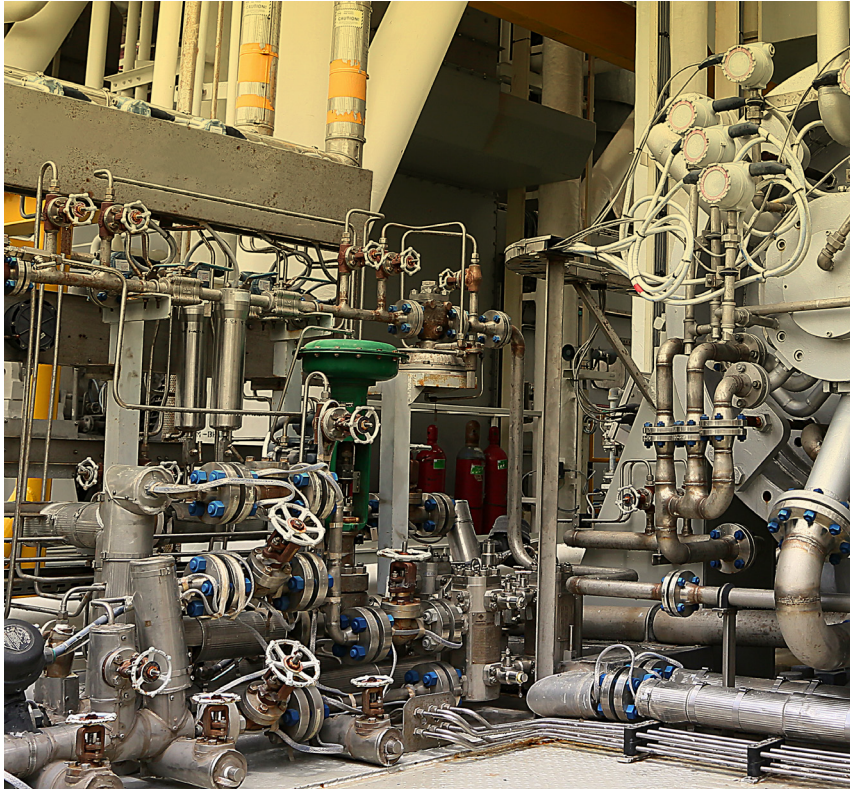


Dinel[®]

process control

Issue 3/2025



30 YEARS OF DINEL

This year, we are celebrating 30 years since our company was founded – three decades of honest work, innovation, and joint efforts. We would like to thank all our employees, customers, and partners who are part of our story. This anniversary is not only an opportunity for us to celebrate, but also motivation for the future. May this anniversary be the beginning of a new era of growth, cooperation, and innovation. We look forward to working with you in the future.



NEW ARLM-54



WHAT CAN YOU FIND IN THIS NEWS

**HIGH-FREQUENCY
LEVEL SENSOR**
RFLS-35 now with IO-Link

OIL QUALITY SENSOR
New QOS-35

**HIGH-FREQUENCY
LEVEL SENSOR**
New RFLS-24

**ANTENNA RADAR
LEVEL METER**
New ARLM-70 „Amanda“

RADAR LEVEL METER
GRLM-70 „Miranda“
ULTRA sensitivity mode

**ANTENNA RADAR
LEVEL METER**
New ARLM-54

OUR NEWS...

RFLS-35 NOW WITH IO-LINK

The RFLS-35 level sensor is a cutting-edge solution for reliable and accurate limit measurement of liquids, slurries, and pasty media. Thanks to the high-frequency FMCW (frequency-modulated continuous wave) principle with a measuring frequency of 25 GHz, it can effectively eliminate the influence of deposits, adhering layers, and foam on the electrode. This makes it ideal for use in demanding applications where conventional vibrating or capacitive sensors fail. In addition, the "Medium Window" function allows specific media to be distinguished from others, increasing the selectivity and reliability of detection.

The RFLS-35 is now also available with an IO-Link communication interface, which significantly expands the possibilities for integrating the sensor into modern control systems. IO-Link is an internationally standardized point-to-point interface that enables both cyclic and acyclic data transfer. In addition to the current value, the sensor also provides configuration parameters and diagnostic data, which facilitates predictive maintenance and reduces downtime. Thanks to simple three-wire cabling up to 20 m in length, installation is easy and economical, while the "automatic parameterization" function allows immediate sensor replacement without the need for manual adjustment.



UPDATE

RFLS-35

The operating parameters of the RFLS-35 remain fully preserved even in the IO-Link version – operating temperature range from -40 to +105 °C, IP67/68 protection, and suitability for use in potentially explosive atmospheres. A wide range of PEEK or PTFE electrodes and sealing O-rings (NBR, EPDM, Viton) are available, allowing the sensor to be used even in chemically aggressive media. With regard to safety, the RFLS-35 meets SIL2 requirements and is therefore also suitable for applications where a high level of safety function integrity is required.

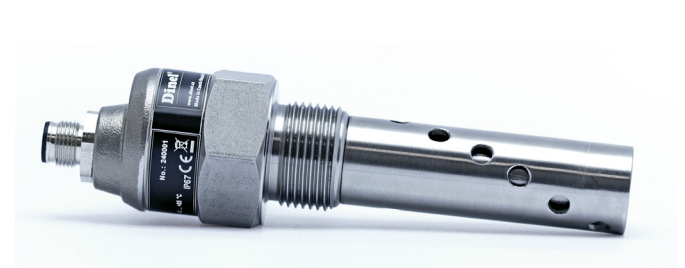


OIL QUALITY SENSOR QOS-35

The QOS-35 is a compact, precision sensor designed to continuously analyze and monitor oil quality in various operating equipment such as engines, transmissions, hydraulic systems or electrical transformers. This sensor operates on the principle of measuring the dielectric constant, which picks up various types of oil degradation, contamination and wear, including the presence of water, acids, fuel, carbon particles and other impurities that can negatively affect performance.

The QOS-35 is versatile for both mineral and synthetic oils and is designed to detect even minor changes in contamination with two sensitivity ranges. Easy initial calibration is performed using a magnetic pen, where the entire sensing section is immersed in a clean oil reference sample, ensuring the sensor is optimally adjusted for specific conditions. Once installed in a horizontal position to ensure the sensing section is flooded with oil, the QOS-35 is ready to monitor and report oil wear status with high accuracy and reliability. Temperature

compensation ensures measurement stability, even under variable operating conditions. The magnetic pen allows easy adjustment of the desired sensitivity to specific requirements. Connection via an analog voltage output facilitates integration of the QOS-35 into existing monitoring systems, bringing quick installation and effective control of oil condition. With this monitoring, unnecessary failures can be avoided and the need for service maintenance eliminated, increasing equipment reliability of the equipment and reducing operating costs.



NEW

QOS-35

HIGH-FREQUENCY LEVEL SENSOR RFLS-24

The RFLS-24 High-frequency Level Sensor is a specialized sensor for limit sensing in liquid and paste media. The sensor is designed to operate in more demanding industrial applications due to its sealed design, where it can be a direct replacement for vibrating or capacitive level sensors. The RFLS-24 can be used with media that are both electrically conductive and non-conductive, regardless of their permittivity. This sensor is suitable for mounting in various types of tanks (such as metal or plastic containers, filling tanks, sumps, or other industrial containers) or in a pipe.

The RFLS-24 provides the user with easy setup using a magnetic pen or programming wire. The instrument has a universal design that allows it to detect all types of liquids, both conductive and non-conductive, without problems. Due to its high stability and sensitivity, it can also be used for low permittivity media ($\epsilon_r \geq 1.5$), expanding its applications across a variety of industries.



NEW

RFLS-24

ANTENNA RADAR LEVEL METER ARLM-70 "AMANDA"

Introducing the new ARLM-70 Antenna Radar Level Meter with a range of 8 m or 20 m. It operates on the FMCW (Frequency Modulated Continuous Wave) principle with a frequency of 25 GHz (K-band), which allows accurate and reliable measurement of liquid and pasty media. Its antenna is equipped with a compact plastic housing that effectively protects against the ingress and deposition of dirt, vapours and other media, which not only prolongs the life of the equipment but also reduces the risk of malfunctions. Compared to competing products, it stands out thanks to its innovative low-power electronics with adaptive transmit power control and the elimination of any number of obstructions.

It offers simple electrical connection via a two-wire 4 - 20 mA current loop and a high level of user comfort with the option of manual adjustment via push buttons or remote adjustment via HART® communication. Like other products in the X-70 series, it allows users the unique option of selecting the type of display. For outdoor environments with sunlight, an LCD display is the preferred choice, while an OLED option is preferable for areas with low light.



ARLM-70-08



ARLM-70-20



NEW

ARLM-70

RADAR LEVEL METER GRLM-70 "MIRANDA" ULTRA SENSITIVITY MODE

Radar level meters are the ideal solution for continuous level measurement of liquids, bulk materials, slurries and pasty materials. Thanks to their sensing principle, they provide accurate and stable results even under demanding operating conditions.

ULTRA SENSITIVITY MODE for difficult to measure media

For some media, the reflection of the measurement signal from the surface is so small that it cannot be reliably evaluated. In such cases, a special method is used that works with the so-called "fly-through" of the measurement signal through the medium and its reflection from the end of the electrode.



UPDATE

GRLM-70

ANTENNA RADAR LEVEL METER ARLM-54

The ARLM-54 Antenna Radar Level Meter is an addition to the ARLM model series. This non-contact level meter also operates on the same FMCW (frequency modulated continuous wave) principle as the 25 GHz (K-band) ARLM-70 "Amanda" and is available in 8 m and 20 m range versions, allowing accurate measurements of liquid and pasty media. It is equipped with a compact plastic housing that reliably protects the antenna from dust, vapors and other contaminants, thus extending the life of the device and minimizing the possibility of malfunction.

The ARLM-54 level meter features low-power electronics with adaptive transmit power control to ensure efficient operation even in the presence of obstacles. The electrical connection is made via a two-wire 4 ... 20 mA current loop, with communication via the HART® protocol.



NEW

ARLM-54

WHERE YOU CAN FIND US IN 2025/2026

7 - 10 October 2025

MSV 2025

66th International Engineering Fair
Brno, Czech Republic

25 - 27 November 2025

SPS 2025

Smart production solutions
Nuremberg, Germany

17 - 19 March 2026

AMPER 2025

**International Trade Fair for Electrical
Engineering, Electronics and Energy**
Brno, Czech Republic

DE

CZ

CZ

Dinel, s.r.o.

U Tescomy 249, 760 01 Zlín | Czech Republic
Phone: +420 577 002 003 | email: sale@dinel.cz

www.dinel.cz

