O. (Normally Open)</td>
</tr>
<tr>
<td>Execution</td>
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<td></td>
<td>Pxx</td>
<td>Customized</td>
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</table>
**LET Dimensions**

<table>
<thead>
<tr>
<th>Length</th>
<th>H1 [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>400</td>
<td>400</td>
</tr>
</tbody>
</table>

- **Connection “G”**
  - Cable clamp PG09, cable cross section 6÷8 mm
  - A/F 34
  - O-Ring seal

- **Connection “F”**
  - Cable clamp PG09, cable cross section 6÷8 mm
  - O-Ring seal

- **Holes on the tank**
  - M4 - #8 UNC
  - Nr. 3 holes

**Electrical Oil Level Indicator**
**LEM**

**GENERAL INFORMATION**

**Technical data**

**Electrical Oil Level Indicators**

LEM is a range of electrical fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank. The float moves through the rod while the fluid level changes. A magnet, fitted into the float, turns a reed sensor fixed into the rod. The setting point is adjustable on site, with few easy actions.

**Available features:**
- Flanged connections
- Adjustable size to meet every size of tank
- Floating monitor for oil level check
- Integrated thermostat, to get a remote monitoring of the temperature

**Common applications:**
- Hydraulic systems
- Mobile machines
- Industrial equipment

**Electrical symbol:**

<table>
<thead>
<tr>
<th>LEM without thermostat</th>
<th>LEM with thermostat</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Common</td>
<td>1: Thermostat</td>
</tr>
<tr>
<td>2: Level</td>
<td>2: Float</td>
</tr>
<tr>
<td>3: Common</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** to invert the contact status from NC to NO and vice versa, simply invert the float.

**Materials**
- Flange/Threaded body: Aluminium
- Tube: Brass
- Float: Polyamide foam
- O-Ring: NBR
- Circlip: Phosphor bronze
- Float contact: N.C. reed, N.O. (on request)
- Thermostat contact: N.O., N.C. (on request)

**Electrical data**
- Protection rating: IP65
- Max switching capacity: 80 W
- Max switching current: 1 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

**Temperature**
From -15 °C to + 80 °C

**Weight**
LEM 0.406 kg

**Designation & Ordering code**

<table>
<thead>
<tr>
<th><strong>COMPLETE ELECTRICAL OIL LEVEL INDICATOR</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Series</strong></td>
</tr>
<tr>
<td>LEM</td>
</tr>
<tr>
<td>Tube material</td>
</tr>
<tr>
<td>Length</td>
</tr>
<tr>
<td>Number of floats</td>
</tr>
<tr>
<td>Float material</td>
</tr>
<tr>
<td>Electrical switch</td>
</tr>
<tr>
<td>Seals</td>
</tr>
<tr>
<td>Connections</td>
</tr>
<tr>
<td>Electrical connection</td>
</tr>
</tbody>
</table>

**Thermostat setting**
- 00 Without thermostat
- 60 60°C N.O. (Normally Open)

**Execution**
- P01 MP Filtri standard
- Pxx Customized
**Dimensions**

<table>
<thead>
<tr>
<th>Length</th>
<th>H1 [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>1000</td>
<td>1000</td>
</tr>
</tbody>
</table>

Without thermostat

- Cable clamp PG09, cable cross section 6÷8 mm
- O-Ring seal

With thermostat

- Cable clamp PG09, cable cross section 6÷8 mm
- O-Ring seal

Holes on the tank

- M4 - #8 UNC
- Nr. 3 holes

Electrical Oil Level Indicator
**LEU**  
**GENERAL INFORMATION**

### Technical data

**Electrical Oil Level Indicators**

LEU is a range of electrical fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank. The float moves through the rod while the fluid level changes. A magnet, fitted into the float, turns a reed sensor fixed into the rod. The setting point is adjustable on site, with few easy actions. They are made of stainless steel, to meet every heavy duty application.

**Available features:**
- Flanged connections
- Setting size for each tank type
- Double Floating monitor for oil level check

**Common applications:**
- Hydraulic systems
- Mobile machines
- Industrial equipment

**Electrical symbol:**

```
① ② ③ ④
1: Common
2: Min. level
3: Max. level
```

**Note:** to invert the contact status from NC to NO and vice versa, simply invert the float.

**Materials**
- Flange / Threaded body: Aluminium
- Tube: AISI 304
- Float: NBR, AISI 316 (on request)
- O-Ring: NBR
- Circlip: AISI 304
- Float contact: N.C. reed, N.O. (on request)

**Electrical data**
- Protection rating: IP65
- Max switching capacity: 50 W
- Max switching current: 0.5 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

**Temperature**
From -15 °C to +80 °C

**Weight**
LEU  0.415 kg

**Connections**
- Flange / Threaded body: Aluminium
- Tube: AISI 304
- Float: NBR, AISI 316 (on request)
- O-Ring: NBR
- Circlip: AISI 304
- Float contact: N.C. reed, N.O. (on request)

### Designation & Ordering code

<table>
<thead>
<tr>
<th>Series</th>
<th>LEU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube material</td>
<td>B AISI 304</td>
</tr>
<tr>
<td>Number of floats</td>
<td>2 Nr. 2 floats</td>
</tr>
<tr>
<td>Float material</td>
<td>B NBR</td>
</tr>
<tr>
<td>Electrical switch</td>
<td>1 N.C. (Normally Closed)</td>
</tr>
<tr>
<td>Seals</td>
<td>A NBR</td>
</tr>
<tr>
<td>Connections</td>
<td>F Nr. 3 holes flange</td>
</tr>
<tr>
<td>Electrical connection</td>
<td>S EN 175301-803 connector</td>
</tr>
</tbody>
</table>

**Configuration example:**

```
LEU  B 2  B 1 A F S P01
```

**Execution**
- P01 MP Filtri standard
- Pxx Customized
Cable clamp PG09, cable cross section 6÷8 mm
O-Ring seal
ON
30
20
3
\( \Phi 21 \)
500
450
Holes on the tank
M4 - #8 UNC Nr. 3 holes
\( \Phi 21 \)
LVK series

Electrical and visual oil level indicator
**Technical data**

**Electrical Oil Level Indicators**

LVK is a range of electrical and visual fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank side. The float moves through the indicator housing while the fluid level changes.

**Available features:**
- Several male threaded connections
- Three different sizes, to meet every size of tank
- Thermometer, thermostat or PT100, to check the temperature of the fluid

**Common applications:**
- Hydraulic systems
- Mobile machines
- Industrial equipment

**Electrical symbol:**
see page. 118

---

**Materials**
- Head: Polyamide
- Screws: Nickel plated brass (standard), AISI 314 (optional)
- Seal: NBR (standard), FPM (optional)
- Float: Polyamide
- Sensor thermometer: Screw + thermometer

**Temperature**
From -20 °C to + 80 °C

**Weight**
- LVK 10 0.140 kg
- LVK 20 0.170 kg
- LVK 30 0.250 kg

---

**Designation & Ordering code**

**COMPLETE ELECTRICAL AND VISUAL OIL LEVEL INDICATORS**

<table>
<thead>
<tr>
<th>Series</th>
<th>Configuration example:</th>
<th>LVK</th>
<th>20</th>
<th>A</th>
<th>M12</th>
<th>1</th>
<th>T</th>
<th>5</th>
<th>P01</th>
</tr>
</thead>
<tbody>
<tr>
<td>LVK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Length**

| 10 | 20 | 30 |

**Seals**

| A | NBR |

**Connections**

| M10 | Screws M10 | M12 | Screws M12 |

**Electrical switch in absence of fluid**

| 1 | N.O. (Normally Open) |
| 2 | N.C. (Normally Closed) |
| 3 | SPDT (single-pole, double throw) |

**Connection**

| M10 | M12 |

**Version**

| S | Standard |
| T | With thermostat |
| P | With PT100 sensor |

**Thermostat setting**

<table>
<thead>
<tr>
<th>S</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard (no setting)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>50°C N.O. (Normally Open)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>60°C N.O. (Normally Open)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>70°C N.O. (Normally Open)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>50°C N.C. (Normally Closed)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>60°C N.C. (Normally Closed)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>70°C N.C. (Normally Closed)</td>
<td></td>
</tr>
</tbody>
</table>

**Execution**

| P01 | MP Filtri standard |
| Pxx | Customized |
LVK Dimensions

**Table:**

<table>
<thead>
<tr>
<th>Size</th>
<th>H [mm]</th>
<th>I [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>108</td>
<td>76</td>
</tr>
<tr>
<td>20</td>
<td>159</td>
<td>127</td>
</tr>
<tr>
<td>30</td>
<td>286</td>
<td>254</td>
</tr>
</tbody>
</table>

**Connections:**

<table>
<thead>
<tr>
<th>D [mm]</th>
<th>ØR [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>M10</td>
<td>10.5</td>
</tr>
<tr>
<td>M12</td>
<td>12.5</td>
</tr>
</tbody>
</table>

**Without thermostat**

**With thermostat**

- O-Ring seal
- Float
- A/F 6
- Holes on the tank
- Ø12.5

Electrical Oil Level Indicator

117
Electrical symbols

N.O. (Normally Open)

N.C. (Normally Closed)

SPDT (single-pole, double-throw)

Thermostat

PT100

Level
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