

Level measurement

Solutions for individual applications

Overview of product range

Measuring fill level with elobau

over

40

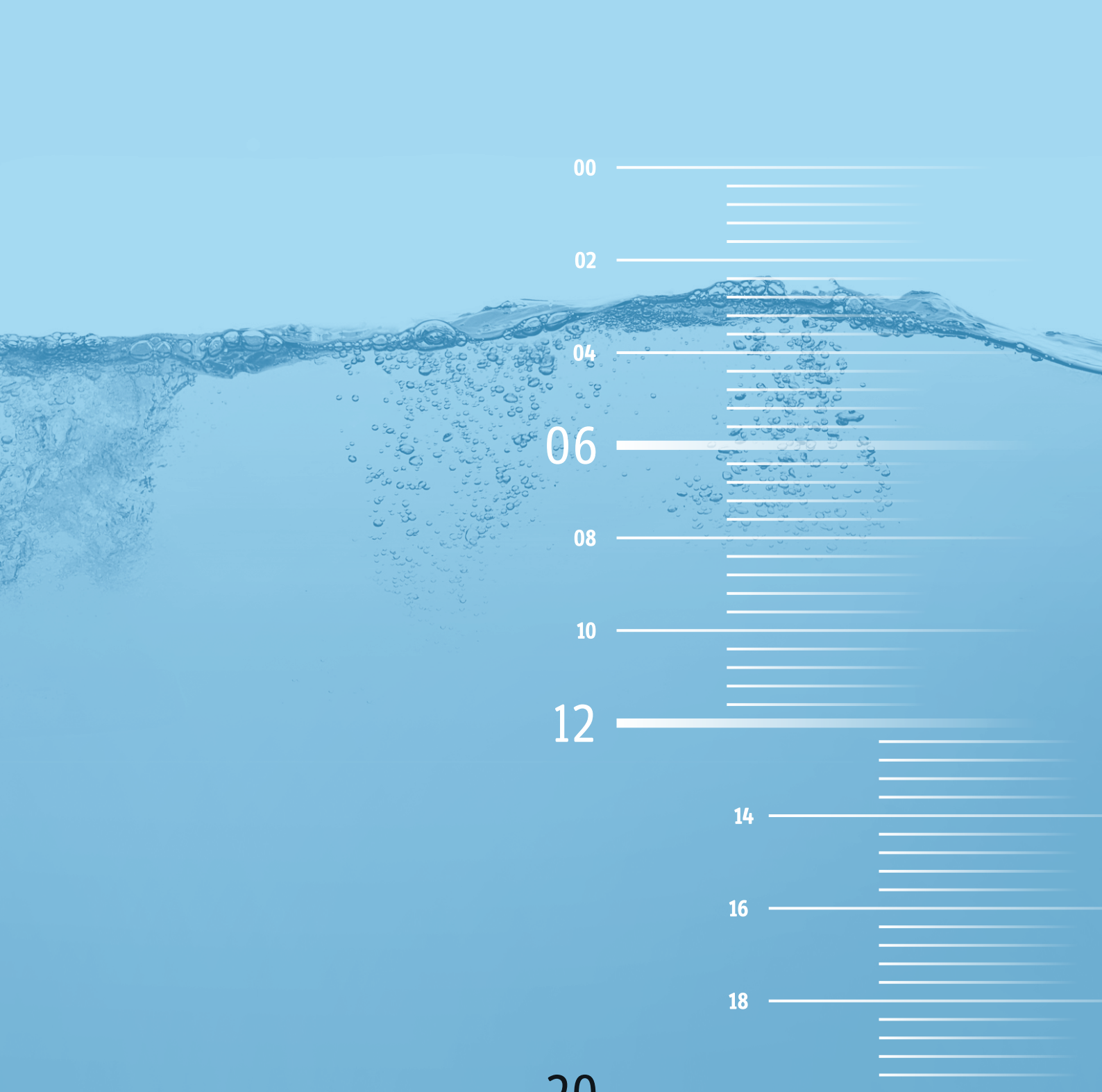
years

Your global partner

For over 40 years, elobau has been developing pioneering sensor products for the international market. Through the use of various technologies, combined with strict quality standards, our products are designed to function reliably, even under the most demanding operating conditions.

Solutions for individual applications

elobau works closely with its customers to create their unique product requirements. With all our development and production taking place in house, we can design and produce individual customised solutions quickly and efficiently.



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Overview of product range

elobau products are designed to fit your needs. Our modular system offers a wide range of standard products that can be quickly and cost-effectively customised to create the ideal solution for you.

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Solutions for individual applications

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Overview of product range

Basic technologies for level measurement

Proven technologies for the field of level measurement

To find the right solution for your level measurement application, we can choose from a wide range of reliable products and technologies.

Our products are based on reed, capacitive and ultrasonic measurement technologies.

Reed

- Measuring length up to 6 m with stainless steel housing
- Measurement resolution up to 5 mm
- Working temperature range up to 120 °C with plastic housing
- Working temperature range up to 180 °C with stainless steel housing
- Up to 4 programmable switching points
- Integrated temperature sensor available
- Wide range of available materials (stainless steel, PVC, PA, PP, PVDF)
- Configuration with programmable switching points or analogue output signal



Capacitive

- Measuring length up to 2.5 m
- Measurement resolution up to 1 mm
- Calibration of the fill level by the user
- Suitable for electrically conductive and non-conductive media
- Integrated temperature sensor available



Ultrasonic

- Measuring length up to 1.8 m
- Measurement resolution up to 1 mm
- Working temperature range from -40 to +105 °C
- Wear-free and reliable measurement of fluids and solids
- Pre-programmed, analogue output signal

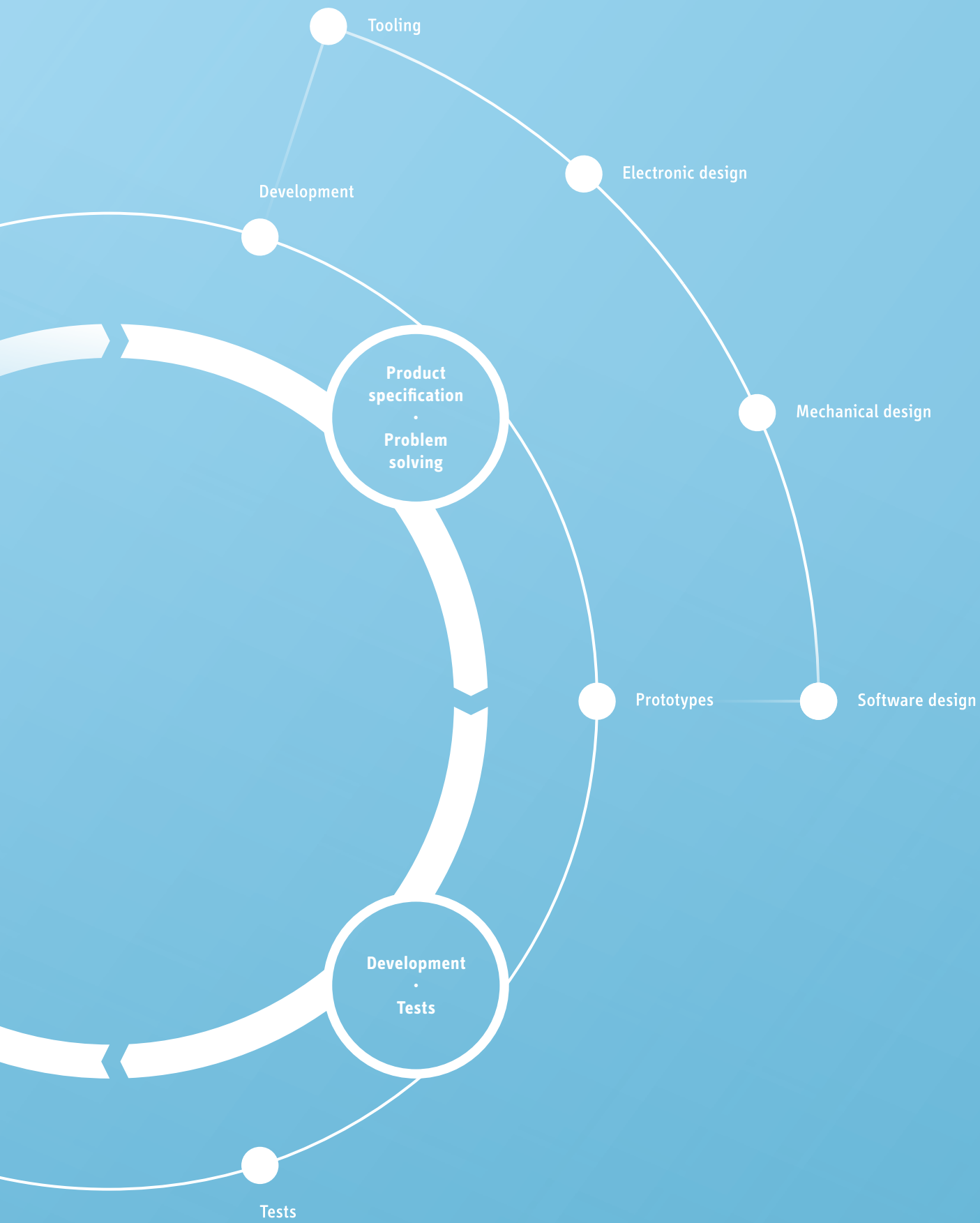


Solutions for individual applications

The development of a customised product always takes place in close partnership with our customer. From the initial concept to the product design, we work with you to develop the right solution for your application.

All design, testing and production is carried out in-house, allowing us to quickly and cost-effectively create your customised solution.





Customer-specific solutions

elobau products are designed to fit your needs

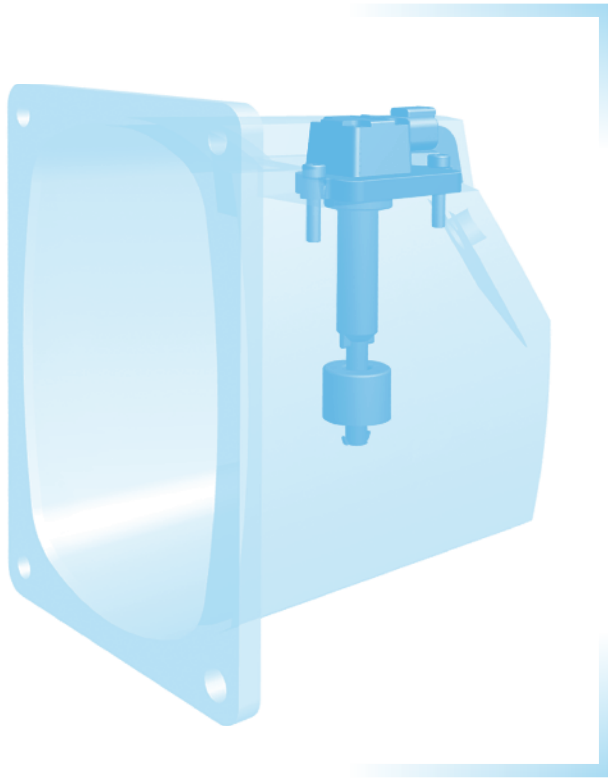
elobau has developed and manufactured thousands of customised solutions for customers over 40 years. Our customers include manufacturers from medicine, dental, semiconductor, printing, food and packaging, automotive and consumer product industries.

elobau has specialised in the use of contactless sensor technology. Through the use of various technologies, our products are extremely versatile. Our experienced development team are able to take new approaches and develop new solutions to fit your unique requirements. Two examples of which are on the right hand side.

The upper model shows a sensor that was developed for monitoring gear box oil in generators and off highway vehicles. Due to limited installation space, our customer required the smallest-possible installation height in addition to a very narrow flange. At the same time, the sensor needed a robust construction for extensive internal testing, and to deliver a long service life.

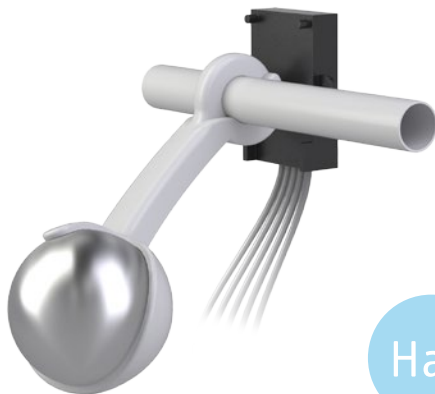
The lower model shows a sensor that was developed for industrial inkjet printers. The challenge here was to achieve an exact analogue measurement without an additional opening for the sensor in the container. The solution was the combination of a Hall element located outside of the tank with a float-magnet system in the tank.



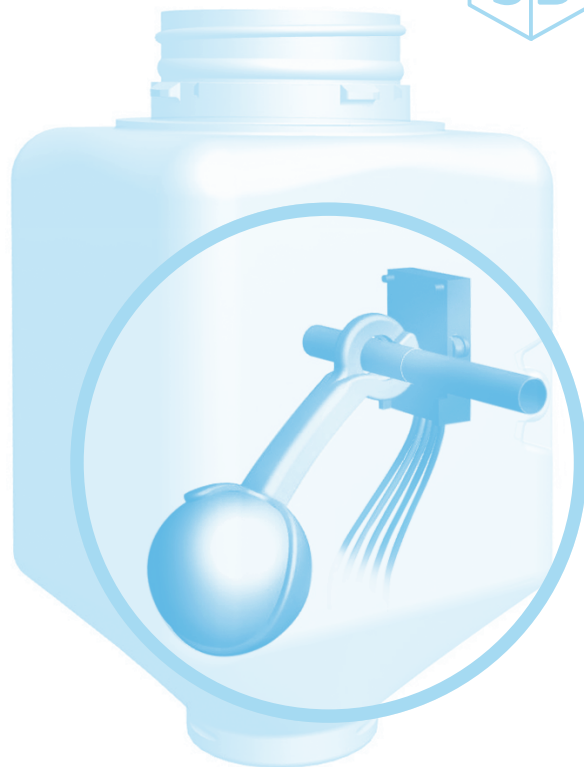


The elobau solution. A robustly constructed fluid level sensor that was specially designed for tight installation spaces.

The elobau solution. A Hall module outside of the tank in combination with a float-magnet system located in the tank.



Hall



Customised solutions from the standard product line

elobau's customised solutions from standard products

Flexibility is the key to elobau's success. For us, flexibility means that we can adapt existing products to fit your needs. A customised solution is created without a complex development process.

Typical modifications include special processing and sealing, materials for high-temperature sensors and various connectors being available. The size of the fluid level sensor can also be adapted up to a length of 6m.

elobau's customised solutions offer the following advantages:

- various materials available **(1)**
- mix of materials possible
- various threads available **(2)**
- various flanges available
- up to 20 switching points or analogue output signal
- up to 250 V, 3 A and 100 W
- up to 33 bar
- temperature range from -40 to +180 °C
- wide variety of connector types, e.g., M8, M12, AMP, Deutsch **(3)**
- low installation height enables reliable leakage monitoring
- connection boxes for self-wiring
- up to IP69K



(1) Available materials



- PVC
- PP
- PA
- PVDF
- PPS
- NBR
- stainless steel
- aluminium
- brass

(2) Mechanical connection

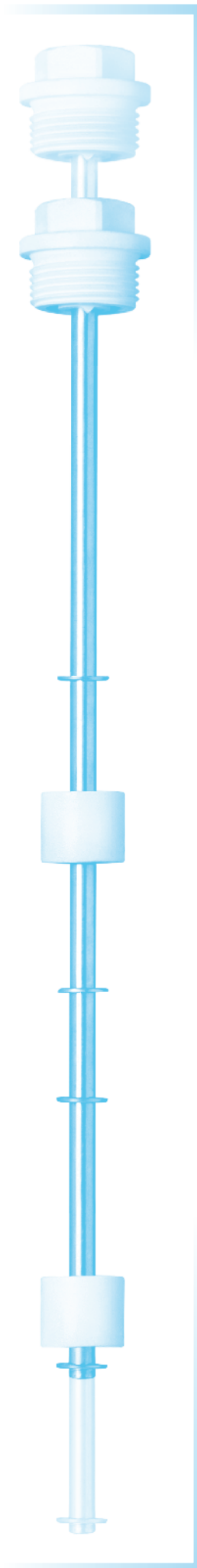


- metric thread
- NPT thread
- whitworth thread
- flange
- customised

(3) Electrical connections



- cable
- connector
- connection box
- connection cable

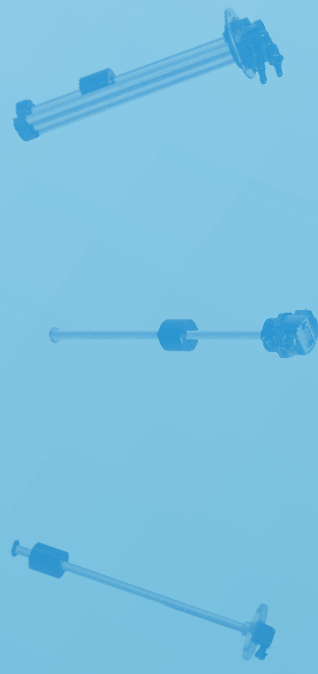
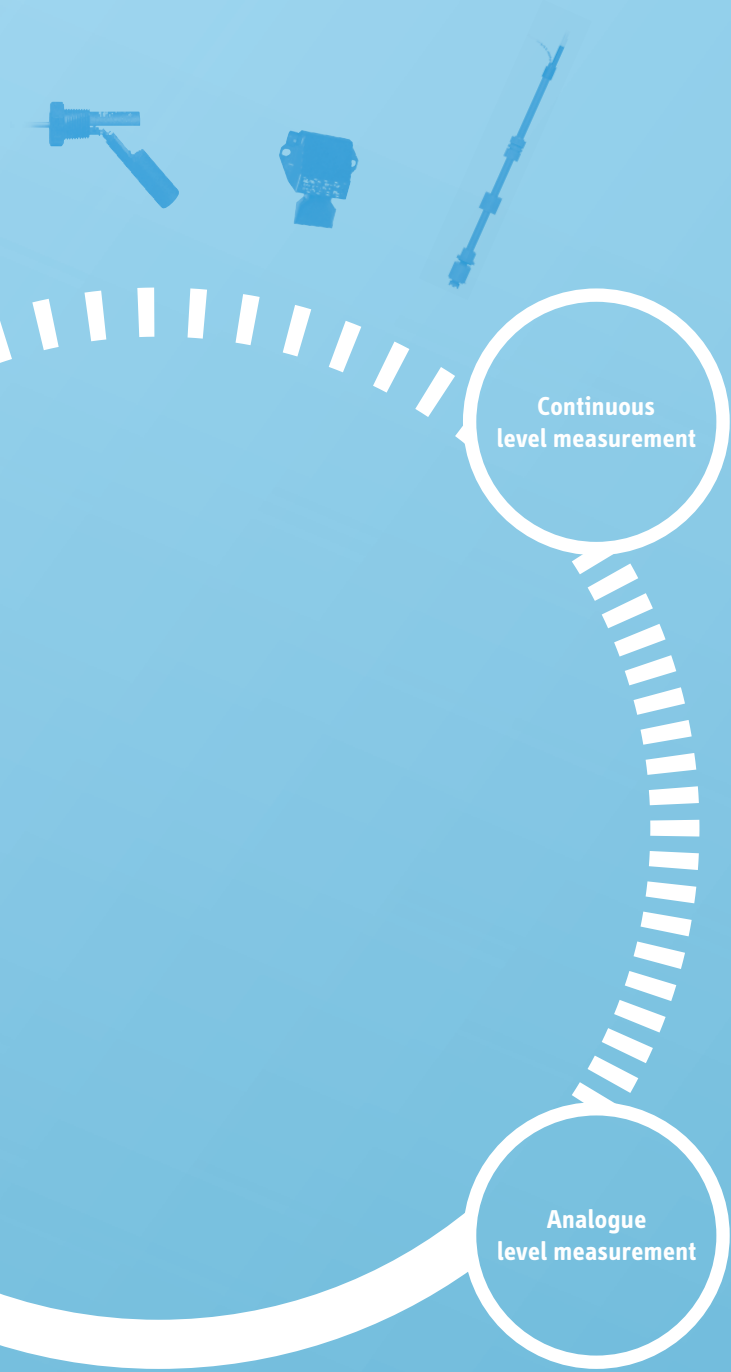


Overview of product range

In addition to customised solutions, elobau also offers a wide range of configurable standard products. Our standard products range from simple float switches to precise ultrasonic level sensors. Our standard products offer an extremely cost-effective and quick solution.



Single point level measurement

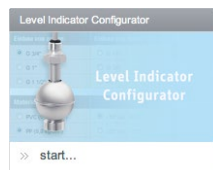


Standard products for every application

elobau's effective, reliable and cost-effective solutions

Are you looking for a particularly cost-effective solution for your level measurement requirements? The elobau product range offers a broad selection of standard products that can be used in various applications.

Our online configurators give you a simple and fast selection from a wide range of individual components. You can find the right product in just a few clicks.



Level detection

Limit-level float switches offer a cost-effective solution for overflow protection or for dry-running protection of pumps. The design, material, housing, switching points and connectors can be individually selected.



Continuous level measurement

Continuous fluid level sensors provide a constant signal over the entire measurement range that corresponds exactly to the fill level. This signal can be generated through the use of reed, capacitive or ultrasonic technologies.



Removal and dosing with integrated level measurement

elobau has fuel level sensors and suction pipes for measuring the fill level, and simultaneously filling and removing. These unique solutions have the advantage that only one tank opening is necessary.



Ultrasonic level measurement

Reliable measurements to the bottom of the tank

The ultrasonic fuel level sensor was developed especially for use in diesel and biodiesel. Its application range however, includes many other fluids. Thanks to its wear-free transmitter-receiver principle, the ultrasonic fuel level sensor has a particularly long service life. In addition, it can be used in harsh environmental conditions thanks to its IP67 protection class. With measurement lengths of up to 1.8 m, the ultrasonic fuel level sensor is also suitable for use in large tanks. The installation position may be sloped up to 10°.

features of elobau's ultrasonic level measurement include:

- space-saving design
- no moving parts
- high reliability and especially long service life thanks to contactless ultrasonic technology
- analogue current or voltage output signal
- operating temperature range from -40 to +105 °C
- precise measurement of the fill level
- available with or without focus tube



IP 67



10°

Programmable level measurement

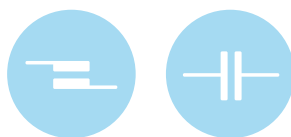
Temperature and fill level indicator combined in one display

elobau's all-round fluid level sensor offers a built-in LCD display, including a button for programming. This allows the user to configure up to three discrete switching points with temperature output or four discrete switching points and one analogue signal with 4 to 20 mA for continuous measurement.

Through the use of a riser made of stainless steel, the sensor can be used in nearly all types of fluids. For use in less-aggressive media, the riser made of plastic is an economical solution.

features of elobau's programmable level measurement include:

- various materials available (1)
- digital and analogue output signals (2)
- individually selected switching points via the analogue output signal with a resolution from 5 to 35 mm
- NPT or Whitworth thread (3)
- various cables and connectors available
- designed for use in a wide range of fluids (4)
- optionally with rotatable head
- 2" internal thread available





(1) Available materials



- PVC
- PP
- PA
- PVDF
- stainless steel

(2) Electrical connections



- cable
- connector
- connection box
- connection cable

(3) Output signals



- analogue
- digital
- analogue + digital

(4) Can be used in aggressive media



- oil
- diesel
- water
- chemicals
- cleaning agent



elobau sensortechnology

The company

As an expanding, globally active, medium-sized family business with more than 700 employees, we develop and manufacture sensor technology and operating systems for the machine construction and off-highway vehicle sectors. Our high-quality products are characterised by a high vertical range of manufacture and are manufactured in a carbon-neutral manner in Germany. With our innovative, contactless sensor products, we support our customers worldwide in constructing machines and vehicles that set standards in terms of performance, operating comfort, safety and quality.

Your global partner.

Select your sales contact at:
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