



LEADING IN SENSORS

metallux.de

"THE BE-ALL AND END-ALL FOR
US IS THE PERFECT SOLUTION
FOR OUR CUSTOMER. WE FACE UP
TO THIS CHALLENGE EVERY DAY.
TRUST US – TRUST THE X."



METALLUX AG OFFERS INSPIRING TECHNOLOGIES

Welcome to METALLUX AG, a technological leader in linear and rotary sensors, resistors, pressure sensors and industrial joysticks in thick-film technology. For more than three decades, we have been dedicated to the needs of our customers from around the entire world. The METALLUX guiding principle defines our actions: a fair partnership for a long-term business connection, combined with personalised and individual consultation for every business partner.

Our high-quality products and innovative system solutions are held in high regard in the automotive field, medical technology, industry, wind and solar energy and many other fields. This is due in no small part to our consistent alignment of all developments with the needs of our customers.

The Metallux team looks forward to collaborating with you in developing a customised solution for your needs.

Best regards



 **ANDREAS OBERASCHER**
Chairman of the board / CEO

METALLUX stands for innovative sensors, resistors and professional joysticks – characterised by expertise, creativity and customer focus.

Find out more at
www.metallux.de

THE SIGN FOR MAXIMUM ADVANTAGES: X



The big "X" in our name stands for cutting-edge technology of the highest quality:

- Standard products in small batch series and mass production, proven x times over
- Precisely planned customer solutions
- Excellent consultation
- Maximum flexibility
- Exclusive, prime quality – Made in Germany
- Precisely documented quality management and process integration acc. to certification ISO 9001:2015

METALLUX customers have high expectations, and the highly trained team from METALLUX lives for a challenge. In order to ensure that this results in premium solutions, we develop and challenge our employees in their creativity, their quality awareness and their personal responsibility. The great number of patents confirms our philosophy: value creation through appreciation – our most valuable resources are our human resources.

As a medium-sized company with international orientation, METALLUX can provide all of the prerequisites and structures for successful innovations and applications:

- a state-of-the-art development department
- professional product engineering
- in-house production on high-tech machines
- compliance with the highest quality standards

In short, we offer our customers maximum planning, production reliability, and long-term location viability. All of this, of course, while protecting resources and the environment.

That's why you should rely on the X

BORDER-CROSSERS, CREATIVE MINDS AND FUTURE-SHAPERS

The first and most important step in any project? Understanding our customer's challenge. Then we find their solution. That's a promise! Our employees are not just interested, but highly motivated to take part in the success of our customers.


Technology and emotions go well together. That's why, in addition to good products, we want to leave you with the good feeling of having been understood and expertly technically advised – so that your vision combines with our expertise to create impressive solutions.

Our portfolio grows year by year. Highly modern production processes, such as thick-film technology, enable the manufacturing of a wide variety of products on many different substrates:

Whether standard products or individual solutions – at METALLUX there is a team at your side that passes on to the customer products with the utmost standards of quality and reliability. Always in focus are perfected technological concepts based on reliable expertise leading to innovative as well as creative solutions.

The numerous applications as well as the many years of experience have made METALLUX what it is today: successful and committed to the customer.



 METALLUX Teamwork: Well-attuned teams are a guarantee for brilliant solutions.

METALLUX SPECIALISTS PROVIDE SUPPORT FOR

Pressure sensors

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pressure_sensors@metallux.de

Joysticks

Tel. +49 (0) 07195/59 80-222

joysticks@metallux.de

Foil sensors (MMP), potentiometers and conductive-plastic elements

Tel. +49 (0) 7195/59 80-224

sensors@metallux.de

High-voltage and power resistors

Tel. +49 (0) 351/403 34 34

resistors@metallux.de

Export

Tel. +49 (0) 7195/59 80-232

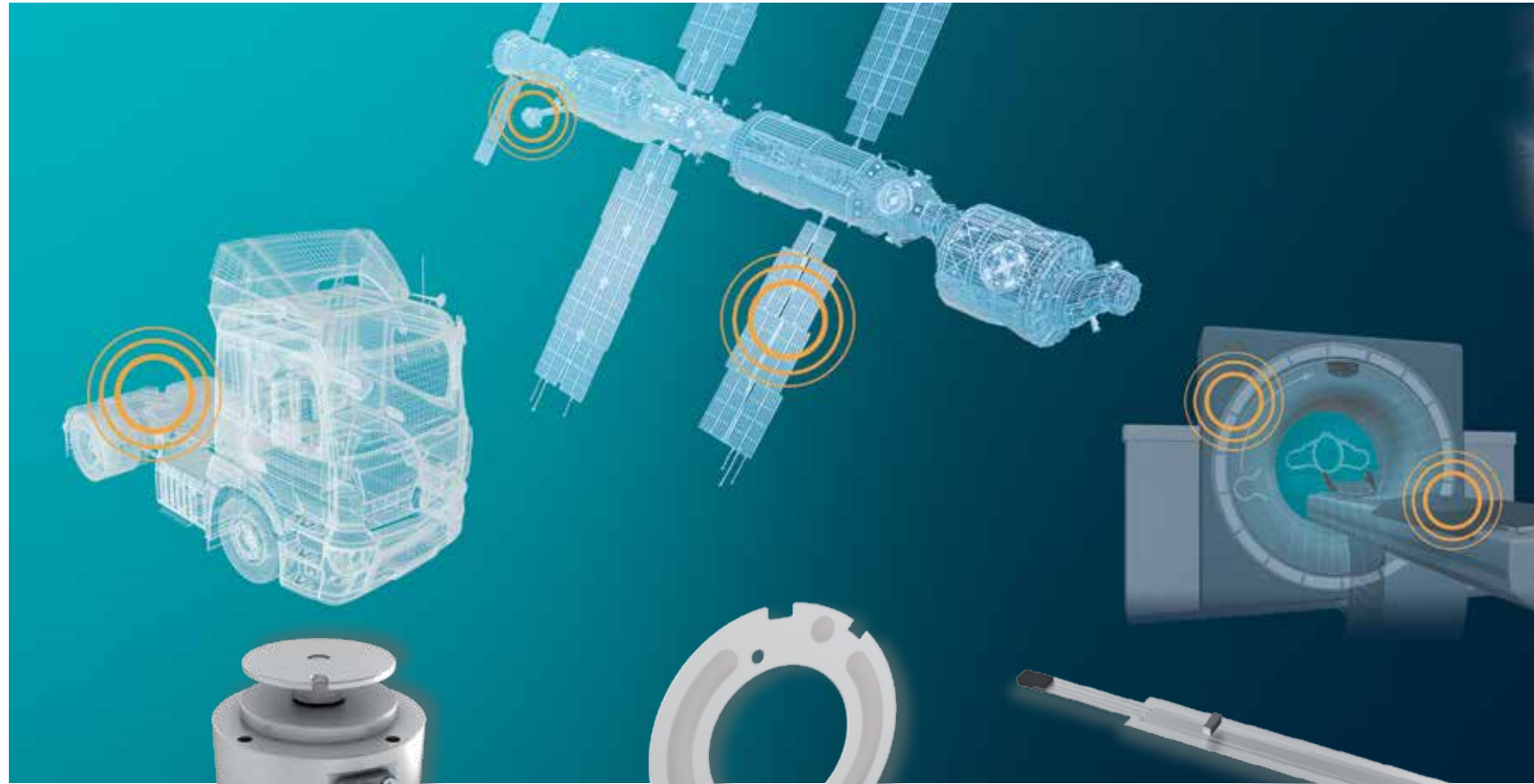
export@metallux.de

OUR PRODUCT PORTFOLIO



Whether basic product or customised development – at METALLUX you get the full range of innovative and precise products and services. Each product line guarantees the utmost in quality and reliability.

Don't see the product you want?
Let us know; our specialists may already be developing it.



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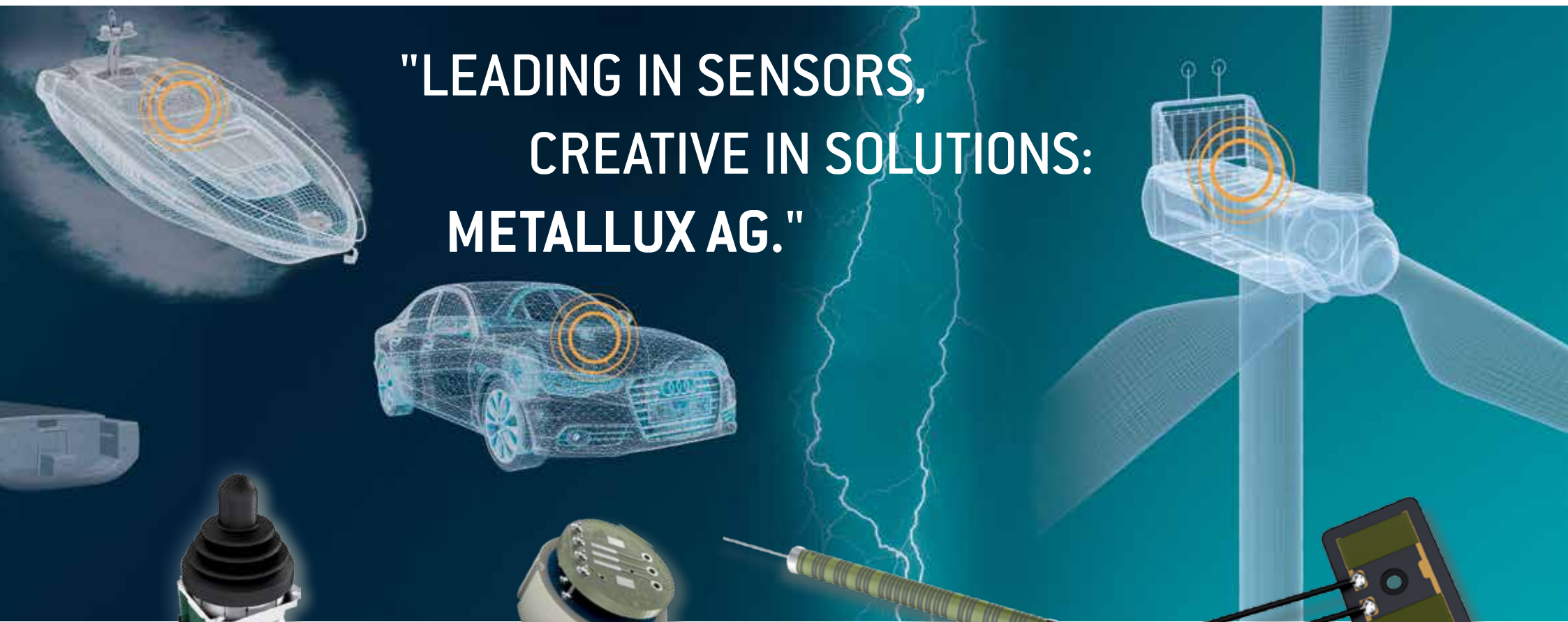
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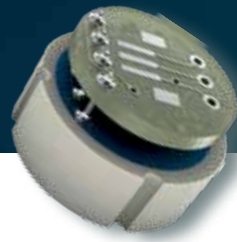
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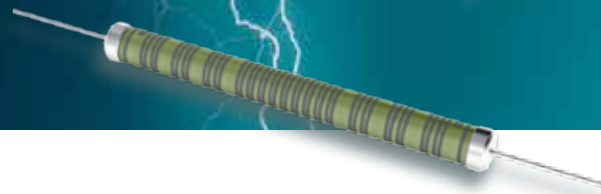
"LEADING IN SENSORS, CREATIVE IN SOLUTIONS: METALLUX AG."



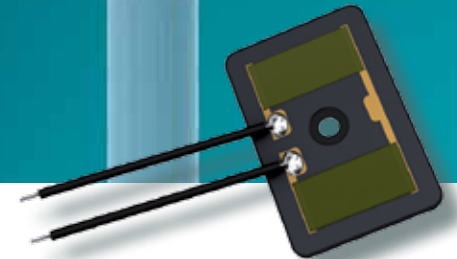
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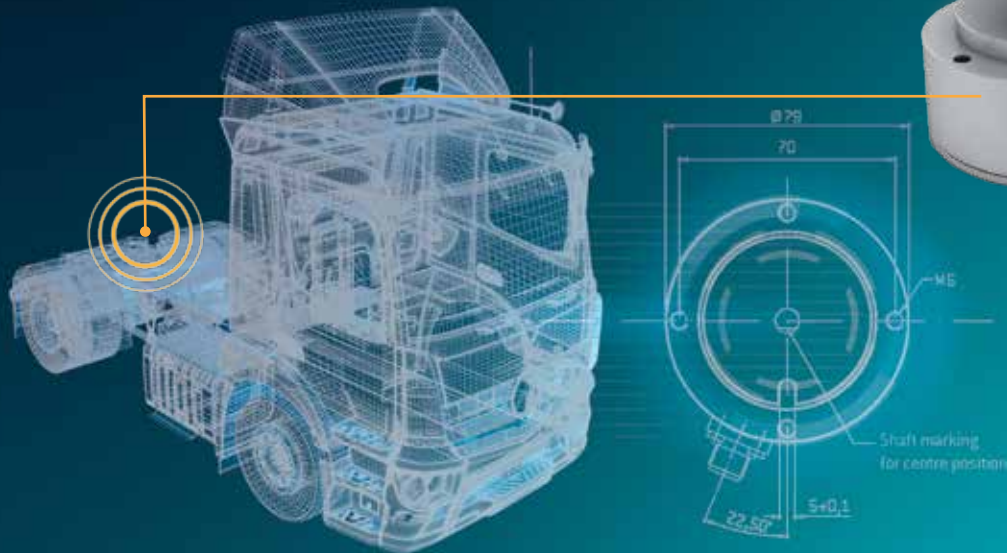
POTENTIOMETERS

Precision potentiometers – we do it precisely.

Whether for standard requirements or as customised special solutions – METALLUX potentiometers are characterised by extremely high precision. Axles with slide or ball bearings provide for exceptionally long service life. The friction-reduced slider/layer system is protected by precision housings made from aluminum, stainless steel or plastic.

The sensors are electrically integrated by means of cables, for fixed wiring, or a wide variety of connectors/pins, depending on the usage conditions and the customer's needs.

Especially for applications in constantly vibrating environments, METALLUX offers potentiometers with Hall-effect sensors. These operate "shaftlessly," with zero contact or wear.



Product advantages at a glance:

- Robust encasing
- Low-wear technology
- Simple assembly/integration
- Shock and vibration resistance
- Adapted axle shapes and lengths
- Reliable METALLUX technology
- Minimal deviation from the characteristic curve (e.g. 0.05 %)

LINEAR AND ROTARY SENSORS

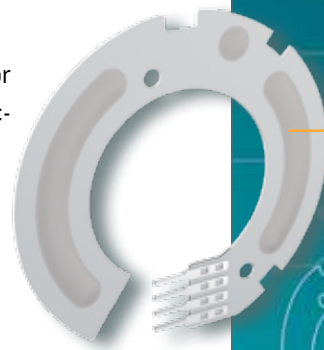
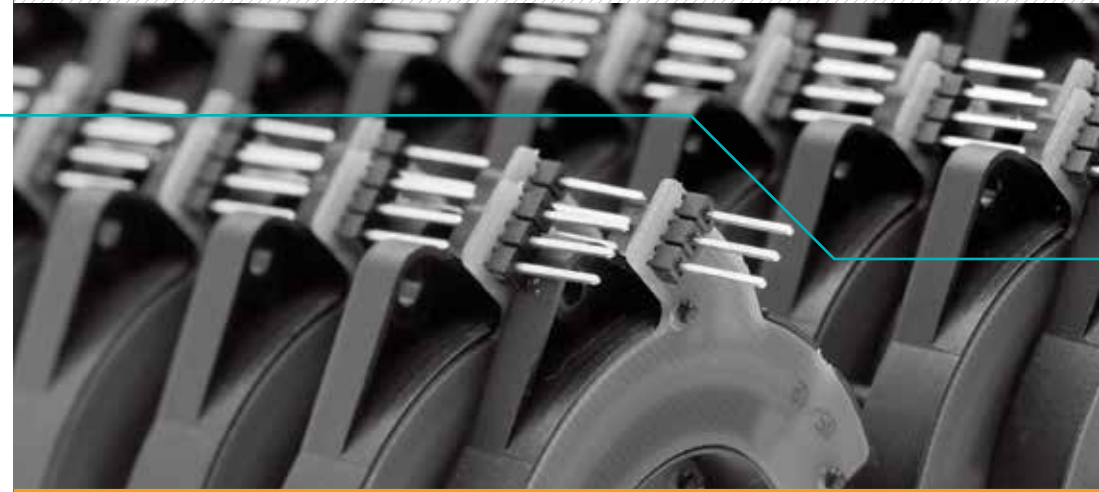
Technology of the future from METALLUX.

METALLUX combines specially developed materials and future-oriented technologies, creating linear and rotary sensors for nearly wear-free operation. Laser trimmers and linearizing equipment provide for high precision, achieving minimal deviations from the characteristic curve of less than 0.05 percent. Additional advantages are efficient integration and a positive price-performance ratio.

Linear and rotary sensors from METALLUX are based on proven sensor technologies and are offered as standard designs and customised productions. Even installation-ready prefabrications can be created.

Product advantages at a glance:

- Low-wear technology
- Variety of structural designs for efficient system integration
- Countless fields of application
- Simple assembly
- High reliability and long service life
- Low power consumption



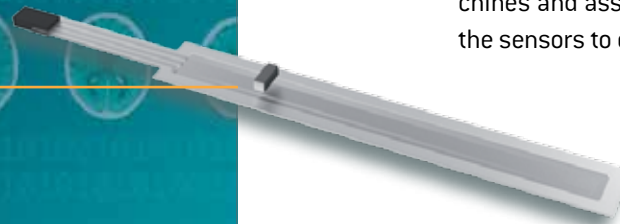
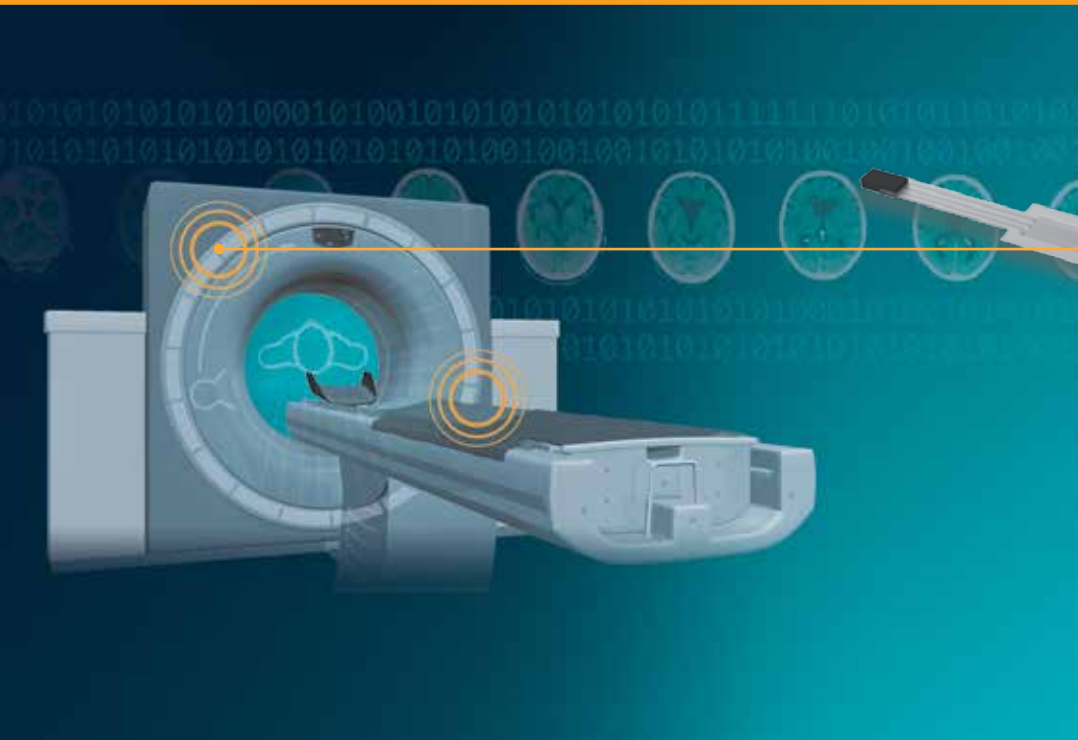
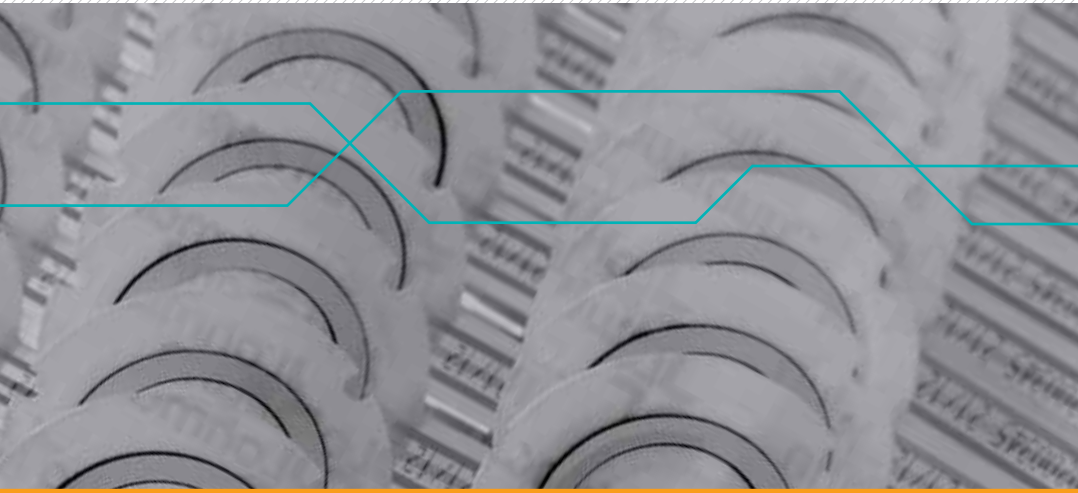
METAPOT MEMBRANE SENSORS

Totally robust

Robust means above all, being able to withstand a lot. METAPOT membrane sensors rise to this challenge: as a hermetically sealed membrane package, they are immune to environmental influences, shocks and vibrations. What's more, METAPOT membrane sensors can be operated with zero contact, and therefore with hardly any wear. The contactless measuring mode with magnetic potentiometer tapping makes linear and rotary measurements possible in most environments. Due to their minimal space requirements, METALLUX membrane sensors can be easily integrated in machines and assemblies. Application-optimised membrane materials allow the sensors to cover a broad range of temperatures.

Product advantages at a glance:

- Linear and rotating models
- Practically wear-free operation
- Magnetic potentiometer tapping
- High precision
- Outstanding imperviousness
- Attractive cost-performance ratio
- High reliability
- Long service life
- Low power consumption

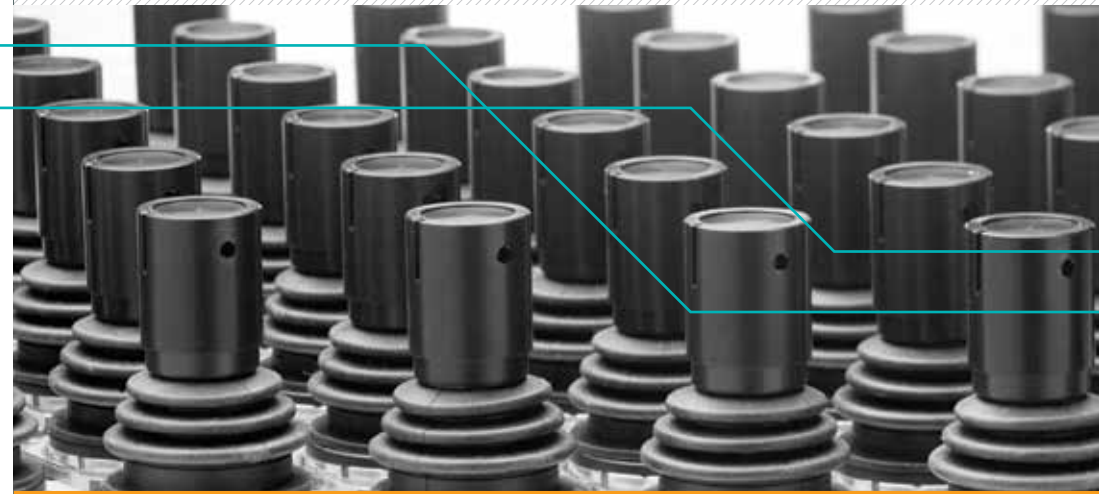


JOYSTICKS

METALLUX Joysticks – synergy of design and functionality.

A total of three technologies are available as the solution to your challenge. This means nearly unlimited possibilities in the individual realization of your specific requirements. Which technology is the right one for you? We will gladly analyze that for you: conductive plastic technology, METAPOT membrane technology or Hall-effect technology.

All three technologies feature extremely precise positioning accuracy and reliability, which is essential for professional, often safety-related applications. Their response behavior is excellent – "Stick-slip" effects are a thing of the past. In addition, METALLUX joysticks are very light and take up only a small amount of installation space – despite their high level of mechanical stability.



Product advantages at a glance:

- Operating lever easily adaptable
- Corrosion-resistant
- Integration of sensing and turn function
- Industrial grade for indoor and outdoor applications
- Utilisation for analogue and digital applications
- Long service life
- Boots made from functionally adapted materials
- Impervious (IP66)
- Vibration resistance
- Very good cost-performance ratio
- Low power consumption



"WE DO IT PRECISELY.
YOU CAN ALWAYS
RELY ON THAT."



PRESSURE SENSORS

Pressure sensors: reliable, robust, patented.

Minor assembly effort, long service life, high precision and functionality are only four of many decisive factors that are important to our customers. The technologies for ceramic pressure sensors specially developed by METALLUX guarantee precisely this.

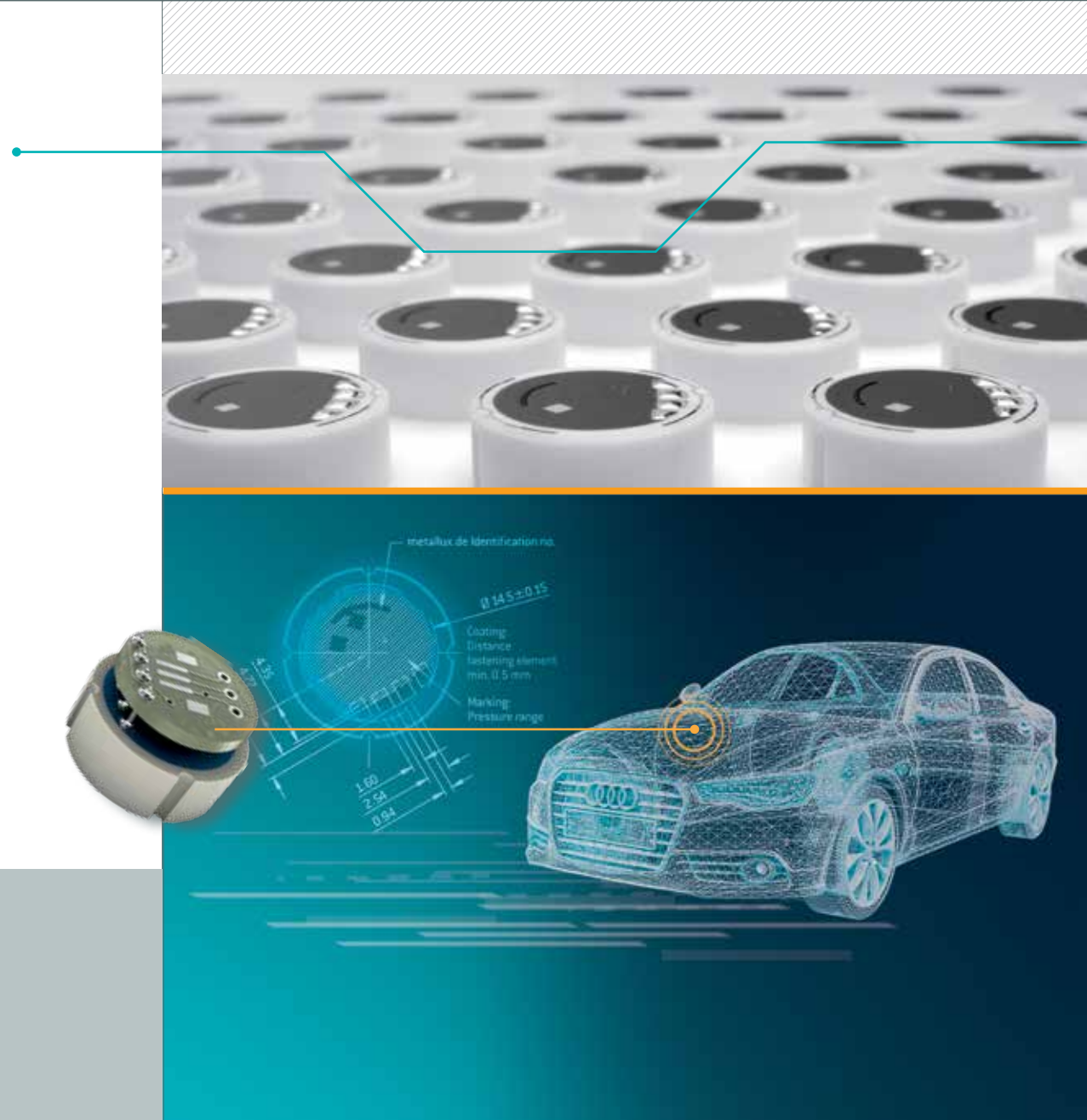
Our product portfolio also includes steel pressure sensors, especially for applications with very high pressure, such as hydraulics systems. The integrated pressure connections achieve maximum functional reliability and imperviousness. Sensors are installed without O-rings in applications where there is contact with aggressive media and high pressure peaks.

Advantages of ceramic pressure sensor:

- Robust encasing and resilient technology
- High resistance against aggressive media
- Long-term stability due to sophisticated calibrations
- Moisture resistance
- Good cost-performance ratio

Advantages of steel pressure sensor:

- High burst pressure
- Simple assembly
- Small installation space
- Stable signal
- Sealless



HIGH-VOLTAGE RESISTORS

High-voltage – from the manufacturing process to the end product.

The right materials for extraordinarily precise products. METALLUX applies special cermet pastes to the ceramic substrates during manufacturing of high-voltage resistors. The layout is designed thereby for an enormously wide spectrum of resistance values. Pastes and layouts, as well as proven process parameters, ensure that resistors can be used with very high operating voltages. The resistors are very stable and can also be used as precise voltage dividers. They can be configured for a wide variety of voltage ranges and manufactured in numerous precision classes. The substrate materials vary according to the required functionality.

Advantages at a glance:

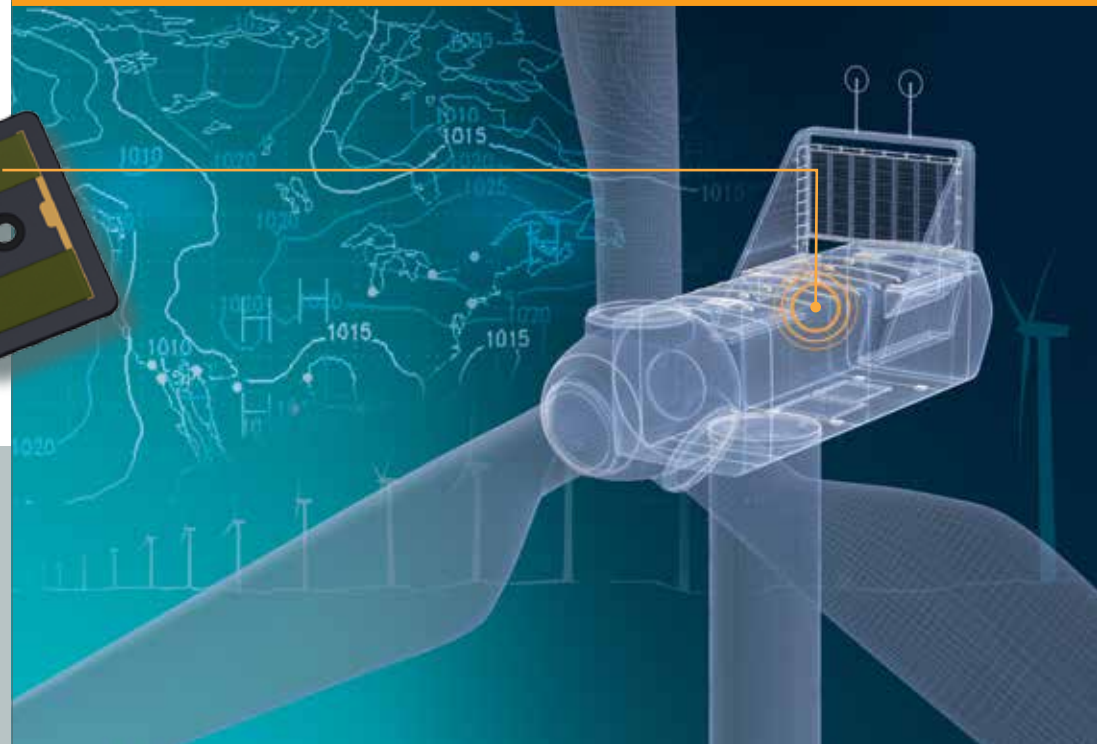
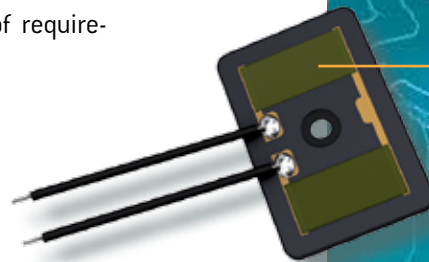
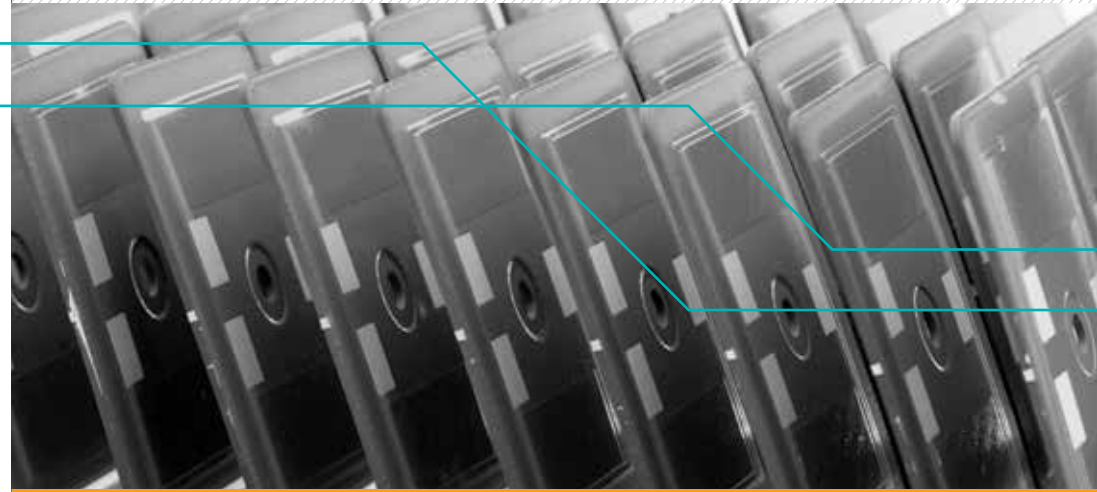
- Highly pulse-proof
- High long-term stability and precise high-voltage measurement
- Broad design variety for diverse application possibilities
- Variable substrate geometry and many structural shapes possible
- Low inductance



POWER RESISTORS

Performance without limits.

The optimal functionality and reliability of power resistors from METALLUX are of the utmost priority. Optimal results are achieved in thick-film resistors through customised adaptation of the layout. These resistors are also permanently thermally resilient and their shape and size can be adapted to the respective application. METALLUX wire resistors, in an aluminum encasing that is specially designed for overload protection, are even more resilient. Various castings, temperature monitors and finished, customer-specific connection lines compatible with the profile of requirements are available.



Advantages of thick-film resistors:

- Flat structural shape
- Very low inductance
- Variable substrate geometry
- High resistance values and pulse-proofness
- High concentration of capacity on minimal space

Advantages of the wire resistors:

- Simple assembly
- Thermal switch for maximum system protection
- High degree of protection and high overload protection
- Good cost-performance ratio
- UL certified

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System Certification
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