

universa®

We serve quality! Since 1993



www.universa.com.tr





TR-Electronic – Your partner in automation

Rotary encoders

Absolute encoder, incremental rotary encoder, wire-actuated encoder

Rotary encoders with optical and magnetic scanning functions register the precise position in a wide variety of applications and industries. In medical engineering, miniature versions ensure correct positioning while SIL3-approved absolute rotary encoders provide the necessary safety. We offer not only high-quality rotary encoders (from Ø 22 to 160 mm) for almost any application but also a comprehensive range of accessories.

Linear encoders

Linear absolute measuring systems, laser displacement measurement

Linear encoders register linear motions in machines, tools and systems according to the specific requirements of different technologies. Linear encoders allow measuring distances of max. 20 m almost without any wear. This value is max. 240 m for laser measuring systems. Machines and systems can be precisely controlled to reach their desired positions.

Motion

Servo drives, compact drives, process drives

Intelligent encoTRive drives are available with the current field bus systems, such as PROFIBUS, ROFINET and CANopen, within a power range of up to 300 watts. These drives are configured to meet customer requirements and can be freely combined with a precision gear, holding brake and I/O. Values of up to 4,350 rpm and a powerful 200 Nm are available to cope with demanding applications.



Components

Industrial PC, field bus I/O, PLC, HMI controller

Industrial PCs are available in numerous variants and offer customized calculation power for PC-assisted automation. Programmable logic controllers (PLC) are the traditional means for automation. HMI controllers establish the interface for the user. Field bus nodes, I/O modules and cam controllers complete the range of automation components

Automation

Consulting and implementation for new machines and retrofitting

You want to set up a largely automated new machine or retrofit and modernize your existing machine with Automation systems? Then you need our extensive expert knowledge and our more than 20 years of experience.

Unidor

Blanking and forming, systems, controls and sensors

Pioneering blanking and forming technology for more than 30 years, we are your reliable partner in the world of blanking and pressing and have proved this with the thousands of machines which we have successfully installed all over the world. Sensors, controls and systems ensure optimal results in machines, tools and retrofit projects.





C_582 – the next generation: Standard size with outstanding features



- » 15 or 18 bit resolution in one revolution (singleturn)
- » 12 bit revolutions (multiturn), optionally 16 bit.
- » Output of up to 256,000 revolutions.
- » CE_582 and CO_582 add hollow-through shafts with diameters up to 15 mm to the standard range of solid and slip-on blind shafts and flanges
- » Mounting space is valuable. Do not let cabling interfere with other parts and components
- » Parameterizable gearbox
- » Latest communication standards for Industry 4.0
- » "On the fly" preset for adjustment during the process

CD_582+FS – functional safety in standard industrial form factor



- » Efficient design
- » architecture according category 4 „two encoders in one“
- » Certified according to DIN EN 62061 (SIL) und 61508 (PL) by TÜV NRW
- » SIL2/PLd, cat3; SIL3/PLe, cat4
- » Solid shaft, Blind shaft, Solid shaft
- » PROFINET/PROFIsafe, CIPSafety, Ethernet IP, EtherCAT (TTL/HTL, sincos)

Linear encoder with magnetostriction how to find the perfect fit LMRI46



- » 50...4000 mm*, in steps
- » 0,001 mm resolution
- » Fieldbus, Industrial Ethernet
- » SSI dan PROFIBUS etc all interfaces.
- » Programmable output signals
- » Multiple magnet option

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- » Multiple magnet option
- » Maximum pressure 600 bar, static

Measurement over long distances without contact and fast enough for closed-loop control



- » Option with external cooling for 100°C ambient temperature
- » Contact-free and wear-free distance measurement
- » Distances up to 125 m, 170 m, 195 m, 240 m
- » Flexible programming

Overview of our Signal Construct LED PRODUCTS

Over 40 years of experience



LED Lamps



Front Panel Indicators



LED Lightnings



LEDs for PCBs



Components





Storage and logistics

Particularly in the area of modern warehouse setups, such as shelf-stacking devices, transfer belts and crane systems, a powerful, decentralized measuring and control system for simple project processing and quick configuration makes all the difference..



Printing technology and paper processing

Fast signal processing for printing machines enables high register accuracy and decentralized compact drives automate setting processes. Rotary encoders with stainless steel housings can resist even aggressive media such as groundwood pulp in paper machines. Small absolute encoders measure movements in restricted installation spaces.



Metal processing

The world of presses and punches has long been TR-Electronic's special field. We develop the products from the outset so that they can withstand the high stresses of shocks and vibrations.



Event technology

TR-Electronic absolute encoders offer safety for all requirement classes in event technology. From rotary encoders with an additional incremental track through to SIL3-/PLe-certified safety rotary encoders, we offer the right solution for your customized safety concept



Woodworking



Intelligent, decentralized control concepts, efficient sensors with local signal processing and components which operate reliably despite strong temperature fluctuations are the basis for automation solutions in the woodworking industry.



The intelligent equipping and networking of transfer machines, machining centers and assembly cells is our speciality, especially when you require a platform for your own special machine philosophy or special function!.

Renewable energies



Intelligent tracking of photovoltaic systems increases efficiency and accelerates automation. High-resolution rotary encoders enable exact positioning. Compact drives reduce the number of components to be networked and align your system with the sun, even after a number of years.

Safe rotary encoders in pitch and azimuth drives in wind power plants assist optimal alignment for the most efficient energy conversion, whilst at the same time offering sufficient reliability to put the system into a safe condition in the event of a malfunction..

Packaging industry



Flexible automation solutions according to our customers' wishes are the intelligent basis for successful machine concepts within the packaging industry. High processing speeds enable fast turnaround times and large quantities. Absolute measuring systems save time-consuming reference travel, while highly integrated, intelligent sensor technology reduces space requirements and relieves higher-level controls. We can provide solutions which were previously not possible, particularly for high-precision applications.

Plastics processing



Diverse measurement tasks in plastics processing machinery and systems require fast signal processing and high precision. Linear measuring systems for installation in hydraulic cylinders can be integrated seamlessly into injection molding machines, while industrial PCs are a universal platform for user-specific control systems in both series machines and special systems.

The high speed Press Control



compactPRESS is a general purpose, that measures, controls, checks, compares and evaluates the analog and digital signals of sensors, encoder and transmitters.

The user-friendly control with the Touch-Screen is so easy to manage and uncomplicated. Using images instead of buttons, the system guides, informs and helps through every process.

compactPRESS offers an optimized function package for comprehensive tool protection and user-friendly tool management:

- » min/max monitoring of all relevant tool and press parameters
- » automatic tool profiling by teach-in
- » long-term protection through continual tool checks
- » tool reports and tool history for economic evaluation of tool and press

We have thought of everything so that you can use the compactPRESS measuring device simply and effectively:

- » a fully-integrated system from the control through tool protection
- » a user-friendly interface that anyone can learn quickly and simply
- » universal hardware with essential components only, for a reliable and continuous operation
- » worldwide service – no matter where your press is operating, you will always have a complete control

Unidor sensors and components





ÜNİVERSA İÇ DIŞ TİC. MAK. SAN. LTD. ŞTİ.

Üniversa is a domestic and foreign trade company that was established in 1993. We are experienced in the field of quality and set out an idea of qualified service.

We are the sole representative of the world's leading companies TR- Electronic and Signal-Construct all in Turkey and the Middle East. We combine the technical support that we receive from them with our marketing and total quality management strategies also well qualified and selfless staff. We offer you to be your solution partner!



TR-Electronic GmbH

Various encoders and automation components for measurement and control technology since 1983

TR-Electronic develops and manufactures sensors and actuators for industrial applications, particularly in automation technology.



In our Rotary Encoders unit, optical or magnetic scanning product detect the angular motion of a rotating shaft. Magnetostrictive linear encoders measure the position of a non-contact linear motion (for example, in a hydraulic cylinder).



The smart compact drives in our drives unit are used as actuators or as process drives.



Control and measurement modules, developed with special knowledge in the pressing and metalworking sectors, complete the program.



Signal-Construct GmbH

Experience and innovation in LED technology

With more than 40 years of experience, Signal-Construct is one of the world's leading companies in led signal and display technology. OUR PRODUCTS are used SAFELY in many sectors with various options ranging from status indicators of PCBs to environmental lighting, from machine LEDs to military and commercial vehicle LEDs.

TR-Electronic

Absolute encoders
Incremental encoders
Linear encoders
Safety encoders

TRSystems

Endüstriyel PC
Fieldbus I/O
HMI Denetleyiciler
PLC

Unidor

smartDIE-PRO 6
PKM 2000
LVCpro 02-S

Signal-Construct

LED lamps
Front Panel
Indicators LEDs for
PCBs LED Lighting



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Since 1993

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