

# Product Catalogue



More than safety.



**EUCHNER**

# More than safety.



Emil Euchner, the company's founder and inventor of the multiple limit switch, circa 1928.



## **Around the world – the Swabian specialists in motion sequence control for mechanical and systems engineering.**

EUCHNER's history began in 1940 with the establishment of an engineering office by Emil Euchner. Since that time, EUCHNER has been involved in the design and development of switch-gear for controlling a wide variety of motion sequences in mechanical and systems engineering. In 1953, Emil Euchner founded EUCHNER + Co., a milestone in the company's history. In 1952, he developed the first multiple limit switch – to this day a symbol of the enterprising spirit of this family-owned company.

## **Automation – Safety – ManMachine**

Today, our products range from electromechanical and electronic components to complex system solutions. With this wide range of products we can provide the necessary technologies to offer the right solution for special requirements – regardless of whether these relate to reliable and precise positioning or to components and systems for safety engineering in the automation sector.

EUCHNER products are sold through a world-wide sales network of competent partners. With our closeness to the customer and the guarantee of reliable solutions throughout the globe, we enjoy the confidence of customers all over the world.

## **Quality, reliability, precision**

Quality, reliability and precision are the hallmarks of our corporate philosophy. They represent concepts and values to which we feel totally committed.

At EUCHNER, quality means that all our employees take personal responsibility for the company as a whole and, in particular, for their own field of work. This individual commitment to perfection results in products which are ideally tailored to the customers' needs and the requirements of the market. After all: our customers and their needs are the focus of all our efforts. Through efficient and effective use of resources, the promotion of personal initiative and courage in finding unusual solutions to the benefit of our customers, we ensure a high level of customer satisfaction. We familiarize ourselves with their needs, requirements and products and we learn from the experiences of our customers' own customers.

## **EUCHNER – More than safety.**



Quality – made by EUCHNER

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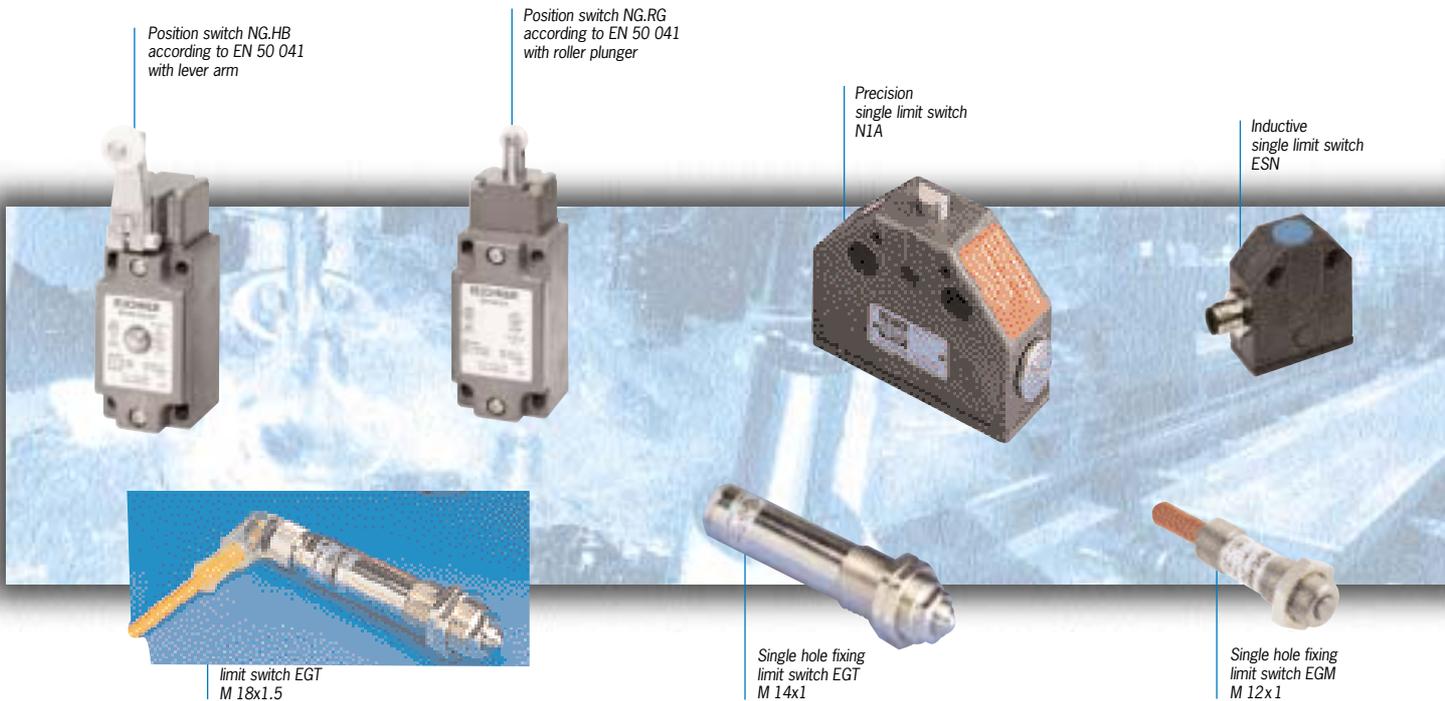
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# Position Switches, Metal Housing



## Position Switches According to EN 50 041

EUCHNER position switches are high-performance limit switches with a long mechanical life; designed according to the European Standard EN 50 041. The user can choose between lever arm or plunger actuated and 10 different actuating heads with 4x90° adjustment.

### Features

- ▶ Metal housing
- ▶ Mechanical life up to 30 million operating cycles
- ▶ Degree of protection IP 67



## Single Hole Fixing Limit Switches – Cylindrical Design

The round design with simple, single-hole assembly allows installation of the controls directly at the scanning points. Exact adjustment is permitted by means of the precision metric thread. The limit switches with inert gas contact can be operated up to a water column pressure of 30 meters.

### Features

- ▶ 6 basic types M 12x1 to M 18x1.5
- ▶ Housing of nickel-plated brass or stainless steel
- ▶ Mechanical life up to 100 million operating cycles
- ▶ Degree of protection IP 68/IP 67

## Precision Single Limit Switches

These switches are used in mechanical and systems engineering for controlling and positioning tasks.

The robust housings made of die-cast anodized aluminum are characterized by their high level of mechanical endurance and corrosion resistance.

### Features

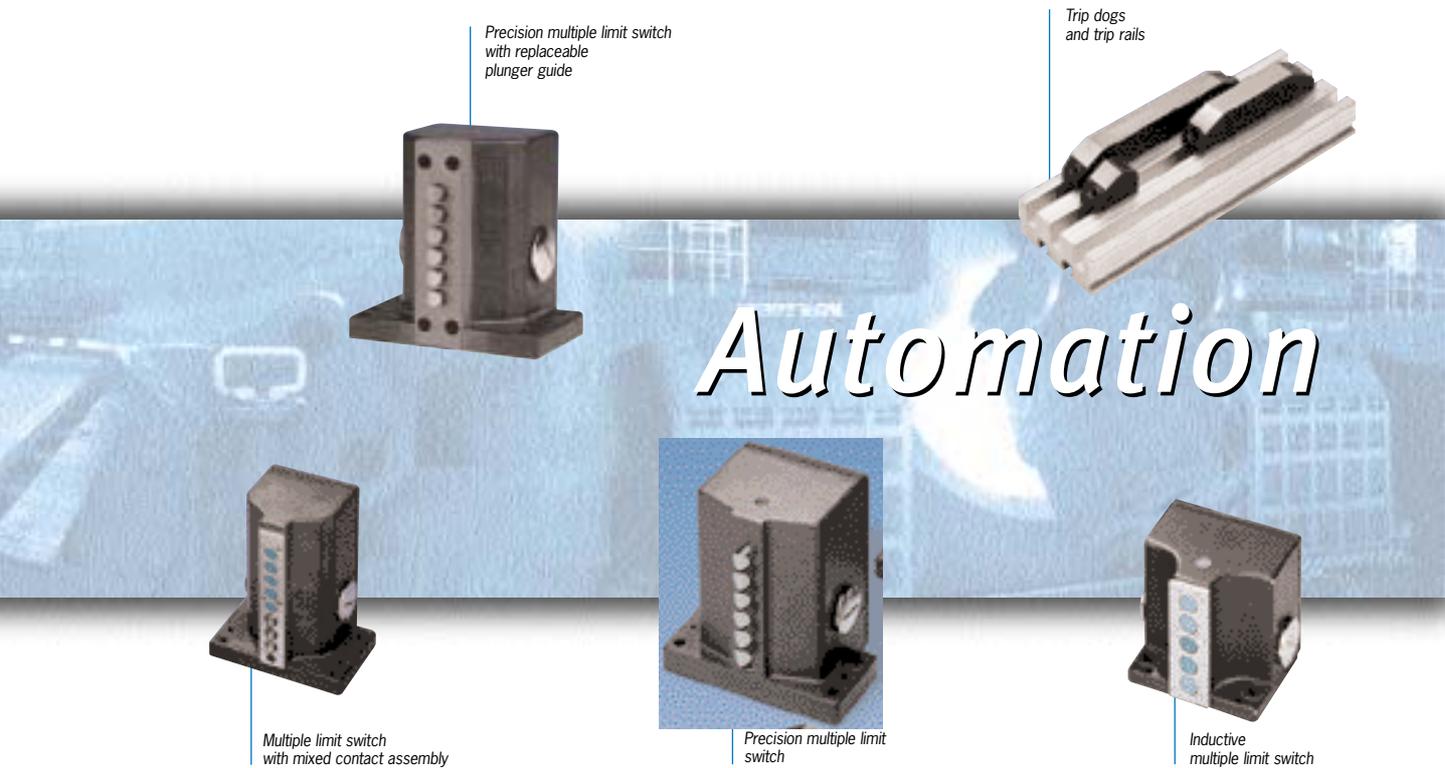
- ▶ 9 basic types from miniature 40 x 40 mm to standard according to DIN 43 693
- ▶ Metal housing
- ▶ Mechanical life up to 30 million operating cycles
- ▶ Degree of protection IP 67
- ▶ Precision +/- 0.002 mm

## Inductive Single Limit Switches



Inductive single limit switches are non-contact in operation. They are used as an alternative to mechanical switches. The main advantage is their wear-free operating mode. They are noted for their insensitivity to corrosive ambient conditions and their virtually unlimited mechanical life.

# Multiple Limit Switches Trip Dogs / Trip Rails



## Precision Multiple Limit Switches

These highly precise and reliable switches are used in an extremely wide range of machines and industrial systems. Suitable for use under the toughest production conditions, their compact design makes them ideal for posi-

tioning and control applications in mechanical and systems engineering. Proven special designs are available for specific applications. Their high quality standard guarantees an exceptional mechanical life.

### Features

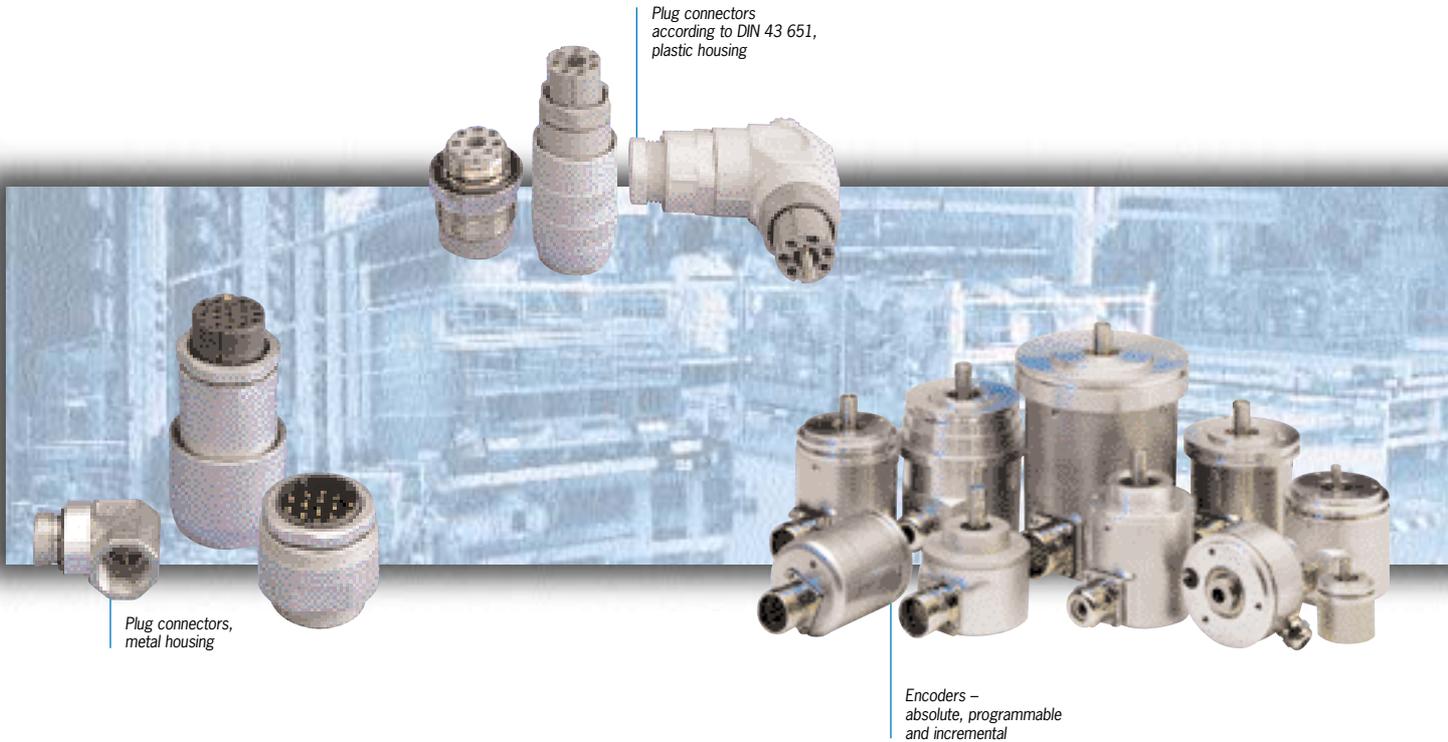
- ▶ Degree of protection IP 67
- ▶ Repeat accuracy  $\pm 0.002$  mm
- ▶ Mechanical life up to 30 million operating cycles

## Trip Dogs / Trip Rails



The combination of trip rails and trip dogs with multiple limit switches from EUCHNER guarantees the advantages of these highly precise positioning devices and ensures trouble-free operation.

# Plug Connectors Encoders



## Round Plug Connectors/Elbow Adapters

The plug connectors are equipped with a robust, matt chromium plated brass housing. Optimum EMC solutions are possible with EMC assembly configurations. The connector system can also be used for very low currents and voltages due to the integration of gold-plated contacts.

### Features

- ▶ 4 to 19 poles
- ▶ Degree of protection IP 67

## Plug Connectors According to DIN 43 651



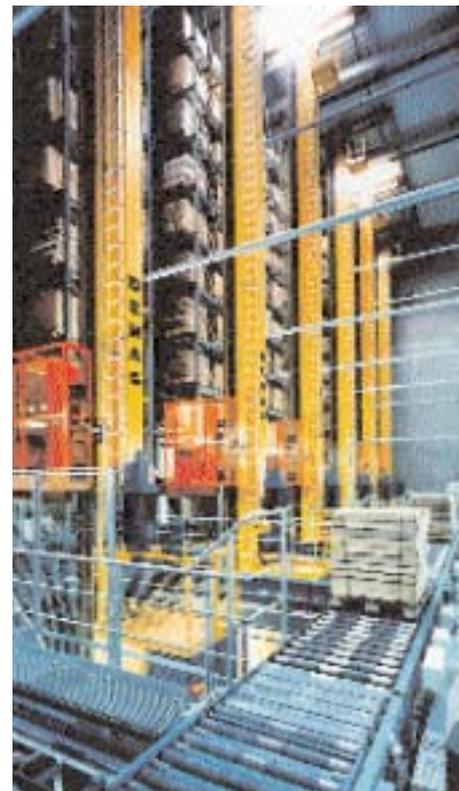
All plug connectors have a housing made of non-combustible, high strength PET according to UL Standard 94 VO. The crimp contacts used permit fast and easy connection with highest operational reliability.

### Features

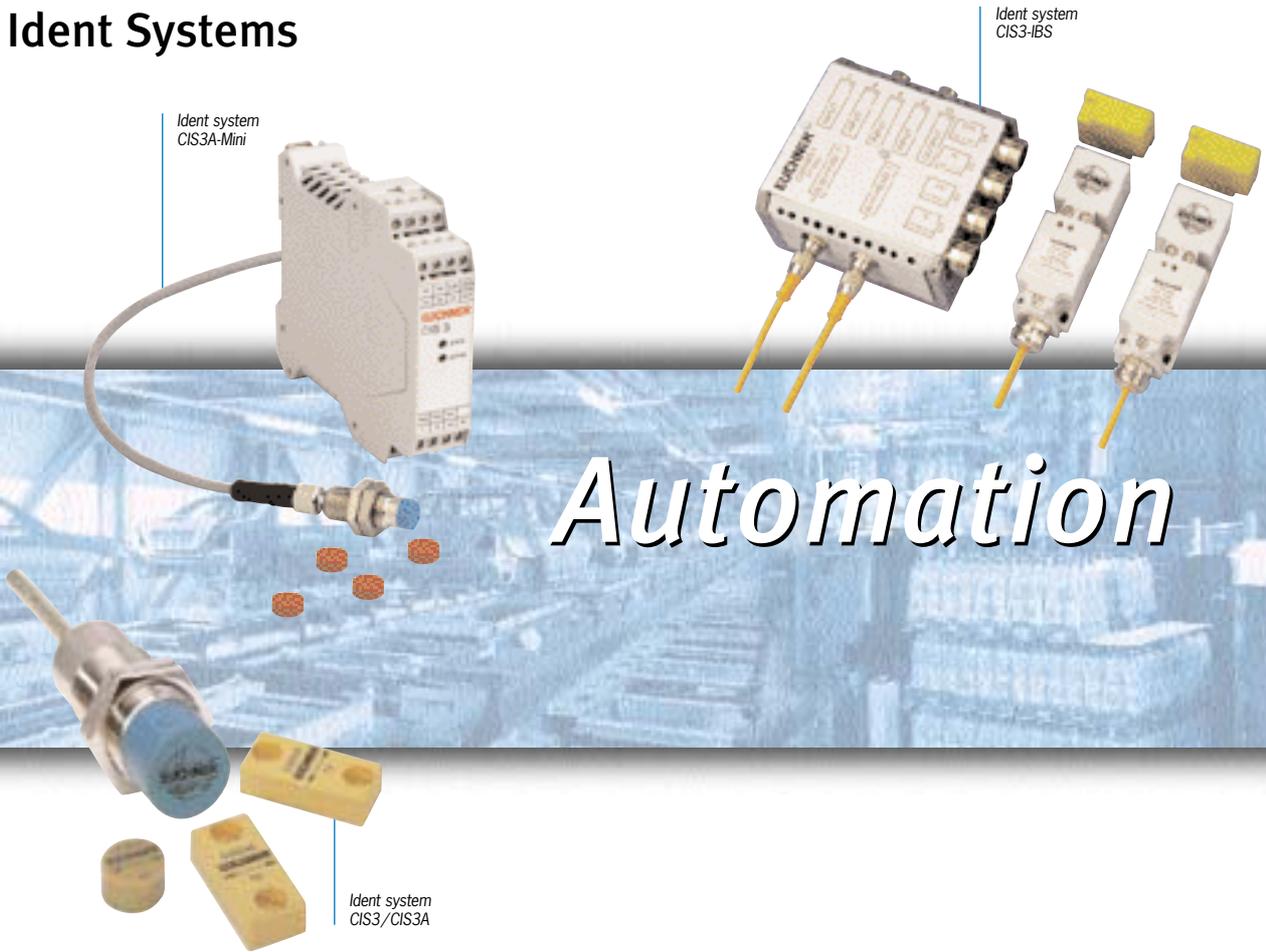
- ▶ 6+PE/11+PE poles
- ▶ Degree of protection IP 65

## Encoders

EUCHNER encoders are devices for absolute or incremental detection of angles of rotation. A rotating digital code disk representing angular displacement is precisely monitored by miniature optoelectronic scanners and converted to electrical output signals. EUCHNER encoders are precise digital positioning devices for detecting rotary displacements or linear displacements that can be converted to rotary motion.



# Inductive Ident Systems



## Inductive Ident Systems

EUCHNER offers a wide range of industrial identification systems for many different applications.



### Features

- ▶ All with non-volatile data carriers
- ▶ Data carriers can also be installed flush in metal
- ▶ Data carriers from 16 bytes up to 32 Kbytes
- ▶ FRAM data carrier with > 10 billion programming cycles
- ▶ Robust devices suitable for industrial use (degree of protection up to IP 67)

## CIS3 / CIS3A

- ▶ Low-cost read/write system with separate read-only heads
- ▶ Compact head design
- ▶ No external evaluation unit required
- ▶ Easy connection of the read-only head to the parent controller by 24 V parallel interface
- ▶ Storage capacity: 16 bytes
- ▶ Read distance 0 - 40 mm
- ▶ Dynamic reading with up to 90 m/min. possible



## CIS3A Mini

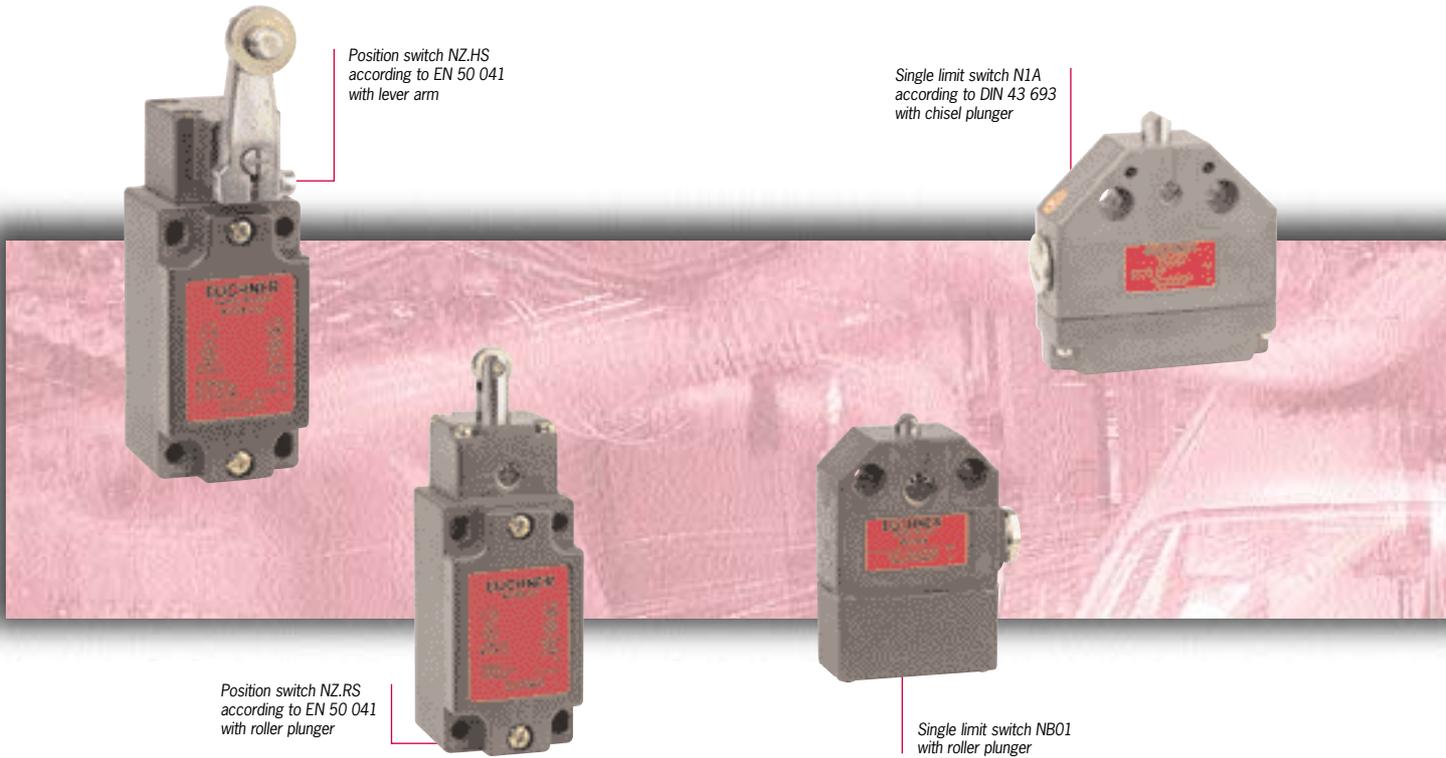
- Extremely small dimensions characterize the read/write head and data carrier of the new, innovative Ident System CIS3A Mini.
- ▶ One of the smallest plug-in read/write heads
  - ▶ Miniature data carrier dimensions according to DIN 69 873 (Ø 10 x 4.5 mm)

## CIS3-IBS



- Data carriers with the very latest FRAM memory technology (>10 billion programming cycles) and up to 32 Kbyte memory capacity. Robust (IP 67) and universal InterBus interface adapter for direct local machine mounting and connection of:
- ▶ 2 read/write heads
  - ▶ 8 binary sensors
  - ▶ 2 binary actuators

# Position Switches with Safety Function, Metal Housing



Position switch NZ.HS according to EN 50 041 with lever arm

Single limit switch N1A according to DIN 43 693 with chisel plunger

Position switch NZ.RS according to EN 50 041 with roller plunger

Single limit switch NB01 with roller plunger



## Position Switches According to EN 50 041

These position switches are available in different versions, e.g. with cable entry or plug connections, with LED display and various voltage ranges. The versatility of the actuating mechanisms (plunger, lever arm or switch head) as well as the possibility of installation in any position ensure simple integration in all systems.

**Features**

- ▶ Mechanical life up to 30 million operating cycles
- ▶ Degree of protection IP 67
- ▶ 2 or 4 contact elements, e.g. 2 positively driven NC contacts + 2 NO contacts

## Single Limit Switches in Slim Design

These slim design safety switches have a die-cast, anodic oxidized alloy housing. This extremely sturdy housing, in conjunction with the high degree of protection IP 67, permits use under the most extreme ambient conditions. The series are available in various versions, e.g. with cable entry, plug connections or LED display.

**Features**

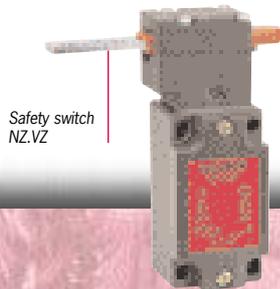
- ▶ Housing 40x58x20
- ▶ Mechanical life up to 10 million operating cycles
- ▶ 1 positively driven NC contact

## Single Limit Switches According to DIN 43 693



These limit switches are used to limit the final position and to safely shut down drives in plant and machinery. The built-in safety switching elements ensure safe contact interruption – even in emergencies.

# Safety Switches with Separate Actuator, Metal Housing



# Safety

## Safety switches TX with Guard Locking and Guard Locking Monitoring

Thanks to its slim design, the TX safety switch is ideally suited for mounting on guard fences.

### Features

- ▶ Mechanical unlocking mechanism from the front
- ▶ 2 LEDs for function display
- ▶ Large insertion funnel
- ▶ Backloading on the door does not prevent the switch from being unlocked
- ▶ 3 cable entries
- ▶ Simple head rotation



## Safety Switch NZ.VZ

The safety switch NZ.VZ has a standardized basic housing according to EN 50 041. The extremely sturdy, die-cast alloy housing with the high degree of protection IP 67 permits use under extreme ambient conditions.

### Features

- ▶ Actuating head that can be turned in 90° stages
- ▶ 2 or 4 contact switching elements
- ▶ Available with LED display

## Safety Switches NZ.VZ.VS with Guard Locking



NZ.VZ.VS. safety switches have additional solenoid locking. The safety guard cannot be opened when locked.

### Features

- ▶ Solenoid operating voltage optionally 24 VDC / 110 VAC / 230 VAC
- ▶ Mechanical/electrical locking

## Safety Switches TZ with Guard Locking and Guard Locking Monitoring

The TZ safety switch has solenoid locking with additional guard locking monitoring. Consequently, the position of the door and the solenoid can be monitored by the higher-level control.

### Features

- ▶ Mechanical unlocking mechanism from the front
- ▶ 2 LEDs for function display
- ▶ Optionally with emergency release
- ▶ Connection by cable entry or plug connector
- ▶ Max. 8 contact elements permit flexible wiring

# Position Switches with Safety Function, Plastic Housing



## Position Switches NM



NM position switches are used for monitoring the position of safety guards and moving machine components. These switches are available with five different actuating heads:

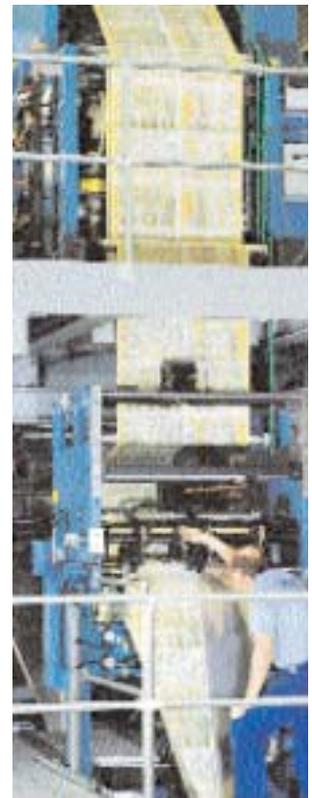
- ▶ Roller plunger
- ▶ Dome plunger
- ▶ Roller arm
- ▶ Lever arm
- ▶ Hinged actuator

Every user can thus employ the most suitable actuator element for their application. The simple rotation of the actuator heads in four approach directions permits maximum flexibility.

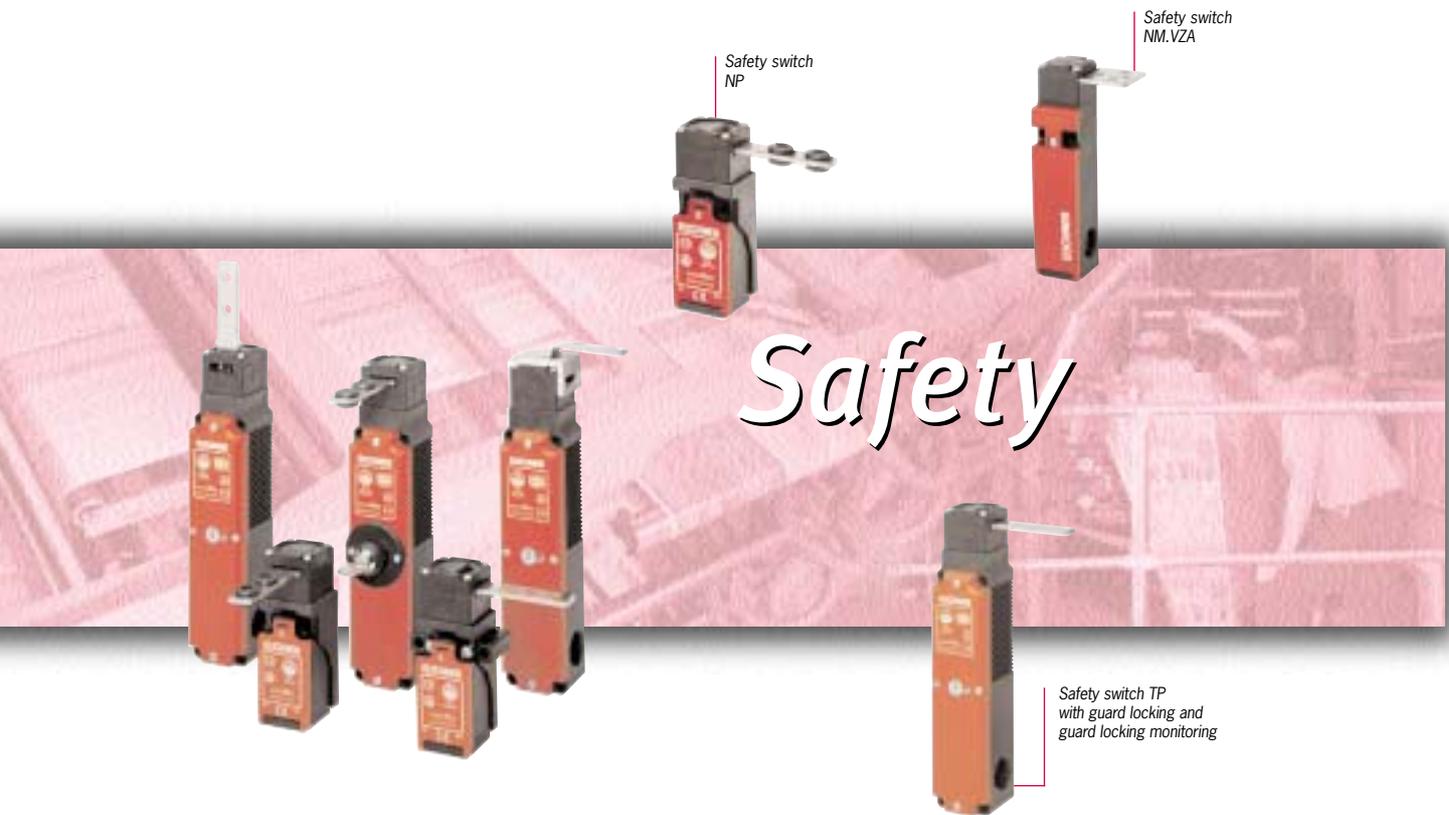
Two basic housings are available with up to three contact elements. The compact design as well as the possibility of installation in any position mean that these switches can be integrated in all automation and assembly fields.

### Features

- ▶ Degree of protection IP 67
- ▶ Long mechanical life
- ▶ Various switching elements
- ▶ Ample space for wiring



# Safety Switches with Separate Actuator, Plastic Housing



## Safety Switches NP

NP safety switches permit operation of an installation only when the safety guard is in the closed position and the actuator is inserted in the switch. Different mounting fixtures and switch contacts provide the best preconditions for use in all automation, assembly and handling fields.

### Features

- ▶ Degree of protection IP 67
- ▶ Up to 3 contact elements
- ▶ Different actuators
- ▶ 5 approach directions

## Safety Switches TP with Guard Locking and Guard Locking Monitoring

TP safety switches ensure that safety guards remain in closed position until a hazardous movement, e.g. an after-running main spindle, has come to a standstill. Similarly, opening of the safety guards during a process is prevented. Thanks to their slim design, they are ideal for universal mounting on profile rails.

### Features

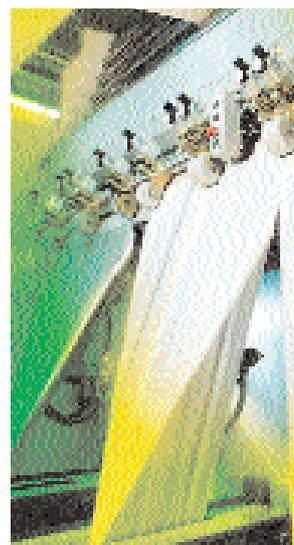
- ▶ Mechanical unlocking mechanism
- ▶ Emergency release from the rear
- ▶ Different switch contacts
- ▶ Up to 4 cable entries

## Safety Switches NM

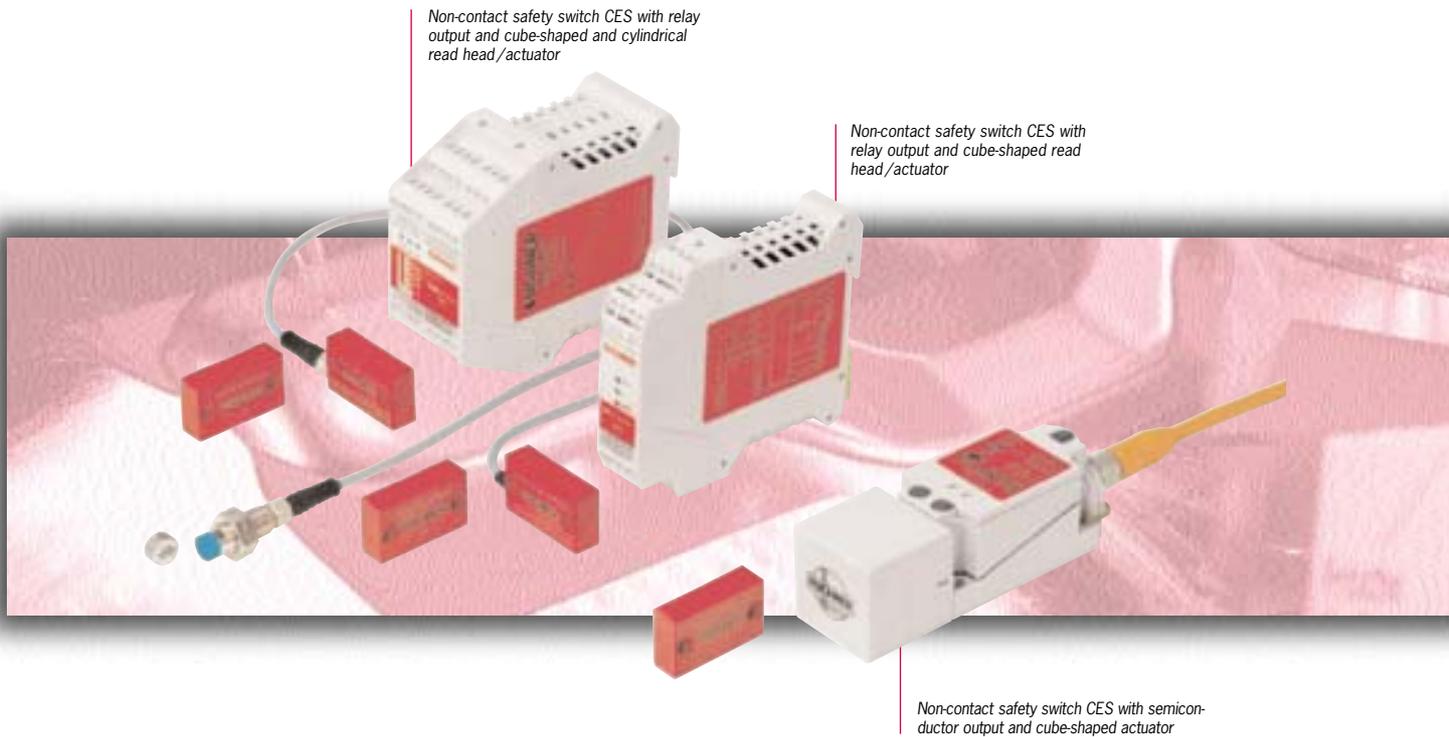
NM safety switches are the perfect solution for applications with limited installation space thanks to their small dimensions. The simple changeover of the approach direction and up to three cable entries are features which provide a considerable amount of flexibility during installation.



Different wiring concepts can be realized. Up to three switch contacts are available.



# Non-Contact Safety Switches, Transponder Coding



## Non-Contact Safety Switches CES, Transponder Coding

Non-contact safety switches are interlocking devices which are designed to protect people and machines. CES non-contact safety switches operate on the basis of a uniquely electronically coded actuator (transponder). The transponder receives and processes an electromagnetic field and the data signals are then returned to the receiver as a response depending on the transponder coding. Transponder technology has been used successfully in electronic immobilizers for many years by almost all automotive manufacturers.

## Safety Switches CES with Relay Output for the Connection of One Read Head

This series consists of three components:

- ▶ Evaluation unit
- ▶ Read head
- ▶ Actuator

The actuator and read head are available in a cube-shaped and cylindrical design. The read heads are also available in a plug-in design. The low width of the evaluation unit permits space-saving assembly in the control cabinet. Two relay output contacts (safety outputs) permit switching of large and small currents.

## Safety Switches CES with Relay Output for the Connection of Four Read Heads

1...4 read heads may be connected to the evaluation unit in this series. As a result, up to four safety guards can be monitored. The evaluation unit also possesses connection terminals for a start pushbutton and for the feedback loop for monitoring power contactors. The following settings can be made optionally by means of DIP switches on the evaluation unit:

- ▶ Number of read heads 1...4
- ▶ Manual or automatic start
- ▶ Operation with or without feedback loop

## Safety Switches CES with Semiconductor Output

The read head and evaluation unit form a compact unit in this series in standard housing according to EN 60 947-5-2,. The evaluation unit in degree of protection IP 67 is fitted to the safety guard on site. The decentralized wiring concept, with connection by plug connector, reduces wiring to a minimum. Electrically separate semiconductor outputs also permit operation with pulsed signals. EUCHNER offers the switches in this series for use in safety category 4 in accordance with BG (German Employers' Liability Association).



# Non-Contact Safety Switches, Magnet Coding



## Non-Contact Safety Switches CMS, Magnet Coding

EUCHNER's CMS safety switches are based on the magnetic principle. The tamper-proof coded system was specifically developed to monitor moving machine components and movable safety guards. The magnetic switches are characterized by their high degree of protection and compact design.

They are therefore particularly suitable for areas where cleaning and maintenance are major factors. A major advantage of EUCHNER's CMS safety switches is that the actuator and read head can be fitted behind stainless steel. This property enables the use of the switch in the food industry in particular.

### Features

- ▶ Long mechanical life (100 million switching cycles) of reed contacts
- ▶ The coding for all the actuators in a series is identical – fast replacement in the event of repair
- ▶ Evaluation units permit connection of the actuators and read heads in the various versions
- ▶ Actuator and read head have high degree of protection IP 67
- ▶ Problem-free operation under extreme environmental conditions, e.g. dirt and moisture
- ▶ Actuator and read head have a wide sensing range and a broad hysteresis

EUCHNER offers the evaluation units in two different versions:

### CMS-E-AR

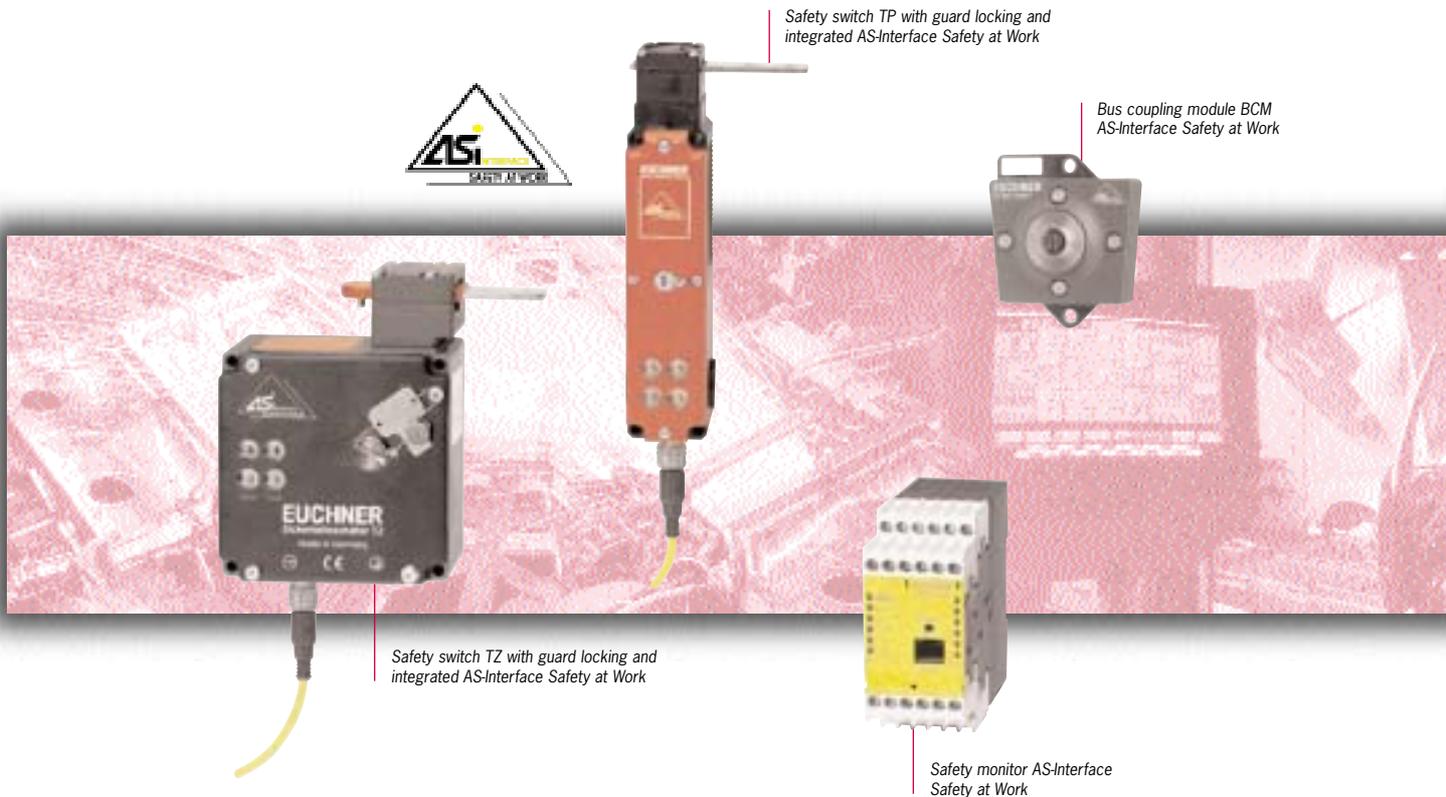
- ▶ Connection of up to 30 read heads
- ▶ Use in safety category 2 or 3 in accordance with EN 954-1

### CMS-E-BR

- ▶ 4 read heads can be connected
- ▶ 1 door monitoring output for forwarding to a PLC for visual display
- ▶ 1 feedback loop for monitoring motor contactors
- ▶ Use in safety category 4



# Safety Products with Integrated Bus Interface



## Safety Products with Integrated Bus Interface - AS-Interface Safety at Work

### AS-Interface Safety Switches with Guard Locking TZ...AS and TP...AS

The safety switches signal the guard position and guard locking status via the bus. The individual signals are obtained and evaluated in the control system. A safety monitor is responsible for switch status monitoring. The bus signals are supplied to the M12 plug connector. The bus must be connected via the bus cable and an additional cable for the auxiliary power. The AS-Interface bus coupling module BCM is used for connection.

#### Features

- ▶ Status signaling via the bus
- ▶ Guard position

- ▶ Position of the locking solenoid
- ▶ Bus status display
- ▶ Control of the interlocking solenoid via the bus
- ▶ Control of the LEDs via the bus
- ▶ Green and red LEDs for possible visualization

### AS-Interface Safety Monitors SFM-A...

The monitor monitors all safe bus users on the AS-Interface bus in accordance with the AS-Interface Safety at Work protocol. If an error occurs, the monitor switches off the assigned safety outputs with a maximum response time of 40 ms.

The safety outputs are redundantly designed as floating NO contacts.

The door monitoring outputs are designed as transistor outputs. The outputs switch off when safety is no longer assured, either due to the switching off of a monitored user or the detection of an error.

#### Features

- ▶ Single or dual-channel design
- ▶ Monitoring of safe inputs on the bus
- ▶ Multiple safety monitors on a single bus possible
- ▶ Diagnostic function for safe inputs

### AS-Interface Bus Coupling Module BCM

With the bus coupling module, the ribbon cables for the AS-Interface bus and power

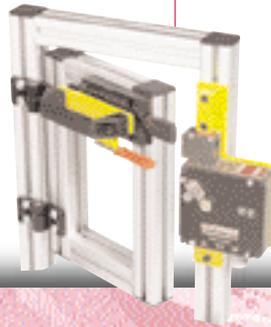
are converted to an M12 socket with four contacts. The coupling module makes it easy to connect EUCHNER AS-Interface safety switches to the ribbon cables of the AS-Interface bus. The coupling modules have the degree of protection IP 67, which makes them suitable for field use. The seal also guarantees the high degree of protection with piercing technology.

#### Features

- ▶ Housing made from reinforced thermoplastic
- ▶ Connections:
  - M12 socket
  - AS-Interface bus ribbon cable
  - AS-Interface power ribbon cable

# Bolts for Safety Guards

Bolt for safety guards TZ



# Safety



Bolt for safety guards CES



Bolt for safety guards TX

## Bolts for Safety Guards

Bolts are employed with safety switches to protect the operator from hazardous machine movements. An additional door handle is no longer required if an EUCHNER bolt is used. Using the bolt will always ensure that the actuator is properly inserted in the safety switch when the safety guard is closed. The bolt is designed to provide mechanical protection of the switch when the safety guard is closed. The available assembly holes permit easy and fast mounting of the bolts on the safety guards.

### Features

- ▶ Bolts are a mechanical guard locking device, i.e. the safety circuit cannot be opened unintentionally by pulling on the hinged door.
  - Accidental stoppage of the machine is prevented
- ▶ The actuator is brought forward mechanically when inserted in the actuating head of the safety switch. This ensures optimum insertion of the actuator even if door guidance is not exact.
- ▶ If the safety door is shaken, the force is transmitted to the mechanically stable bolt and not to the safety switch.
  - Safety switches and actuators are thus protected against damage
- ▶ Standard aluminum profiles are very often used for safety guards. The safety guard locking devices are especially easy to mount here.
  - Optimum adaptation of the bolts to the market standard is guaranteed



- ▶ In the past, bolts were commonly produced in internal company locksmiths' shops at considerable expense. Today, standard bolts are the preferred solution for cost reasons, particularly in the automotive industry.



# Enabling Switches



## Enabling Switches

EUCHNER enabling switches are manually operated controls. They are intended for use by persons working in hazardous areas of machines and installations. In "manual mode" the protective effect of movable safety guards may be disabled under certain conditions. Authorized personnel can then enter hazardous areas. Enabling switches are available in hand-held and built-in versions. A special control unit is not required for EUCHNER enabling switches due to a patented switch mechanism.

### Features

- ▶ Lighter and more stable action point
- ▶ Reliable line monitoring for short circuits
- ▶ Tamper resistant
- ▶ Light weight
- ▶ Two- and three-stage designs

Enabling switches are used in automated production facilities and installations in 'manual mode' in accordance with the regulations EN 775 and VDI 2854. Safety guards are partially ineffective in this operating mode.

### Additional features

- ▶ Excellent ergonomics
- ▶ Easy to hold on to when changing hands
- ▶ Redundancy in open circuit



# Safety Modules



# Safety

Safety Modules ESM

## Safety Modules ESM

Safety modules are used to evaluate signals generated by safety switches, emergency stop switches, two-hand controls, etc. and for subsequent reliable stoppage of hazardous machine functions.

The compact standard housing (22.5 mm wide) with DIN rail mounting and the application options up to control category 4 in accordance with EN 954-1 make a compelling argument for the use of these safety modules.

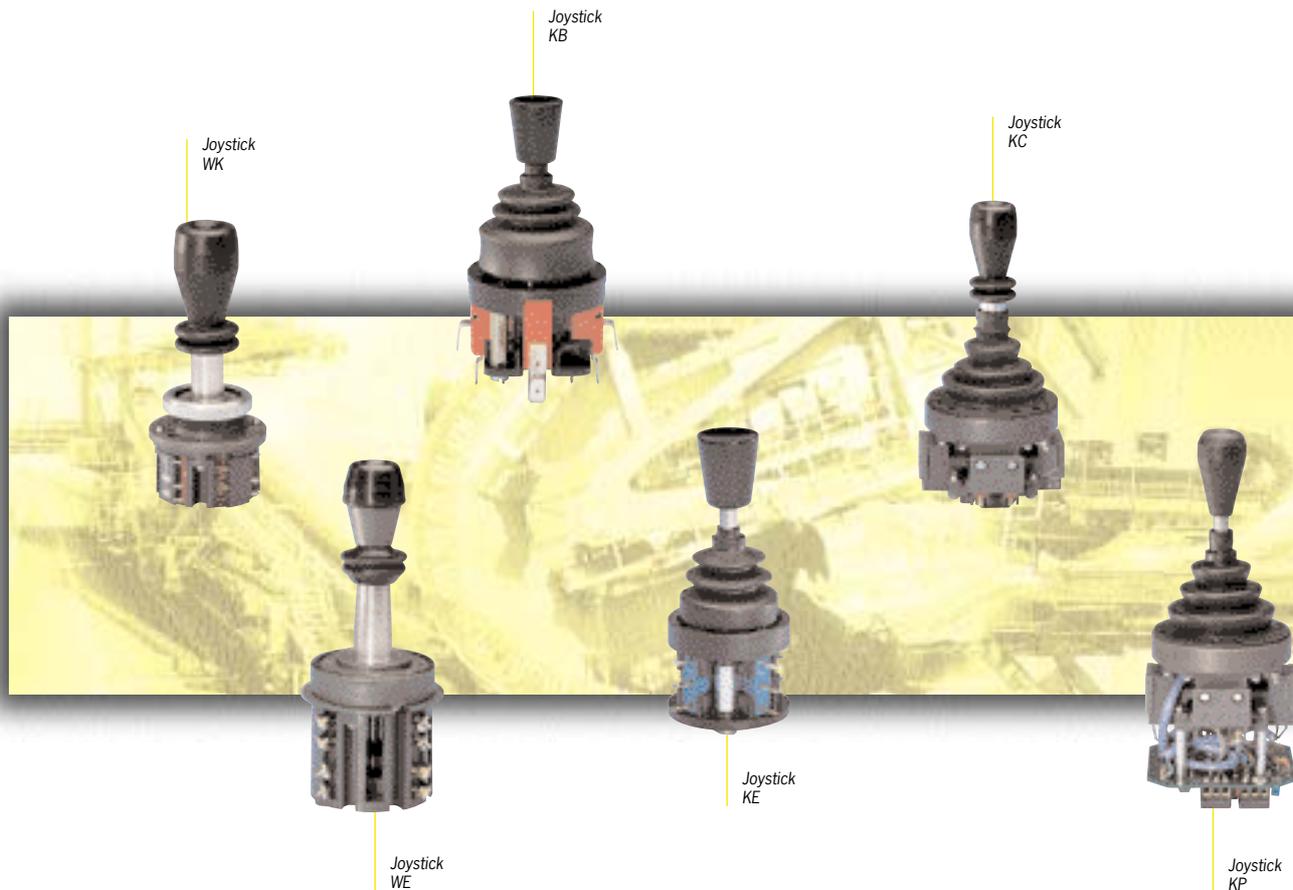
### Features

► Many combination and expansion options so that most applications can be catered for with just a few different safety modules. Thus reducing inventory costs.

- Various basic modules with up to 3 release paths and one door auxiliary contact
- Can be used up to safety category 4 and for stop category 0 or 1
- 1- and 2-channel control possible
- Time-delay (continuously adjustable up to 30 s) and non-time-delay expansion modules can be supplied to match the basic units
- Automatic and manual start (monitoring available as an option) can be implemented
- Earth-fault monitoring and short-circuit monitoring available



# Joysticks



## Joysticks

Joysticks are manually actuated control devices for installation in operator panels and portable control equipment. The range of applications includes the steel and construction industry, warehousing, medical and studio engineering.

### Features

- ▶ 6 basic types
- ▶ 1 to 8 actuating directions – latching, momentary-contact or combined
- ▶ Simple installation
- ▶ Degree of protection IP 65
- ▶ Mechanical life up to 1 million operating cycles

### Options

- ▶ Pushbutton in handle
- ▶ Mechanical interlock
- ▶ Center position contact

## Series WK / WE

Industrial design for installation in control panels Ø 30.5 and 40 mm. The robust metal housing of this series makes them particularly suitable for applications in the mechanical engineering field.

## Series KE / KB / KF

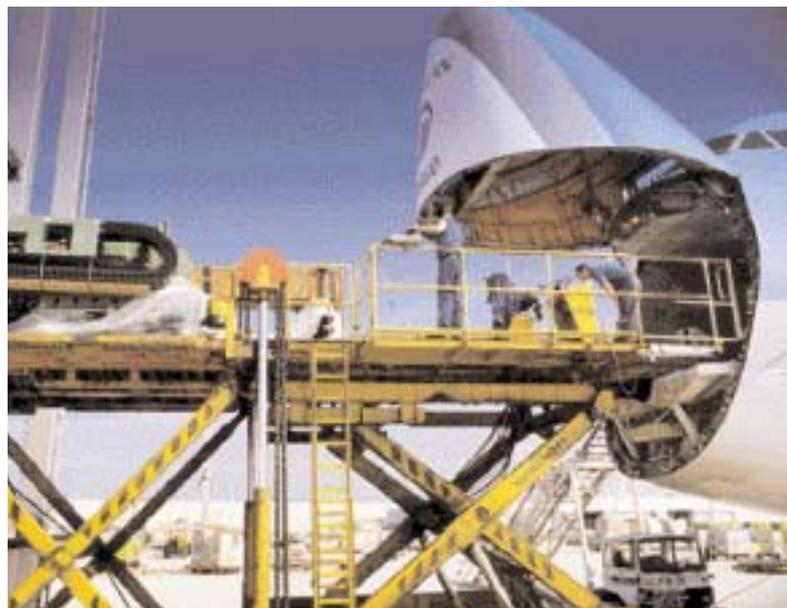
Robust design for installation in control panels Ø 22.5 and 30.5 mm. This series is primarily used for the radio controls sector.

## Series KC

Multifunctional control unit, designed for use in machine tools. 1 to 8 actuating directions with up to 3 switching elements per direction – momentary-contact, scanning or combined. 1 to 3 switching positions per direction are possible.

## Series KP Analogue Joystick

The analogue joystick provides proportional voltages +/- 10 V DC for deflecting the control lever. Different variations in 4 sensible actuating directions are possible. Typical applications are the actuation of infinitely adjustable, electrical and hydraulic drives.



# Electronic Handwheels



## ManMachine



### Electronic Handwheels

Position quickly and safely "in no time at all". The EUCHNER electronic handwheel is a universal pulse generator for manual axis positioning. It is mainly used for positioning NC-controlled axes in machine tools during set-up.

100 or 25 square-wave pulses per revolution are available to the user at the output. A second output phase-shifted by 90° allows the downstream controller to detect the direction of movement.

The HKD handwheel is designed as a modular system. It consists of a total of three parts:

- ▶ Handwheel
- ▶ Setting wheel
- ▶ Front plate

The flat design of the HKC handwheel makes it particularly suitable for applications with a small installation depth. The handwheel and setting wheel form one unit, thus reducing the time needed for installation.

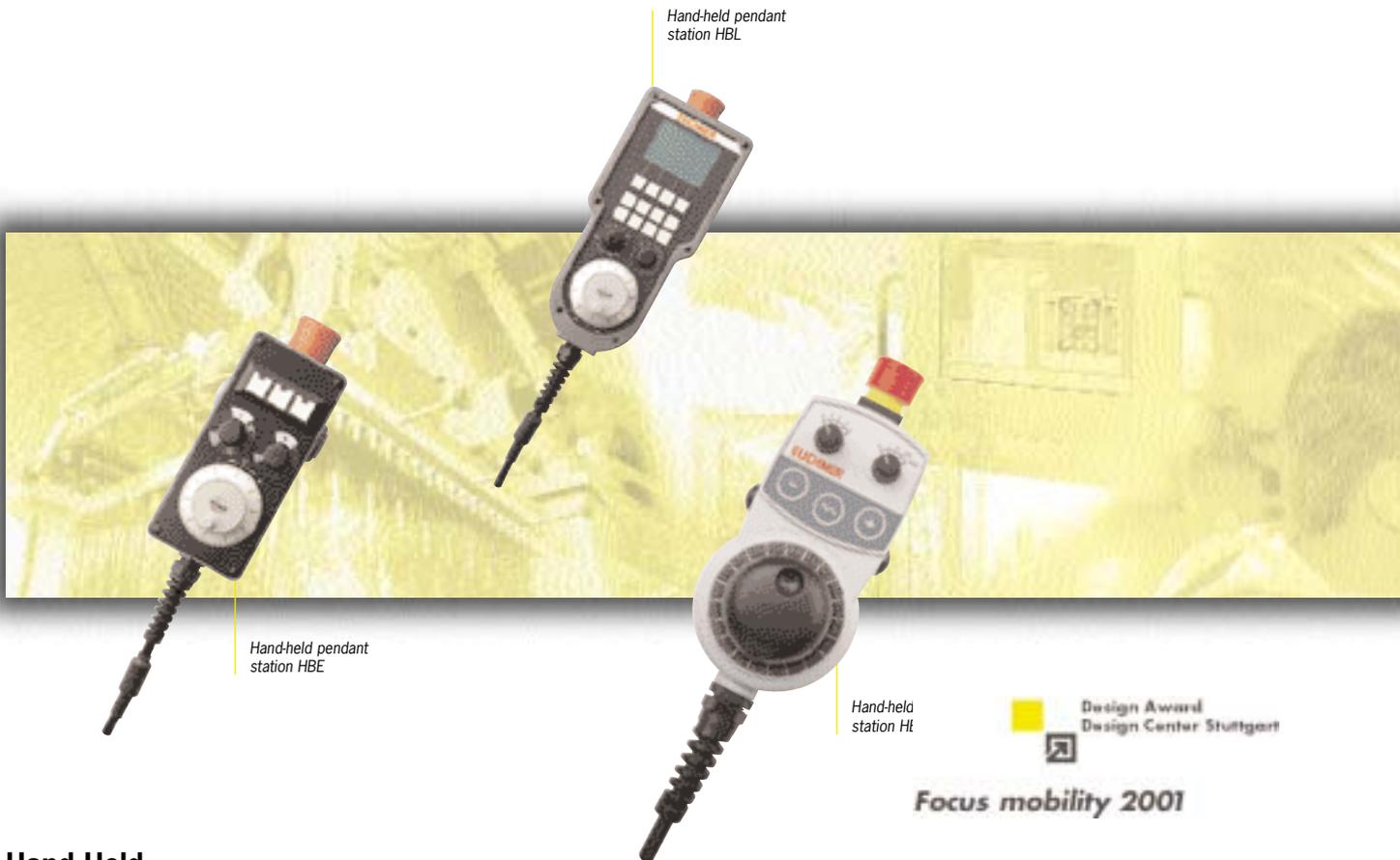
In the case of the HKA handwheel, particular attention was placed on the design and the ergonomics.

The different pulse rates and output stages make the handwheels suitable for all control systems.



As a matter of principle, all handwheels are designed with a wear-free magnetic detent mechanism. This ensures absolute freedom from maintenance.

# Hand-Held Pendant Stations



## Hand-Held Pendant Stations

To make operation of machines easier for the user, the functions of the control panel can be transferred to a mobile input device. Using the hand-held pendant station with enabling switch and emergency stop pushbutton, it is possible to work in hazardous areas of machines and installations. Authorized personnel can enter hazardous areas to perform programming, setting-up, testing and service work.

The wide product range extends from standard housings to custom-built hand-held pendant stations, e.g. with LCD displays, multifunctional keyboards and serial communication ports. Custom-built versions based on the standard devices can also be produced in small quantities.

EUCHNER provides a kit for hand-held pendant stations so that ergonomically designed housings can also be used for single units, e.g. prototypes or special versions. We therefore have the possibility to design hand-held pendant stations according to special demands.

EUCHNER hand-held pendant stations are characterized by their robust plastic housing with high degree of protection IP 65, their multifunctional expandability and ergonomically logical operability.

The three housings HBE, HBL and HBA offer different advantages.

- HBE ▶ Standard housing
- HBL ▶ Bigger size, large front panel, many control elements possible
- HBA ▶ Flat, lightweight housing, award-winning design



## ManMachine



### Electronic-Key-System EKS

With the EKS Electronic-Key-System, it is no problem if a password is forgotten. This system provides access control on PCs and control units.

Nowadays access rights are usually controlled by the issue of passwords. In practice, however, this often leads to unauthorized system interventions. This is where the Electronic-Key-System can be put to optimal use.

By comparison to the issue of a password, considerably more responsibility is assigned to the owner of an Electronic-Key. This provides protection against unauthorized access to operation and visualization systems.

It is often the case that only specific persons have permission to change the process parameters of critical systems. This is the ideal area of application for EKS.

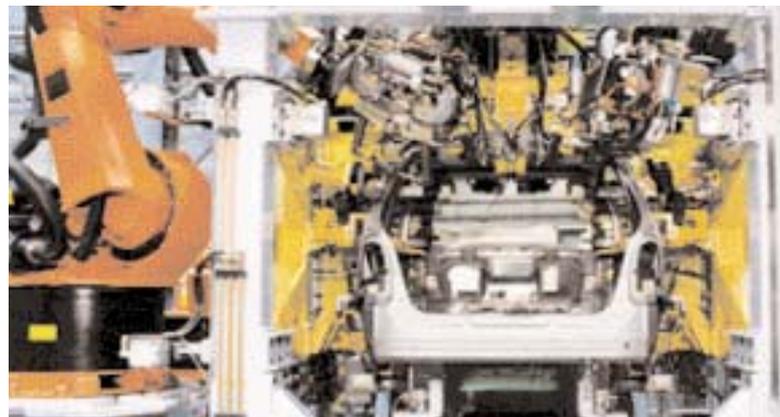
In principle EKS comprises two components: an Electronic-Key and the matching Electronic-Key adapter. The Electronic-Key latches into the Electronic-Key adapter and is retained there during operation. Integrated into the Electronic-Key in the form of a robust tag is a memory chip and an antenna (transponder). This is a non-contact inductive Ident System with a transponder without battery.

There are two memory variants for the data carrier in the Electronic-Key:

- ▶ 4 Electronic-Keys read/write 116-byte programmable plus eight-byte fixed code
- ▶ 4 read-only keys five-byte fixed code

The compact Electronic-Key adapter is available with different interfaces.

Due to the contactless transfer of data, it was possible to design the Electronic-Key adapter from the access side with the high degree of protection IP 67, i.e. suitable for industry.





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