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More than safety.



High spirits safeguard steady innovation

The EUCHNER success story starts in 1940 with the start-up of an engineering company by Emil Euchner. A milestone was set in 1952 with the development of the first “multiple limit switch” in the world. Highly sophisticated in technical terms, this position switch was developed in close co-operation with the machine tool industry. It is used for positioning and controlling machines and systems, and is still a symbol of the company’s innovative power today.

Safeguarding people, machines and processes is the main focus of EUCHNER's activities today. Wherever people and machine meet, our safety components help minimizing hazards and risks for workers.

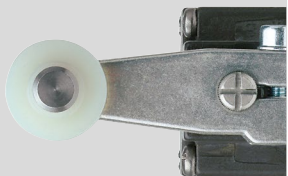
Our primary objective is 100% customer satisfaction without neglecting the well-being of our employees. The hallmarks of the EUCHNER philosophy are therefore quality, reliability and precision. Based on the long-standing experience of our staff, we always find the right solution for our customers' individual requirements.

The medium-sized family-operated company based in Leinfelden, Germany, employs around 750 people around the world. In addition to the production locations in Unterböhringen and Shanghai/China, 17 subsidiaries and other sales partners in Germany and abroad work for our international success on the market.



 **made
in
Germany**

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■ ManMachine

Joysticks, electronic handwheels, hand-held pendant stations,

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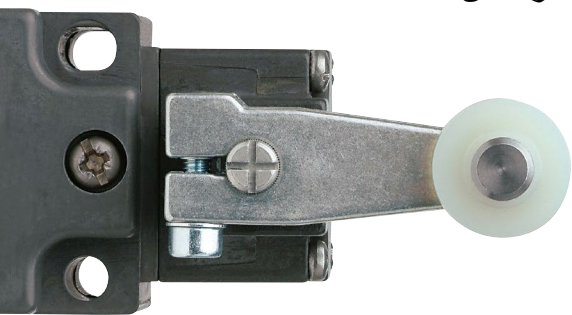
Joysticks, electronic handwheels, hand-held pendant stations

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■ Automation

EUCHNER developed the first multiple limit switch in 1952. This switch, which has been continuously further developed, still forms a key element of the product range today alongside numerous other command switches. Selected, high quality materials, the tough surfaces as well as the proven EUCHNER characteristics of quality, reliability and precision makes these switches ideal for use in mechanical and systems engineering. The Automation product line also includes round plug connectors, trip dogs, trip rails and inductive ident systems.

Position switches

These mechanical command switches are designed according to the European standard EN 50041. The robust design, the utilization of corrosion-resistant materials, the precise production methods and the high degree of protection guarantee straightforward and reliable function in the toughest conditions.



■ Detailed information in catalog: Main Catalogue ManMachine, Automation



Precision single limit switches

These limit switches were developed in close co-operation with machine tool manufacturers. The high quality materials, the combination of mature technology, high precision and practical design guarantee straightforward function in all industrial applications. Different designs cover a wide range of specific applications.

■ Detailed information in catalog: Main Catalogue ManMachine, Automation



Precision multiple limit switches

Suitable for use in harsh production conditions, these high precision, reliable switches with their compact design are ideal for positioning and control applications in mechanical and systems engineering. A very wide range of applications is covered by the flexible configuration of these devices with non-contact and mechanical switches as well as other customer-specific features. Their high quality guarantees an exceptional mechanical life.

■ Detailed information in catalog: Main Catalogue ManMachine, Automation



Inductive ident systems

Inductive ident systems are used for the non-contact identification of tools, workpiece carriers, pallets, containers and vehicles in the entire logistics sector. The read/write data carriers function completely wear-free and without batteries using inductive coupling.

■ Detailed information in catalog: Main Catalogue ManMachine, Automation

Trip rails/trip dogs

The combination of trip rails and trip dogs with all EUCHNER command switches safeguards the advantages of these highly precise positioning devices and ensures trouble-free operation.



■ Detailed information in catalog: Main Catalogue ManMachine, Automation



Single hole fixing limit switches

The alternative to inductive proximity switches are mechanically actuated limit switches. These switches are completely maintenance-free and are also used in the most extreme conditions. Their small size makes it possible to install them directly at the monitoring point.

■ Detailed information in catalog: Main Catalogue ManMachine, Automation

Round plug connectors

Round plug connectors have a very robust, matt chromium-plated brass housing. When assembled correctly in relation to EMC, they provide optimal protection against electromagnetic interference. The connector system can also be used for very low currents and voltages because of the integration of gold-plated contacts.



■ Safety

Safety switches with metal housing

The function of safety switches is to monitor the position of a safety guard and, if the safety guard is opened, to trigger a signal that safely interrupts the supply of power to the hazardous parts of the system. Switches are available with a large number of options, for example with guard locking, emergency release and escape release as well as accessories.

Safety switches without guard locking

Safety switches with a separate actuator permit operation of a system only if the safety guard is in the closed position and the actuator is inserted in the switch. A range of mounting fixtures makes these devices ideally suited to situations requiring high flexibility and robust design.



■ Detailed information in catalog:
Safety Switches with Metal Housing



Safety switches with guard locking

In addition to the same function as the safety switches with a separate actuator, these switches also have guard locking. Safety guards can then not be opened when locked.

■ Detailed information in catalog:
Safety Switches with Metal Housing





Safety switches with guard locking and guard lock monitoring

These safety switches have an interlocking solenoid with additional guard lock monitoring. As a result the position of the guard and the solenoid can be monitored safely. The guard locking prevents the unintentional opening of a safety guard. These switches are suitable for the protection of people as well as for the protection of the process.

Detailed information in catalog: Safety Switches with Metal Housing



Safety hinges

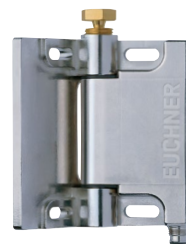
Because of its small design, the safety hinge is particularly suitable for applications in which robustness is required in conjunction with small dimensions. It combines the function of a door hinge with that of a safety switch. The safety hinge can be mounted on standard aluminum profiles or directly on doors. The operating point can be adjusted over a large angular range.

Detailed information in catalog: Safety Switches with Metal Housing

Position switches and limit switches with safety function

These position switches are used to limit the final position and to safely shut down drives in systems and machinery. The built-in safety switching elements ensure safe interruption of the circuit. Like all EUCHNER safety switches, contact elements are available in a large number of versions and provide the necessary flexibility for all applications.

Detailed information in catalog: Safety Switches with Metal Housing



Safety

Safety switches with plastic housing

The safety switches with plastic housing are also ideally suited to use in all applications. Both small and large guards can be protected depending on the version and requirement. Switches with and without guard locking are also available in plastic housing.



Position switches with safety function

These switches are used for monitoring the position of safety guards and moving machine components. They are available with different actuating heads. Every user can thus employ the most suitable actuating element for his/her application. The versions with hinged actuator require little space for mounting and can be fitted such that they are secure against tampering.

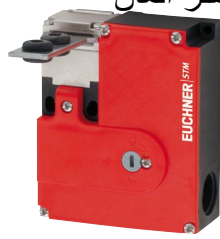
■ Detailed information in catalog: Safety Switches with Plastic Housing



Safety switches without guard locking

These safety switches with a separate actuator are suitable for safety guards that must be closed to provide the necessary safety. The different versions of the switches provide solutions for all applications.

■ Detailed information in catalog:
Safety Switches with Plastic
Housing



Safety switches with guard locking and guard lock monitoring

The plastic safety switches also ensure that safety guards remain in the closed position until a dangerous movement has come to a standstill. Opening of the safety guards during a process is also prevented. With a choice of actuating heads made of plastic or metal, you will find the right combination for every application. The advantages of metal and plastic switches can therefore be optimally combined.



■ Detailed information in catalog: Safety Switches with Plastic Housing

Rope pull switches

EUCHNER rope pull switches are used as EMERGENCY STOP devices with detent according to the related standard wherever machines and systems cannot be protected with safety covers (for example on particularly long and extensive systems). The EMERGENCY STOP function is triggered by pulling a pre-tensioned rope system or if the rope is severed.

■ Detailed information in catalog: Emergency Stop Device/Rope Pull Switches





Safety

Non-contact safety switches

EUCHNER supplies non-contact safety switches with two different principles of operation. Systems with transponder technology and systems with magnetically coded reed switches. Especially the transponder-based safety systems feature a very large read distance and center offset, a uniform operating distance as well as protection against tampering. Furthermore, with their small design, no service requirements and their resistance to vibration, they offer advantages in many applications.



Detailed information in catalog:
Transponder-coded safety systems



Key adapter CKS

The CKS is used as an electronic lockout mechanism and for safely entering installations. It is based on transponder technology and prevents the installation starting if the key is removed. The CKS key adapter is used in combination with a CES evaluation unit.



Detailed information in the catalog:
Transponder-coded safety systems



Non-contact safety systems CMS – magnetic coding

These magnetic switches are characterized by their high degree of protection and compact design. A major advantage of safety switches CMS is that the actuator and read head can be fitted behind stainless steel.

Detailed information in catalog: Magnetically coded safety switches CMS

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Safety system ESL

Multifunctional door handle, consisting of a handle module and an interlocking module with integrated transponder technology. It is used for protecting and monitoring safety guards. The compact and symmetrical design permits simple mounting on profile and allows use on doors hinged on the left and right. The metal housing is ideal for use in harsh conditions.



■ Detailed information in catalog: Safety system ESL



Transponder-coded safety guard locking with guard lock monitoring

With the CET the advantages of non-contact transponder technology have been combined with mechanical guard locking. Features such as unique coding and a particularly large offset are integrated into a switch with extremely high locking forces. The highest safety category is achieved even with the use of a single switch.

■ Detailed information in the catalog: Transponder-coded safety systems

Safety switches CTP

This switch combines the proven principle of operation of electromechanical safety switches with guard locking and guard lock monitoring with modern transponder coded safety engineering. Thanks to this technology, even a single CTP achieves category 4 / PL e according to EN ISO 13849-1 without additional fault exclusion and complies with all the requirements of EN ISO 14119.

■ Detailed information in catalog: Transponder-coded safety switch CTP with guard locking



EtherNet/IP

PROFINET

Safety System MGB – Multifunctional Gate Box

The safety system MGB (Multifunctional Gate Box) combines a safety switch, bolt and door locking mechanism in one system. The modular design is flexible for upgrades and can be individually adapted to suit the diverse safety requirements of every customer. It is ideal for protecting safety doors. In addition to the standard version the MGB is also available in the versions PROFINET and EtherNet/IP.

■ Detailed information in catalog: Multifunctional Gate Box MGB

Field evaluation unit CES-FD

The CES-FD evaluation unit is suitable for the connection of CES / CKS read heads. The transponder signals are evaluated directly in the field. The safe semiconductor outputs can be connected directly to the control system.

Transponder-coded safety switch CEM-C40

The safety switch CEM-C40 is the ideal solution for all customers who must achieve a high level of safety (category 4 / PL e) when securing a safety guard and also need guard locking to protect the process. It comprises a solenoid and integrated evaluation electronics. Opening is effectively prevented by the magnetic forces even in applications where significant forces are applied by the user.



■ Detailed information in catalog: Transponder-coded safety systems

■ Detailed information in catalog: Transponder-coded safety systems

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Safety

Enabling switches

The large range of enabling switches from EUCHNER provides the user with suitable solutions for every application. Along with standard devices, built-in versions and kits are available.

Bolts for safety guards

Bolts are used in conjunction with safety switches. The safety switches are protected against damage and installation is simplified.

Light grids and light curtains LCA

When combined with the proven guard locking devices and interlocking devices, non-contact safety guards such as light grids and light curtains form a complete solution to secure machines.




Enabling switches

Enabling switches are manually operated control devices. These switches are used wherever personnel must work directly in the danger area on machines and systems. Because of their robust and ergonomic design, these switches are the right choice for numerous applications, for example during setup operation.



Authorized personnel can enter hazardous areas with the enabling switches. Enabling switches are available as built-in and hand-held versions, with two or three-stage switching elements and in various housings.

 Detailed information in catalog: Enabling Switches



Bolts for safety guards
The use of bolts will ensure that the actuator is properly inserted in the safety switch when the safety guard is closed. Forces, as occur for instance on slamming a guard shut, are applied to the mechanically very robust bolt and not the safety switch. In accessible hazardous areas, bolts with escape release enable the safety guard to be opened from inside the danger area. By fitting padlocks to the bolt tongue, operators can effectively prevent locking inside. An additional door handle is no longer required if an EUCHNER bolt is used.



The bolt is designed to provide mechanical protection of the switch when the safety guard is closed. The assembly holes provided permit easy and fast installation of the bolts to the safety guards. Mounting is particularly straightforward on standard aluminum profiles. Bolts can be combined with both electromechanical and non-contact safety switches

I Detailed information in the accessory category of catalogs: Transponder-coded safety systems. Safety Switches with Metal Housing and Safety Switches with Plastic Housing.

Light grids and light curtains LCA

Light grids and light curtains are non-contact safety guards (electro-sensitive protective equipment) for securing danger areas on machines and installations. They use several light beams to form an invisible safety light curtain in front of the danger area. When a machine operator interrupts one of these light beams, it will cause the safety outputs to switch off.

I Detailed information in catalog: Light grids and light curtains LCA



Safety

Safety Switches with AS-Interface

A connection to the AS-Interface Safety at Work is available for almost all EUCHNER safety switches. As a result the switches can be integrated into the bus very easily.

Safety relays

EUCHNER supplies a wide range of evaluation units for monitoring safety components.

Small safe control system

Freely programmable, modular safety system for the protection of machines and installations.

Safety Switches with AS-Interface

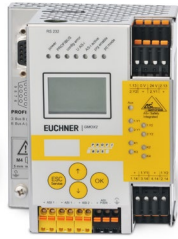
These safety products are based on the proven standard AS-Interface bus technology. The wiring effort has been reduced to a minimum. Because of the simple structure it is not necessary to set parameters. The safety-related signals for AS-Interface Safety at Work are evaluated using a safety monitor. This monitor is a safety PLC that can be programmed, as required, very straightforwardly using clearly understandable software.



The wiring of the overall system always corresponds to the highest safety category. The status signals from all safety-related components connected can be evaluated directly in the control system. Additions can be realized as required with very little effort and very easily.

! Detailed information in catalog: Safety Switches with AS-Interface





Safety relays ESM

All modules in this series are built into a housing that is only 22.5 mm wide. Various safety relays are available to which expansion modules can be added on the output side. The advantage of the ESM modular principle is that different safety evaluations can be realized with only a few module variants.

■ Detailed information in catalog:
Safety Relays ESM



Small safe control system MSC

The small safe control system MSC is a universal, freely programmable, modular safety system for the protection of machines and installations. Even with only the base unit it is possible to realize applications with up to 8 inputs and 2 outputs. Depending on requirements, the MSC can be expanded with input, output or fieldbus modules. Programming is undertaken easily and intuitively using the software EUCHNER Safety Designer. The MSC offers various options for diagnostics to obtain a quick overview of the status of the device.

■ Detailed information in catalog:
Small safe control system MSC





■ ManMachine

Joysticks, electronic handwheels, hand-held pendant stations

Joysticks are integrated into control panels and portable control equipment. Electronic handwheels are particularly useful in any situation where manual axis positioning is required. The hand-held pendant stations facilitate work in danger areas on machinery and systems.

Electronic-Key-System

The EKS provides electronic access management on PCs and control systems, and protects against unauthorized operation.

Electronic handwheels

EUCHNER electronic handwheels are universal pulse generators for manual axis positioning. They are mainly used for positioning NC-controlled axes. Different pulse rates and output stages make the handwheels suitable for the most control systems. By using wear-free magnetic detent mechanisms, absolutely no servicing is required.

■ Detailed information in catalog: Hand-Held Pendant Stations/Handwheels

Joysticks

These devices are always used if movements are to be controlled as a function of the manual actuation direction. Joysticks are used in areas of the steel and construction industry, in transport and conveyor systems, in systems engineering and mechanical engineering, as well as in warehousing, medicine and studios. The devices are also approved for maritime use because of their certification by Germanischer Lloyd.



■ Detailed information in catalog: Joystick Switches



Hand-held pendant stations

Machine functions can be monitored and controlled decentrally using hand-held pendant stations. In addition to the control function, hand-held pendant stations can also have a safety function. For this purpose the hand-held pendant stations are equipped with EMERGENCY STOP buttons and enabling switches.

■ Detailed information in catalog: Hand-Held Pendant Stations/Handwheels



Electronic-Key-System EKS

The EKS comprises an Electronic-Key and an Electronic-Key adapter - a read/write device with integrated evaluation electronics and interface. Various versions with different interfaces are available. All devices feature an extremely compact design for installation in a standard cut-out. Because of the non-contact transfer of data, the Electronic-Key adapter is suitable for harsh industrial use.

■ Detailed information in catalog: Electronic-Key-System EKS



Electronic-Key-Manager EKM

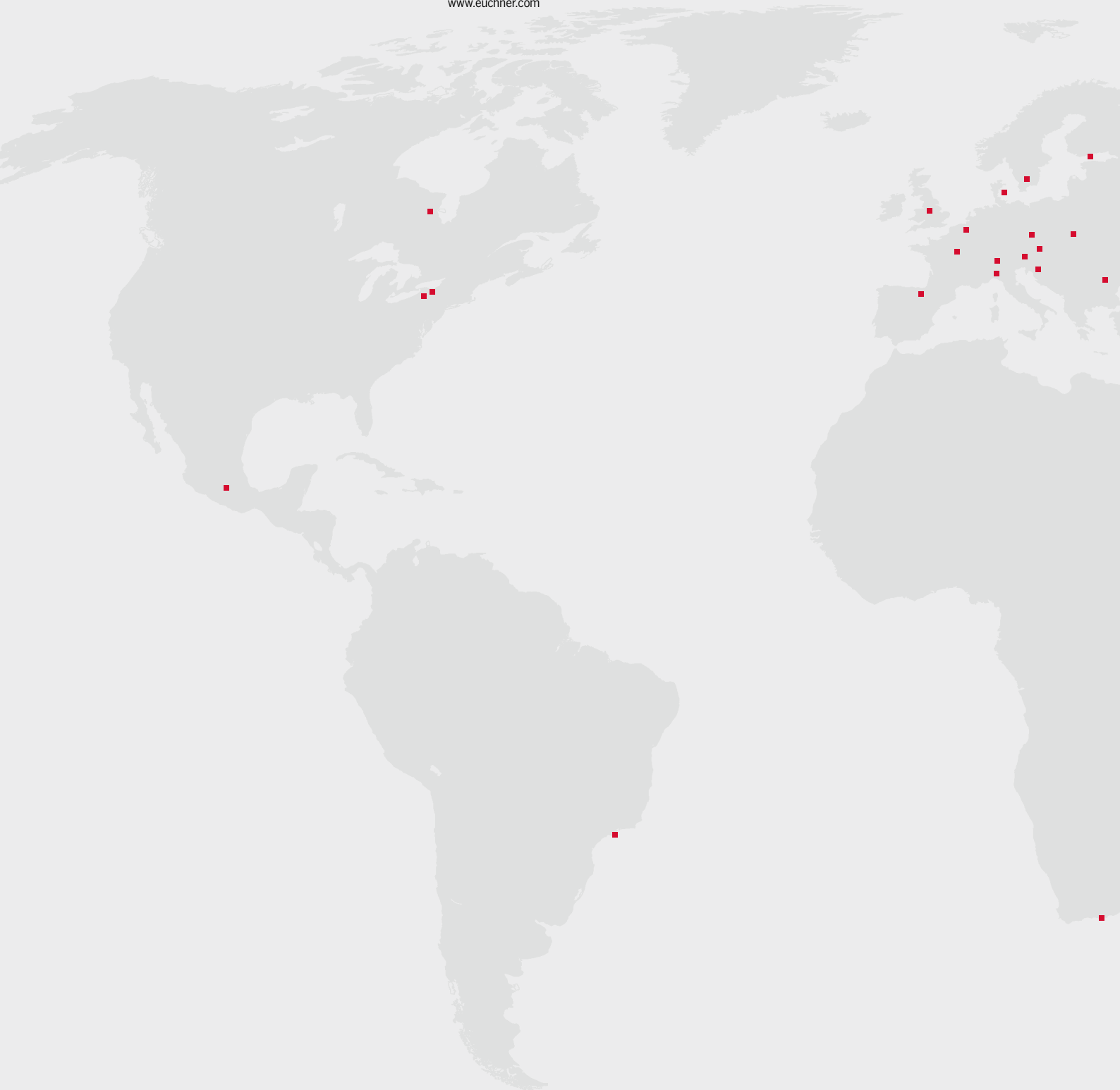
EKM is a software package for writing and managing the keys using a PC. All Electronic-Keys and their contents are saved in a central database. The freely programmable memory in the key can be allocated to database fields. The database fields and the user interfaces for entering the data can be configured as required. Read and write authorizations can be granted through user management. Product parameters and operator entries can be logged according to FDA-21 CFR part 11.



■ Detailed information in catalog:
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