

**TURCK**

**levelprox -  
NON-INVASIVE  
LEVEL DETEC-  
TION IN METAL  
CONTAINERS**

Bitte senden Sie mir Unterlagen:

**Sensortechnik**

- Induktive Sensoren
- Induktive Sensoren für Schwenkantriebe
- uprox*® induktive Sensoren
- Kapazitive Sensoren
- Magnetfeldsensoren
- Opto-Sensoren
- Geräte für den Personenschutz
- Ultraschall-Sensoren
- levelprox* Füllstandssensoren
- Strömungswächter
- Druckwächter
- Temperaturwächter
- Linearweg-Sensoren
- Drehweg-Sensoren
- Steckverbinder
- CD-ROM Sensortechnik

**Interfacetechnik**

- Interfacetechnik im Aufbaugehäuse
  - Bauform *multimodul*
  - Bauform *multisafe*®
- Allgemeine Informationen
- Interfacetechnik auf 19"-Karte
  - Bauform *multicart*®
- Miniaturrelais, Industrirelais, Zeitwürfel, Sockel
- Zeit- und Überwachungsrelais
- Ex-Schutz - Grundlagen für die Praxis (Übersichtsposter)
- CD-ROM Interfacetechnik

**Feldbustechnik**

- busstop*®-Feldbuskomponenten
- Bussystem *sensoplex*®2
- Bussystem *sensoplex*®2Ex
- Bussystem *sensoplex*®MC
- Bussystem AS-Interface®
- Bussystem DeviceNet™
- Ethernet Netzwerkkomponenten
- BL20 I/O-Busklemmensystem
- Bussystem FOUNDATION™ fieldbus
- Bussystem PROFIBUS-DP
- Bussystem PROFIBUS-PA
- Bussystem *piconet*®
- Bussystem *excom*®
- .....

Please send me more information:

**Sensors**

- inductive sensors
- inductive sensors for rotary actuators
- uprox*® inductive sensors
- capacitive sensors
- magnetic-field sensors
- photoelectric sensors
- machine safety equipment
- ultrasonic sensors
- levelprox* level sensors
- flow controls
- pressure controls
- temperature controls
- linear position sensors
- rotary position sensors
- connectors
- CD-ROM Sensors

**Interface technology**

- devices in modular housings
  - *multimodul* style
  - *multisafe*® style
- general information
- devices on 19" card
  - *multicart*® style
- miniature relays, industrial relays, time cubes, sockets
- programmable relays and timers
- explosion protection - basics for practical application (overview poster)
- CD-ROM Interface technology

**Fieldbus technology**

- busstop*® fieldbus components
- bus system *sensoplex*®2
- bus system *sensoplex*®2Ex
- bus system *sensoplex*®MC
- bus system AS-Interface®
- bus system DeviceNet™
- Ethernet network components
- BL20 I/O bus terminal system
- bus system FOUNDATION™ fieldbus
- bus system PROFIBUS-DP
- bus system PROFIBUS-PA
- bus system *piconet*®
- bus system *excom*®
- .....

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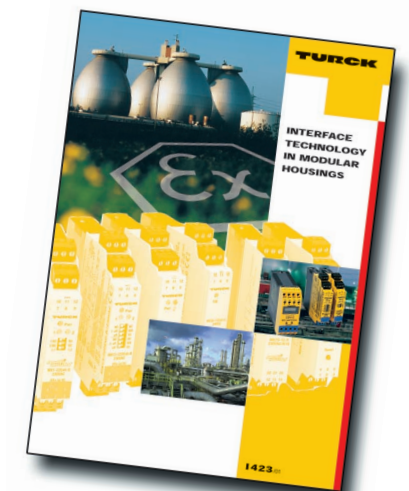
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# levelprox - NON-INVASIVE LEVEL DETECTION IN METAL CONTAINERS

## The function principle of levelprox

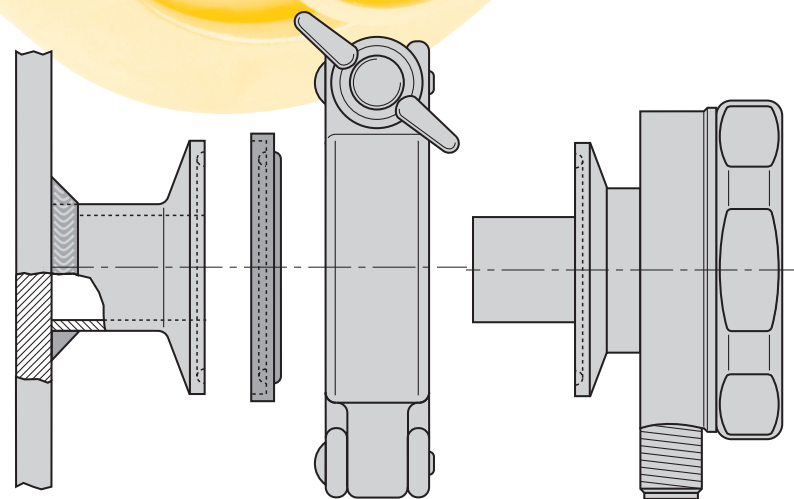
levelprox sensors generate a high frequency ultrasonic pulse which is coupled to the container wall from the outside using a coupling gel. This pulse propagates within the wall and is multiply reflected. Depending on the duration of the reflection, the sensor is able to distinguish whether gas or liquid interfaces the wall and sets its output accordingly. The sensor adjusts automatically to the mounting conditions at the touch of the button and learns to differentiate between an empty and a filled container.

The silicone gel OKS110 is used as a coupling medium. The gel easily attaches to the container wall, retains its elasticity even during high temperatures and is non-toxic.

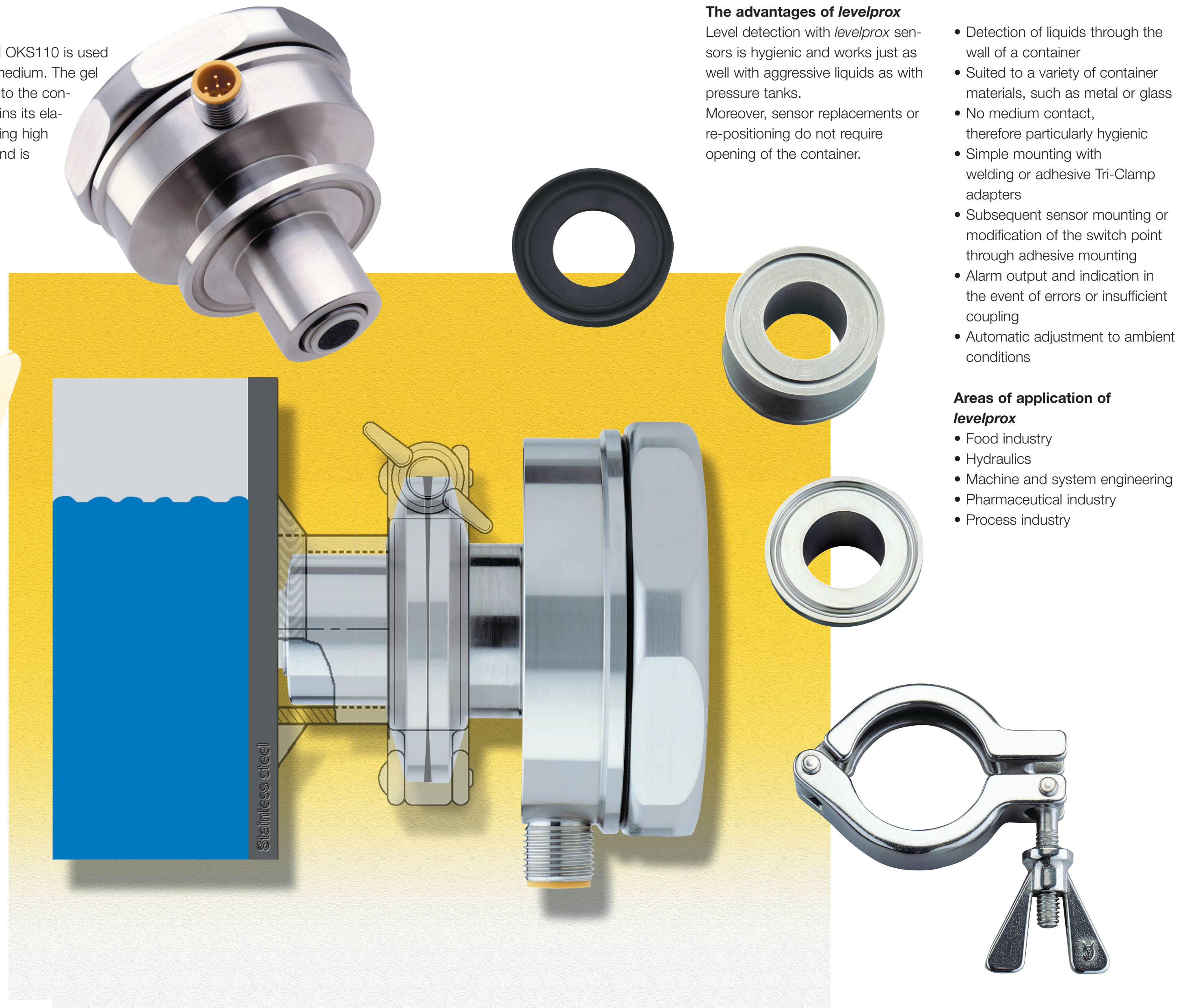
## levelprox for the food industry

The LP-T50-UP6x3-H1151 was developed to match the specific needs of the food industry. The sensor is mounted with a Tri-clamp connection widely used in this sector. A clamping adapter is either welded or bonded to the container wall. Then the sensor is plugged into the clamping adapter, sealed and finally fixed in position using a clamping collar.

The standard mounting accessories come as a mounting kit. The sonic transducer head is elastically supported by springs to ensure optimum pressure force.



Welding mounting kit LP-MS-T50-S



## The advantages of levelprox

Level detection with levelprox sensors is hygienic and works just as well with aggressive liquids as with pressure tanks. Moreover, sensor replacements or re-positioning do not require opening of the container.

- Detection of liquids through the wall of a container
- Suited to a variety of container materials, such as metal or glass
- No medium contact, therefore particularly hygienic
- Simple mounting with welding or adhesive Tri-Clamp adapters
- Subsequent sensor mounting or modification of the switch point through adhesive mounting
- Alarm output and indication in the event of errors or insufficient coupling
- Automatic adjustment to ambient conditions

## Areas of application of levelprox

- Food industry
- Hydraulics
- Machine and system engineering
- Pharmaceutical industry
- Process industry