LPG Sensors
For use at Petrol Stations

Sensors & Systems Worldwide:
www.fafnir.com
**VISY-Stick LPG**

VISY-X tank gauging system for LPG applications

Existing ATG systems may be integrated into the FAFNIR VISY-X system at any time.

**Function description**

The VISY-Stick LPG (Liquefied Petroleum Gas) level sensor supplies information about the fuel level in LPG tanks. The magnetostrictive sensor with buna float and pressure-resistant stainless-steel screw connection is specially designed for use in liquefied petroleum gas.

**Benefits of FAFNIR technology**

- Magnetostrictive sensor for use in liquefied petroleum gas
- Sensor material: stainless steel
- Continuous detection of product level and product temperature
- Direct installation or installation with installation kit

**Visy-Stick LPG**

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth connector</td>
<td>Stainless steel</td>
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<tr>
<td>Sensor head</td>
<td>Stainless steel and buna float</td>
</tr>
<tr>
<td>Compression fitting</td>
<td>¾&quot; NPT, stainless steel</td>
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<tr>
<td>Reducer</td>
<td>1½&quot; NPT</td>
</tr>
<tr>
<td>Sensor tube</td>
<td>Ø 12 x 1</td>
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<tr>
<td>Product float*</td>
<td>Ø 40 x 120</td>
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<tr>
<td>Circlip</td>
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</tbody>
</table>

*Also available: product float Ø 30 mm x 45 mm for 1" installation

**Approvals:**
- ATEX
- NEPSI
- IECEx
- UL-Brazil
Function description
The optional LPG installation kit comprises a jacketed pipe with flange and a buna float. After the LPG installation kit has been installed in the fuel tank, the tank content sensor is inserted into the jacketed pipe without a float and screwed into position. The sensor is located outside the pressurised zone of the tank.

Benefits of FAFNIR technology
- Possible to replace a sensor without draining the tank first
- Cost savings, easy to install, maintenance-free
LPG installation kit adjustable

Function description
The adjustable LPG installation kit comprises a jacketed pipe of variable installation length, which is secured in position by a compression fitting. With this installation kit, no prior knowledge of the exact installation dimensions is needed for the installation of the jacketed pipe. The length of the jacketed pipe can be shortened on-site. After the adjustable LPG installation kit has been installed in the fuel tank, the tank content sensor is inserted into the jacketed pipe without a float and screwed into position.

Benefits of FAFNIR technology
- Variable adjustment of installation length
- Possible to replace a sensor without draining the tank first
- Cost savings, easy to install, maintenance-free
**TORRIX LPG**

**Function description**
The TORRIX LPG level sensor for liquefied petroleum gas is designed to provide continuous gauging of fuel levels and is intended specifically for use in LPG tanks. The magnetostrictive sensor with buna float measures the filling level and forwards this information to a control unit, such as UM-X.

**Benefits of FAFNIR technology**
- Magnetostrictive sensor for use in liquefied petroleum gas
- Sensor material: stainless steel
- Continuous detection of product level
- Direct installation or installation with installation kit

**Approvals:** ATEX, IECEx
LS 300 LPG with LS 500 LPG
For use in tanks and process containers

Function description
Overfill prevention devices are designed to prevent the overfilling of tanks and process containers. This safety device is an indispensable component for environmental protection when handling water pollutants. An overfill prevention device comprises a level sensor installed inside the tank and a transducer with alarm system and output terminal.

The LS 500 LPG transducer has been developed for use in conjunction with an LS 300 LPG level sensor as an overfill prevention device for liquefied petroleum gas (LPG). Two output relays are actuated independently in the redundant design of the electronics. An alarm must be triggered as soon as either one of the relays opens. Enablement must be achieved independently by both relay contacts (visual signal). Due to the special designed circuitry of the output contacts*, the transducer LS 500 LPG can be used as overfill prevention for LPG tanks and meets the requirements of VdTÜV code of practice, overfill prevention 100 – part 2; 12.2000.

* see Fig. 2: Connection assignment

Approvals: ATEX for Zone 0

Benefits of FAFNIR technology
- Proven millions of times under the most rigorous conditions
- Two-conductor connection to the transducer independent of polarity
- Continuous self-monitoring of the sensors
**LS 300 LPG with LS 500 LPG**
Overfill prevention for Zone 0

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### LS 300 LPG

- **Compression fitting**: ¾” NPT
- **Probe length**: Ø 10 to Ø 16
- **Threshold point**
- **Protective sleeve against powerful vapour flow**

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### Connection assignment

- **Visual alarm** (optional)
- **Audible alarm**
- **Acknowledgement** (optional)
- **Operation** (optional)
- **Main switch**
- **Level sensor**
  - **Typ LS 300 LPG**
  - Intrinsically safe
- **Intrinsically safe Enablement**
- **230 V AC supply**
- **QE 200**

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**Benefits of FAFNIR technology**

- Compact, sturdy and corrosion-free design
- No on-site calibration required
- Absolutely maintenance-free
FAFNIR GmbH, based in Hamburg, Germany, has had over 45 years of experience in the development and production of filling safety devices, overfill prevention solutions, limit signal controllers and continuous level gauging solutions for all types of liquid.

The optimisation of process controls, improvements in cost efficiency and the protection of people and the environment are at the heart of our business. Our close relationship with our customers, based on mutual trust, is a key factor in the practice-oriented implementation of innovative ideas and the functionality of our products.