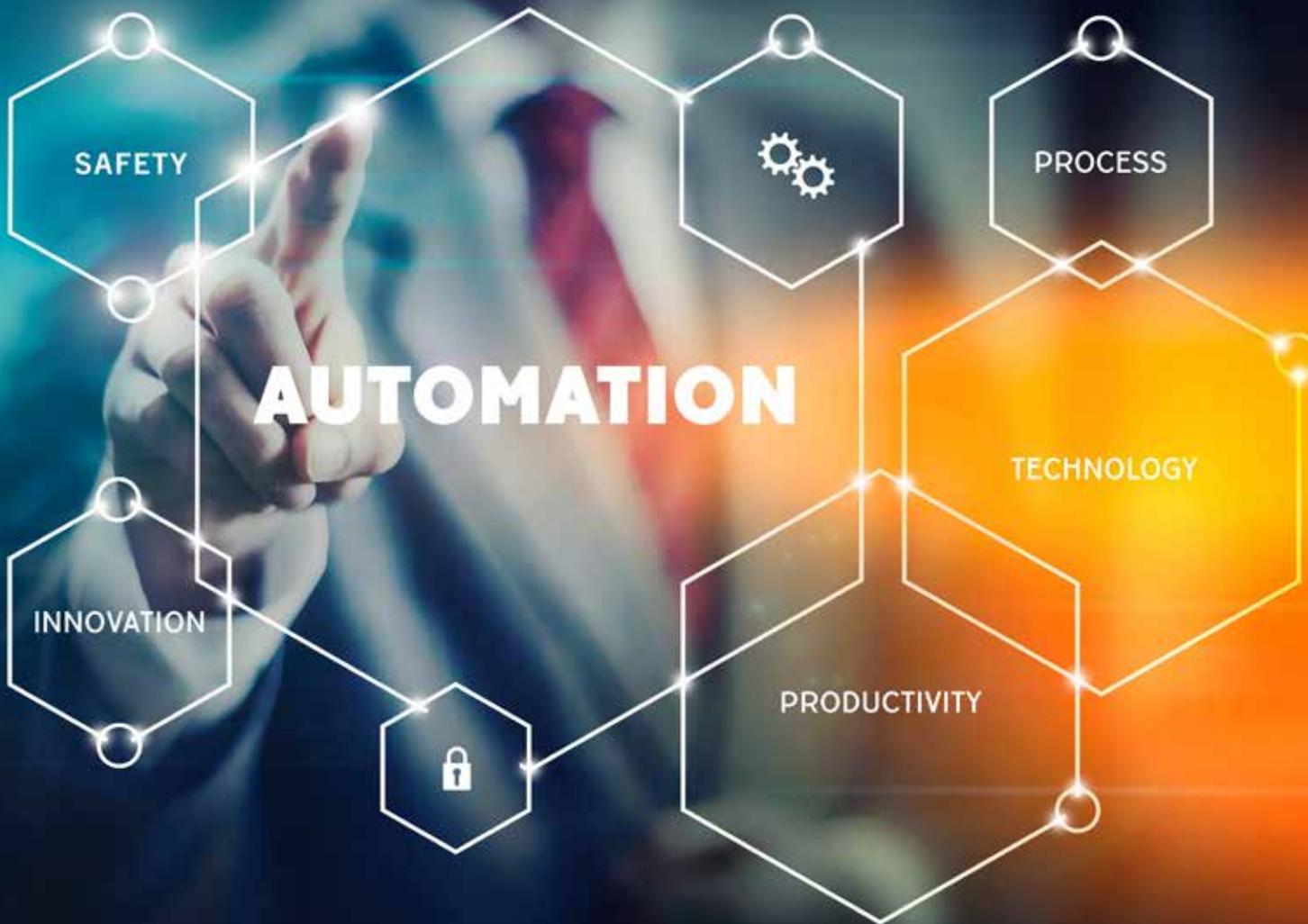


VENUS

AUTOMATION



EUCHNER is one of the world's leading companies in the area of industrial safety engineering.

With products from the three divisions Automation, Safety and ManMachine, EUCHNER has made a major contribution to its customers' business success. Euchner's characteristics is innovating strength and flexibility - and that of course with the highest possible quality.



Transponder-coded safety switches



Electromechanical safety switches without guard locking



Electromechanical safety switches with guard locking



Transponder-coded safety switches with guard locking



Transponder-coded read heads with external evaluation



Euchner Safety Bolts



Safety engineering with AS-Interface



Multiple Limit Switches



Emergency stop devices



ESH Hinge Switch



Electronic-Key-System EKS



Joy Sticks



Hand-held pendant stations



Magnetically coded safety switches

* Approved to Cat 4, PI e



MGB with emergency release handle



ZSM Enabling Switch



MGB-2 with communication interface



Safety switch CES-C07 and Bolt

* Approved to Cat 4, PI e



CTP Guard Locking Switch

MGBS Guard Locking Switch



Safety Bolt

Rope Pull Switch

* Approved to Cat 4, PI e



EKS with USB

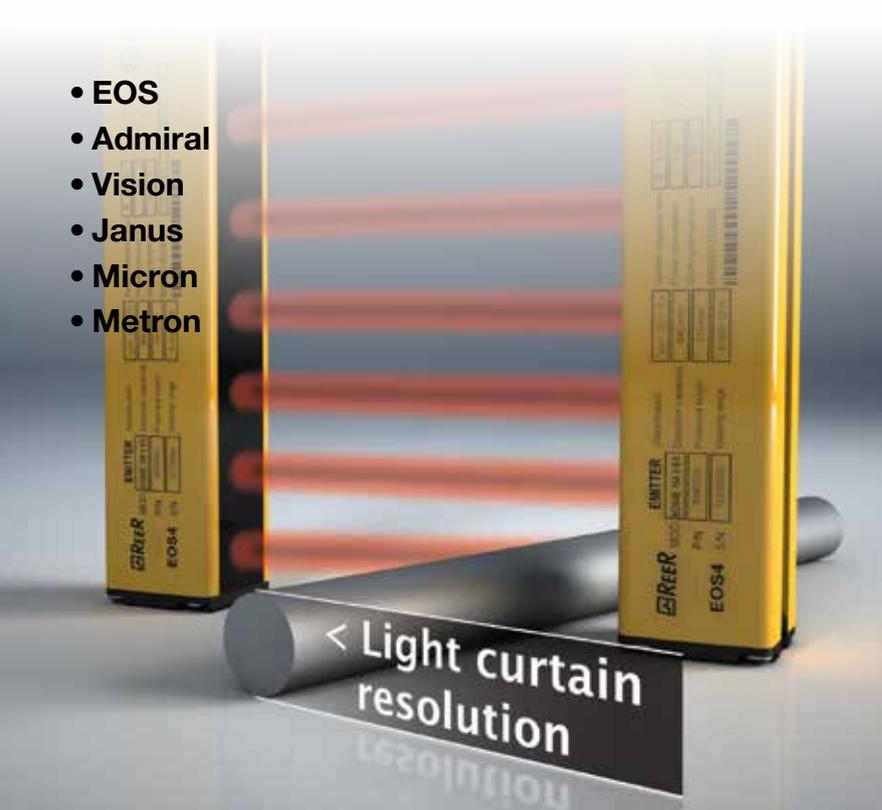
* Approved to Cat 4, PI e



CTP- Transponder coded- Atex Version

Reer was founded in 1959 in Turin, Italy, on the base of a strong vocation to innovation and technology. Reer's safety division is one of the world's leading companies in the design and manufacture of photoelectric sensors for industrial safety.

- EOS
- Admiral
- Vision
- Janus
- Micron
- Metron



SAFEGATE

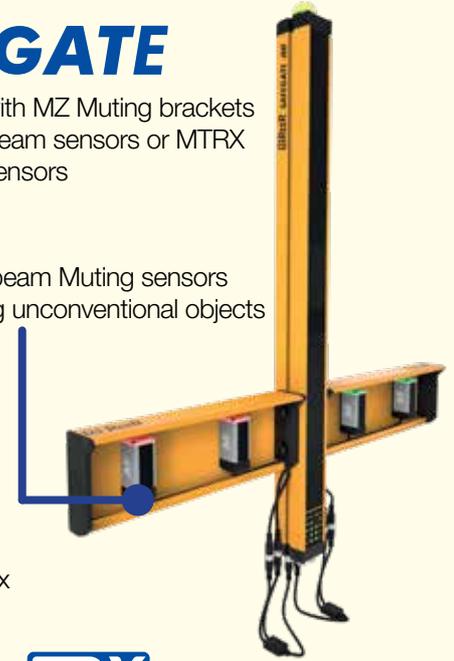
Configuration with MZ Muting brackets with M5 multi-beam sensors or MTRX retro-reflector sensors

M5 multi-beam Muting sensors
Ideal for sensing unconventional objects

New



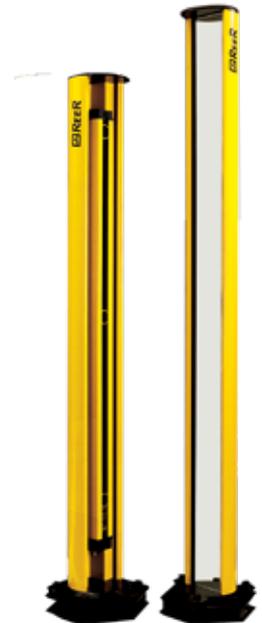
connection box
M SG/O BOX



Also available in **TRX** version with retro-reflector Muting sensors **MTRX** sensors



LC with IP 69K Housing



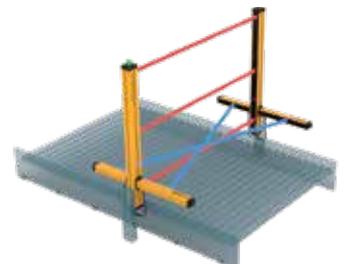
Finger Protection



Hand Protection



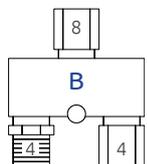
Body Protection



T2X-Crossed Muting

RRFID • MRFID Series

Approved to Cat 4, PI e as per EN-ISO 13849-1.
Series wiring up to 30 sensors.



Y Connectors for series connections of 2 or more sensors

Connection to Mosaic safety controller



M12-8 Pin connector 15 cm pigtail (IP 67)

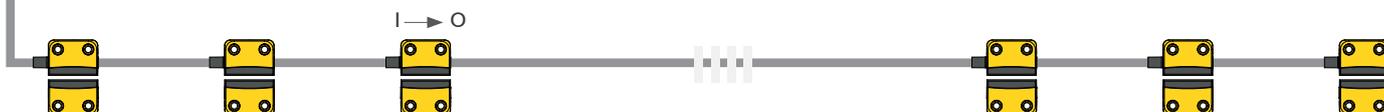
5 mt flying lead (IP 69)



Safety Controller



Transition time between Input and Output: 3 ms, **the shortest in the market**



MRFID B Series



Llion Type 2 Safety Sensor



MGB



MG-M (M 30 Cylindrical)



Connect up to 14 expansions.. to the Master units



Analogue Units

Communication

Speed monitoring

Safety relays

M1S COM



MBx

MCT

MV0/MV1/MV2

MOR4/S8

MR2/MR4

MA4

M ZERO

Additional inputs

Additional outputs

Additional inputs/outputs

Additional status outputs



MI8/MI16/MI12T8

MO2/MO4/MO4L HC S8

MI802/MI804

MOS8/MOS16

Safety Sin/Cos incremental encoder, together with Mosaic, comprise a SIL 3 certified safety function for speed monitoring. Available: Shaft or Hollow shaft versions.

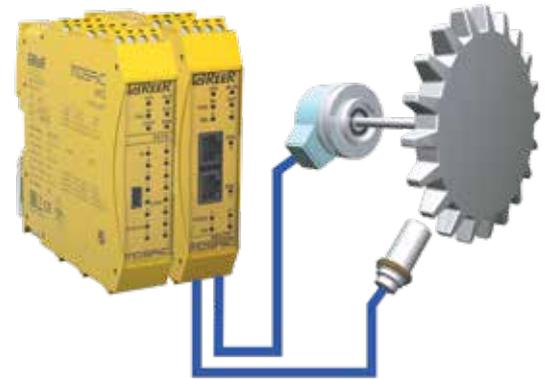
SAFECODER



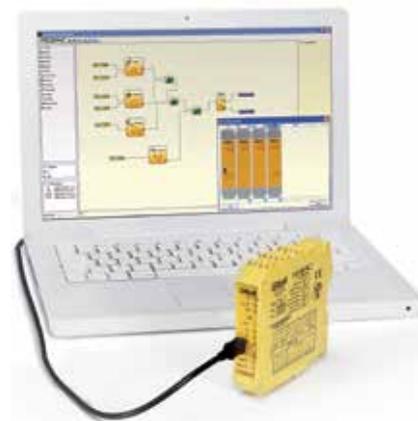
Shaft version



Hollow shaft version



MCT- Distributed Safe Networking (up to 100m)



HM1- DISPLAY UNIT



Alphanumeric display. It displays the messages programmed using the HSD software.

Simulation can start, stop or restart via dedicated menu

Timings setting
When timer operators are included in the actual configuration

Clicking on the button on the lower right of each input block it is possible to toggle its output status

Likewise in the monitor function, also in this case the colour of the line indicates the signal status: green means the signal is at LL1, red means the signal is at LL0

The ReeR's SR SELECT introduces four distinct operating modes, providing the flexibility to connect and oversee various safety devices. These include Safety Light Curtains, Solid-State-Output Devices (such as RFID safety switches), Dual-Channel Emergency Stops, Two-Hand Controls, and Type 2 Safety Photocells.

 <ul style="list-style-type: none"> • Safety Light curtains • RFID Switches • Emergency stops • Two-hand controls • Type 2 Photo cells 	 <ul style="list-style-type: none"> • Safety Light curtains
<p>SR SELECT (2 NO, 6A, 250VAC, Multifunction Safety)</p>	<p>SR ZERO or SR ZERO A (2 NO, 1 NC, 6A, 250VAC, with/without Auxiliary Contact)</p>
 <ul style="list-style-type: none"> • Emergency stop • Safety gate switches 	 <ul style="list-style-type: none"> • Type 2 Photo cells
<p>SR E4 or SR E4R (2 NO, 6A, 250VAC, for safety switches with/without selectable automatic or manual restart)</p>	<p>SR X or SRXM (2 NO, 6A, 250VAC, for safety photocells with/without muting function)</p>
 	
<p>SR ONE or SR ONE M (2 NO, 6A, 250VAC, for safety light curtains with/without muting function)</p>	<p>SR T (2 NO, 250VAC, 6A, for Two-hand control)</p>
	
<p>AD SR0 (2 NO, 1 NC 2A, 250VAC for safety light curtains)</p>	<p>AD SR0A (2 NO, 2A, 250VAC for safety light curtains)</p>
 <ul style="list-style-type: none"> • Emergency stop • Safety gate switches 	 <ul style="list-style-type: none"> • Emergency stop • Safety gate switches
<p>AD SRE3 (2 NO, 6A, 250VAC, Cat. 3)</p>	<p>AD SRE4 (3 NO, 1 NC, 5A, 250VAC, Cat. 4)</p>
	 <ul style="list-style-type: none"> • 2 x PNP Prox sensors • Underspeed, Overspeed Zerospeed. Speed threshold
<p>AD SRT (3 NO, 1NC 6A, 250VAC, for Two-hand control, Cat. 4)</p>	<p>SV MRO or SV MRO U (2 NO, 6A, 250VAC, for Speed Monitoring)</p>



P-Kube 1 Safety handles for FD Series switch

P-KUBE 1 for FD Series



P-Kube 1 Safety handles for FG and FY Series switch

P-KUBE 1 for FG and FY Series



P-Kube 2 Safety handles for NG Series switch

P-KUBE 2 for NG Series



P-Kube Krome Safety handles for NG Series switch

P-KUBE Krome for NG Series

Safety Relay

For Estop, Safety gates, Light curtains

Control voltage of 24VAC/DC
120VAC
230VAC

Cat 4, PI e



CS AR (2NO to 4NO Contacts)

Back EMF Standstill monitor

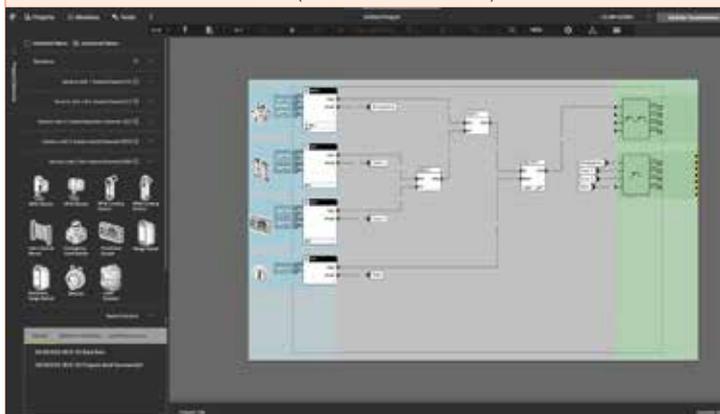
Control voltage of 24VAC...230VAC/DC

Monitoring voltage of 0...690V
Freq: 0..3 KHz

Cat 3, PI d



CS AM (2NO, 1NC, Standstill Monitoring)



Gemis Studio 12 Programming Software

Gemis Programmable Safety controller

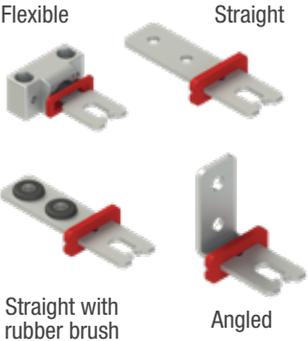
- * Upto 32 inputs
- * Frequeuny inputs
- * Thermocouple inputs
- * Up to 8 Outputs
- * Relay outputs
- * Free Programmable software.



Gemis Programmable Controller CS MP ### Series.

<p>ST- G series</p> <p>22mm 75mm</p> <p>M12-8 pin connector with 20cm pig tail (IP67) 5 mt flying lead (IP 69)</p> <p>Approved to Cat 4, PL e as per EN-ISO 13849-1. Series wiring up to 32 sensors</p> <p>ST- H series</p>	<p>2NC, 2NC+2NO options Options of various activation angle</p> <p>Suitable up to Cat 4, PL e IP 67/69K M12 Plug or Pig Tail</p>
<p>Safety sensors with RFID – ST Series HP – Hinge</p>	
<p>22mm</p> <p>SR-A Series 75mm</p> <p>Options of 2NC, 1NO/NC, 2NC+1NO</p> <p>SR-B series</p>	<p>2NC, 2NC+2NO options Options of various activation angle</p> <p>Cat 4, PL e certified with integrated electronics P 67/69K M12 Plug or Pig Tail Up to 80 Deg C</p>
<p>Magnetic Sensor – SR Series HX – Stainless Steel Hinge</p>	
<p>Up to 8 Devices incl Estop and illuminated Push buttons</p> <p>IO-Link</p>	<p>Emergency Stop with housing – ES Series</p>
<p>Control Device Units – BN Series IO-Link Technology Connection Gateway for Safety Devices – P Connect</p>	
<p>Control Device Units – BN Series IO-Link Technology</p>	<p>Connection Gateway for Safety Devices – P Connect</p>

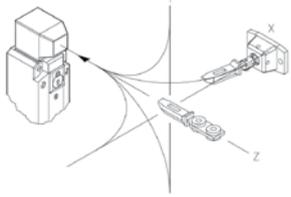
"Pizzato Elettrica is one of the leading European manufacturers of position switches, microswitches, safety" "devices, safety modules, foot switches, control and signalling devices, and devices for elevators."

	<p>FG Series Safety Switch – Metal Housing</p>  <p>Solenoid locking switch with power to lock & Power to release type</p>	<p>Cat 4, PI e switch</p>  <p>Solenoid locking switch with power to lock & Power to release type</p>
<p>FD Series - Safety Switch with Separate Actuator</p>	<p>Cat 3, PI d switch</p>	<p>NG Series RFID Safety Switch – Metal Head and Housing</p>
	 <p>Roller Plunger</p>	 <p>Lever Arm</p>  <p>Adjustable Lever Arm</p>
<p>FY Series Safety Switch – Plastic Housing and Metal Head</p>	<p>"FD Series Position/Limit Switches – Metal Housing"</p>	
 <p>Flexible Straight</p> <p>Straight with rubber brush Angled</p>	<p>Suitable for upto 50m of Rope length</p>  <p>20 metres of rope length</p>	
<p>Actuators</p>	<p>Rope Pull switches</p>	<p>Rope Pull Accessories Kit</p>

Safety relays of the **Wieland** safe RELAY series offer customised solutions for the safety of man and machine. Compact design, flexibility in application, and variable connectivity options are the decisive advantages of these devices, which are available for all safety functions.

	
<p>SNO 4062K-A (2NO, 1NC 24VAC/DC)</p>	<p>SNA 4043K-A or SNO 4083KM-A (3NO, 1NC 24VAC/DC, 115-230VAC)</p>
<p>Safe OFF delay (KL)</p>  <p>Safe ON delay (KP)</p>	
<p>SNV 4063 KL/KP-A (2NO Inst, 1NO Del, 24VDC)</p>	<p>SNV 4076 SL-A (3NO Inst, 3NO Del, 24VDC, 115-230VAC)</p>
<p>2-Hand Safety Relay</p> 	<p>Expander module</p> 
<p>SNZ 4052 K-A (2NO, 1NC, 24VDC, 230VAC)</p>	<p>SNE 4024K-A (2 x 2NO, 1NC 24VDC)</p>
<p>Expander Module</p> 	<p>Expander Module</p> 
<p>SNE 4004K-A (4NO, 1NC , 24VAC/DC)</p>	<p>SNE 4028S-A (8NO, 2NC)</p>
<p>Expander Module</p> 	<p>Back EMF Standstill Detector</p>  <p>* SIL 3, Cat 4, PI e approved</p>
<p>SNE 1 (2 Change over contacts, 24VDC)</p>	<p>SVM 4001 K-A (2NO, 24 VDC)</p>

Sensors of the **Wieland** sensor PRO series ensure the effective protection of people in machine building and system engineering. The sensor PRO series includes contactless safety sensors, such as transponder switches, solenoid switches, light grids, light curtains, and rotary encoders as well as mechanical safety switches, such as emergency stop buttons, position switches, and guard controls.

<ul style="list-style-type: none"> * M8 Connector * 3 m flying lead 	 <ul style="list-style-type: none"> * M8 Connector * M12 connector * 3/5/10 m flying lead * with LED 		
SMA 01## (2NC or 1NO/1NC)	SMA 02## (2NC or 1NO/1NC)		
 <ul style="list-style-type: none"> * M8 Connector * 3 m flying lead 			
SMA 03## (2NC or 1NO/1NC)	SIN #### (Solenoid locking guard switch)		
			
SMS #### Safety interlock		Wipos Power supplies (1.25 A to 40A)	
			
SLS #### Position Switches		Flare Timers and Relays	
			
E-stop Enclosure (SNH 6001)	E-Stop Shroud & Key	E-Stop Illuminated	E-Stop Contact Block

SAFETY - ALL IN ONE with SAMOS® PRO COMPACT

With the highest power in the smallest space, samos® PRO COMPACT sets new standards in the area of safe machine automation. Our all-rounder for all safety tasks, such as emergency stop, safety doors, light barriers, muting, presses, monitoring of speed, direction of rotation, and position, and so much more. Special libraries in the PLUS version offer outstanding added value for Motion, Presses, Muting, Analog and Combustion applications.



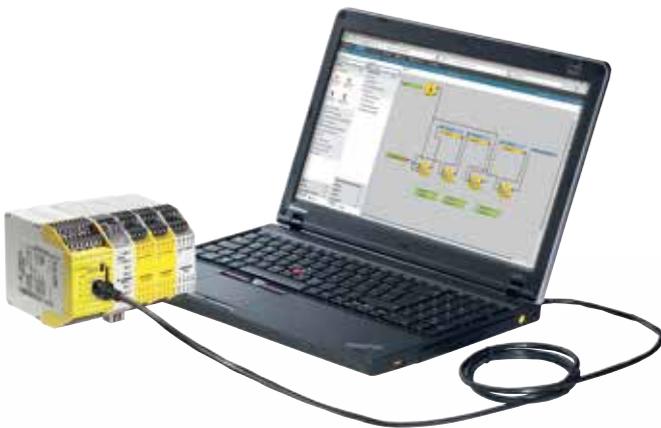
SP-COP 1 - X



SP-COP 2 - X



EXTENSION MODULES



SAFE
ANALOGUE
MODULES



GATEWAY MODULES



SAFE MOTION WITH **SAMOS[®] PRO COMPACT PLUS**

STANDSTILL
MONITORING



SAFE
DIRECTION



SAFE SPEED
RANGE



SAFE LIMITED
SPEED



SAFE SPEED
MONITORING



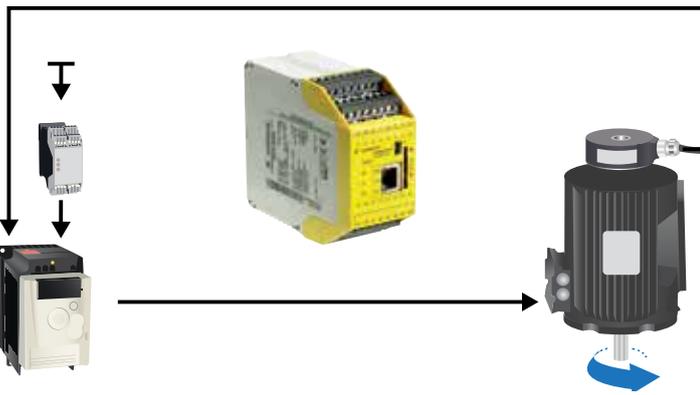
SAFE LIMITED
POSITION



SENC – SAFE HTL INCREMENTAL ENCODER.
SIL 3, CAT 4, PL E APPROVED.

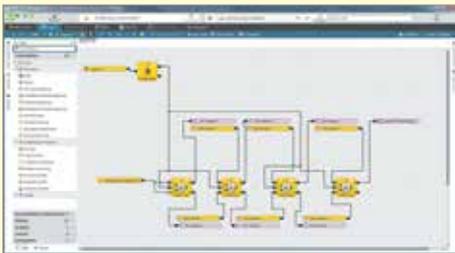


SENC HOLLOW ENCODER

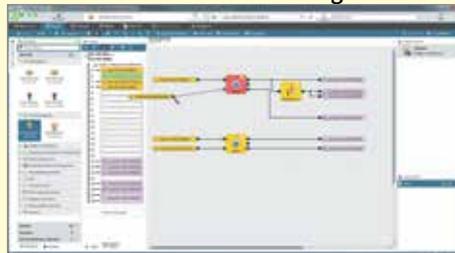


INITIATORS

samosPLAN6 LOGIC COMPLEX



samosPLAN6 module configuration



samosPLAN6 simulation



UAM is world's smallest, safety area laser scanner from Hokuyo, Japan. With 5 m safety, 20 m warning zone and 2 x 2 OSSD outputs, it is approved to SIL 2, PL d, Cat 3 for AGV, vertical and horizontal guarding applications.



Compact design: 95 x 80 x 80 mm, 0,8 Kg



SAFETY LEVEL

TYPE 3

SIL 2
PL d - Cat. 3

Product number

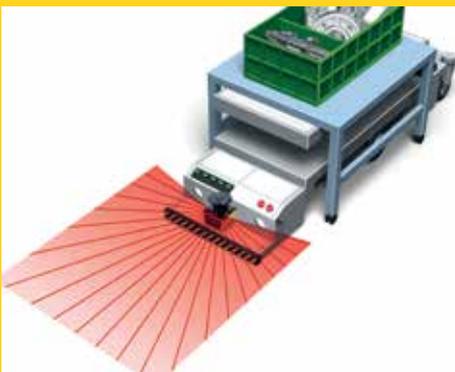
UAM-05LP-T301 (3 m cable)

Product number

UAM-05LP-T301 C (connector)

Expands the range of safety applications

Collision prevention



32 safety area patterns to accommodate the AGV travel path for collision prevention

Presence detection



Detects humans or objects entering the hazardous area

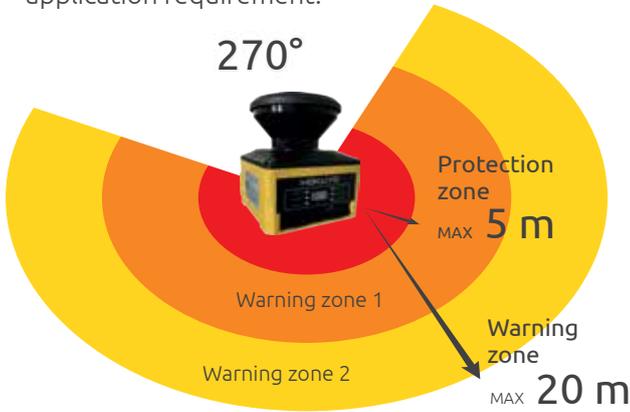
Intrusion detection



Detects access into critical zone

Protection over a wide range

Up to 5 meters of protection zone and 20 meters of warning zone configuration to suit various application requirement.

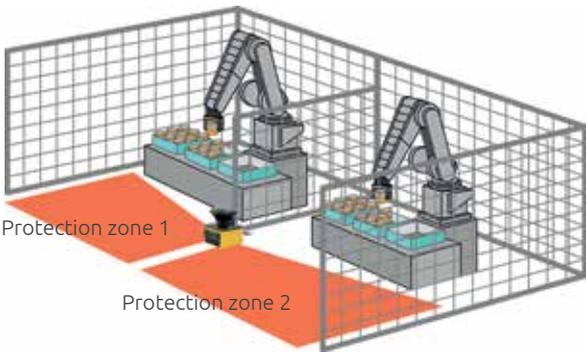


2 operating modes

- 2 warning zones + 1 protection zone
- 2 simultaneous protection zones

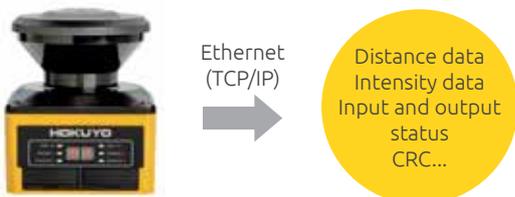
Dual protection mode

UAM can simultaneously protect two hazardous areas. Separate OSSD signals are triggered for the respective protection zones making it possible to guard two machines with a single UAM.



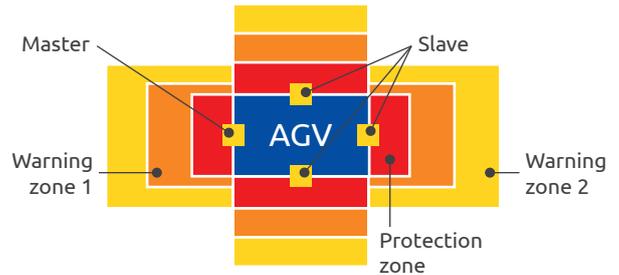
Data output via ethernet

Measurement data can be acquired via Ethernet with status of input/output signals and cyclic redundancy check code. Also supports command in SCIP2.0 protocol.



Master-slave function

Maximum 4 units of UAM can be interconnected for Master-Slave operation when multiple units are required to guard the hazardous area. The system can be controlled by connecting the input and output signals to Master unit only¹.



¹ It is not possible to control the actuators via master-slave bus communication

Encoder input

In AGV applications, area is switched depending on the vehicle's speed. Speed and direction of travel provided via encoders are constantly monitored to switch the area and stop the AGV during abnormal travel.



SD card for configuration

Configuration data can be saved in a SD card which in turn can be used for configuring the UAM without connecting it to a PC. The feature is useful while replacing the UAM or configuring multiple units with the same settings.



The DOLD philosophy,

“Our experience. Your safety” constitutes their program: Offering solutions based on over 80 years of experience with a workforce of more than 400 employees, Dold manufacture high quality products using state-of-the-art production plant at Furtwangen facility in Germany.

		
<p>IK 8800 Relay Pulse activated Relay</p>	<p>BA 9043 Undervoltage relay</p>	<p>BH 5928 Safety relay Time Delay Safety Relay</p>
		
<p>MK9960N Multi-function Timer</p>	<p>LH5946 Standstill monitor</p>	<p>BA9054 Varimeter Voltage Relay</p>
		
<p>LG5925 Dold safety relay 3NO, 1NC</p>	<p>UH5947 Speed and Standstill Relay</p>	<p>UH6937 Speed and Freq Monitor</p>
	 <p>Application range up to category 4 and performance level (PL) e in accordance with EN ISO 13849-1</p> <p>High switching capacity, currents of 25 A to 800 A (AC23)</p> <p>Different designs available</p> <ul style="list-style-type: none"> • Mechanical • Safety switch • Safety switch with lock 	
<p>BA7961 Contact Protection Relay</p>		
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Range 200 kΩ - 2 MΩ</p> <p>BD 5877</p> </div> <div style="text-align: center;">  <p>Range 5-100 kΩ</p> <p>MK 5880 N</p> </div> </div>		
<p>Insulation Monitoring Relays</p>	<p>Power Interlocking - ZRH01SLPR40</p>	

The DOLD philosophy,

“Our experience. Your safety” constitutes their program: Offering solutions based on over 80 years of experience with a workforce of more than 400 employees, Dold manufacture high quality products using state-of-the-art production plant at our Furtwangen facility in Germany.

UH 5947



Standalone safe standstill and speed monitoring using Encoder/prox sensors: UH 5947. Certified to Cat 4, PL e to EN ISO 13849-1, SIL 3 to EN ISO 61508/62061.

UH 6937

Standalone Safe Frequency monitor for 1 phase/3 Phase AC motors: UH 6937. Certified to Cat 4, PL e to EN ISO 13849-1, SIL 3 to EN ISO 61508/62061.



Wireless Safety System with enable switch. BI 6910 with RE 6910. Certified to Cat 4, PL e to EN ISO 13849-1, SIL 3 to EN ISO 61508

Wireless Safety System with Emergency stop. BI 5910 with RE 5910. Certified to Cat 4, PL e to EN ISO 13849-1, SIL 3 to EN ISO 61508

- up to 150- 200 m under industrial ambient conditions *
 - approx 600 m in open area
 - 433.1... 434.67 M Hz
 - Lithium-Ion Battery
- * distance can vary depending on aerial, roof construction and metal walls etc.



UH 6900 Pair mode



Wireless Safety system bi-directional radio-controlled system in pair mode: UH 6900

- High availability up to 800 m
- 433/869 MHz Options
- High availability up to 800 m
- Cat 4, PL e. SIL 3 Certified

UH 6900 - group

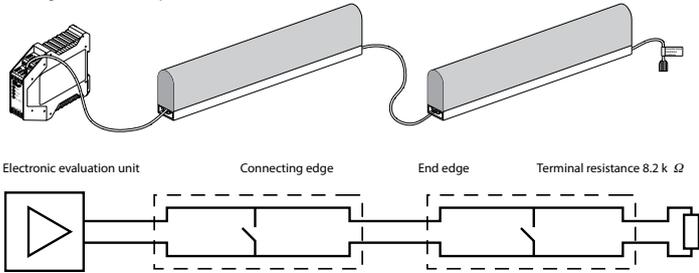
Wireless Safety system bi-directional radio-controlled system in group mode: UH 6900

- High availability up to 800 m
- 433/869 MHz Options
- High availability up to 800 m
- Cat 4, PL e. SIL 3 Certified



Established 35 years ago; **ASO Safety GMBH** is leading European manufacturer of safety edges, bump strips, safety mats and safety controllers. With wide range, huge stock and competitive pricing, Venus Automation is here to help with ASO products.

Wiring in Series up to Cat 3, PI d



Sentir Plug and Play Safety edge



Safety mats



Elmon 41-322 Relay Cat 3, PI e



AL 25-14



Sentir 25.45 TTla



Sentir 25.45 TTLL

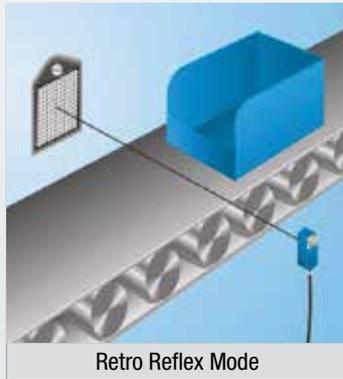


Sentir 25.45 TT

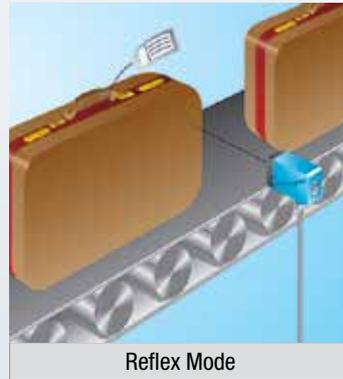
Balluff and Wenglor are leading German sensor manufacturers. Venus Automation offers the best product from these two manufacturers to suit your application.



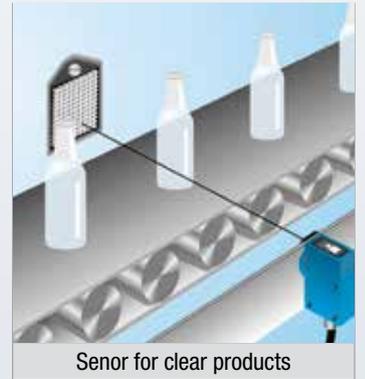
Through Beam Mode



Retro Reflex Mode



Reflex Mode



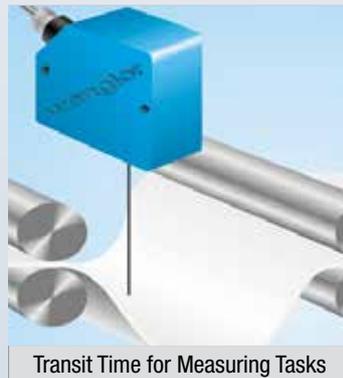
Sensor for clear products



Reflex Sensor for Measuring Task



Print Mark Sensor



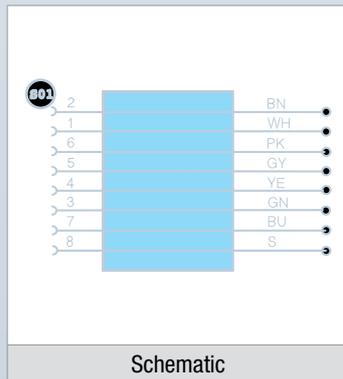
Transit Time for Measuring Tasks



Ultra Sonic Sensor



Connecting Cable



Schematic



Bar Code Sensor



Colour Sensor



Transit Time Sensor

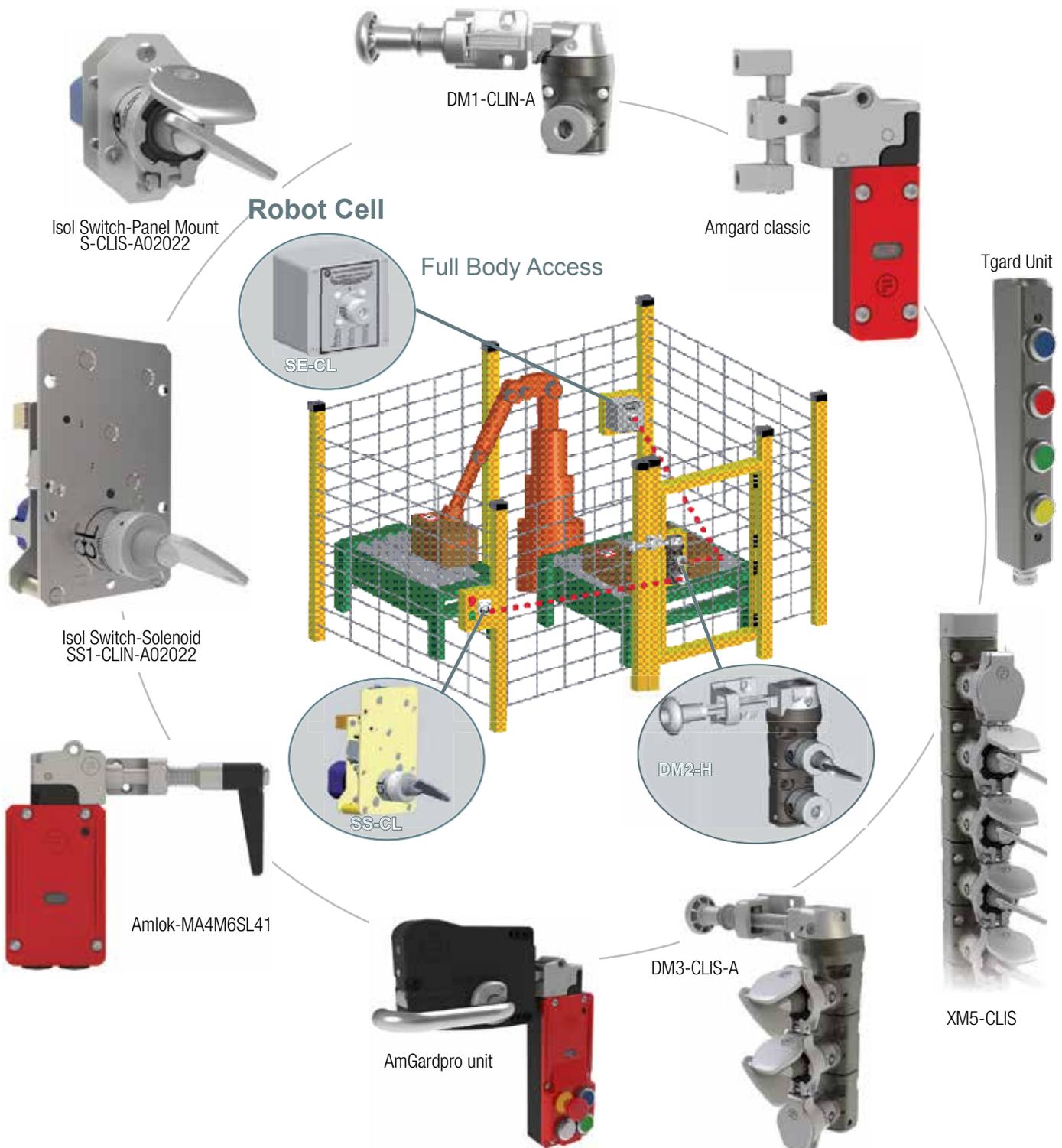


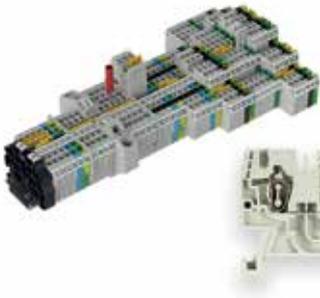
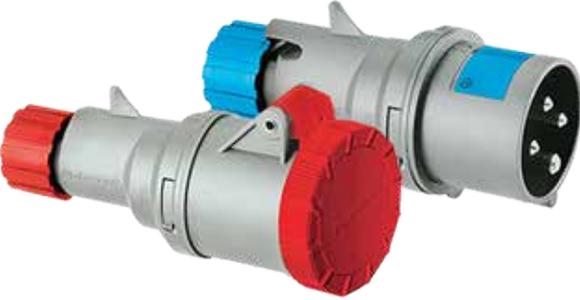
Vision System



Fluid Sensors

Fortress Interlocks is UK based company established 40 years ago. Product portfolio includes trapped key interlocks (mGard), heavy duty safety gate switches, with and without guard locking (amGard Pro) and standard duty interlocks with in-built control functionality (tGard).



		
<p>FASIS WKFN Spring Connection</p>	<p>REVOS EXI- For Mining Applications</p>	<p>SELOS WT Screw Connection</p>
		
<p>RST Connectors</p>	<p>REVOS Basic - Industrial Multipole connectors</p>	<p>PODIS - Energy Bus system</p>
<ul style="list-style-type: none"> • X-CEE Series • IP 67/68/69 • 16A-125Amps 	<ul style="list-style-type: none"> • X-CEE Series • IP 67/68/69 • 16A-125Amps 	
<p>Interlocked Plugs and Sockets</p>	<p>Interlocked- Sockets and Outlets</p>	
<ul style="list-style-type: none"> • Multimax series 	<ul style="list-style-type: none"> • topTER series 	
<p>Interlocked Plugs and Sockets</p>	<p>Interlocked- Sockets and Outlets</p>	

Nuova-Elettronica:

A family based innovative company based in picturesque Citta Delle Pieve of Umbria region of Italy. Nuova-Elettronica have been in business for over 30 years. They are a leading Italian manufacturer of Laser safety system for press brakes.



DSP Laser System is Type 4, ESPE to EN 61496-1:2014 and EN 61496-2:2014. It is certified to PI e, Cat 4 as per EN ISO 13849-1.



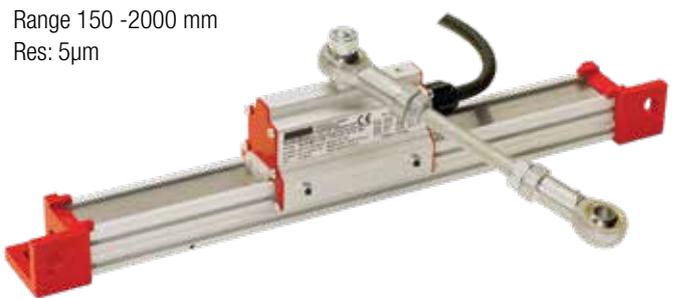
DSP Laser RX



DSP Laser TX



DSP Laser Support arm



Range 150 -2000 mm
Res: 5µm

Magnetic Linear Incremental Encoder- For Press Brakes.

Upto 5000 PPR
6/8/10 mm Shaft



PRI-50 Rotary Incremental Encoder- 50 mm

Upto 3500 PPR
4/6 mm Shaft



PRI-40 Rotary Incremental Encoder- 40 mm

Ancillary Products

Venus Automation offer range of Industrial Automation products like, Energy chain and cables

- Multicore flexible cables
- Cable reels
- Safety Contactors
- Modular safety fencing
- Push buttons
- Multipole connectors
- Festoon systems
- Safety pneumatic valves
- Stack light
- Muting lamps
- Glands and conduits
- Cable trolleys
- Safety wireless devices
- Sound/beacons/alarms



Contactor



Safety Pneumatic Valve



Energy Chains



Pendant Stations



Foot Pedal Switch



Stack Lights

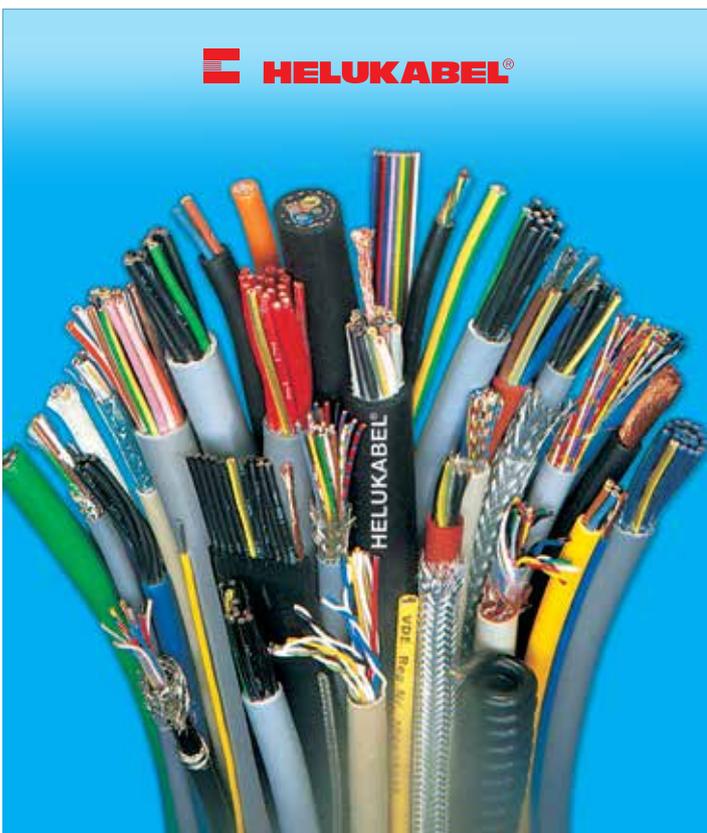
Push Buttons



Emergency Stop / Legends



Power Supplies



Multi Core Flexible Cables



Multipole Connector

Axelent is a leading Swedish company specializing in manufacturing and construction applications, delivering safety, speed, and smart solutions to clients worldwide.

X-Guard®- Complying with 2006/42/EC

Mesh Panels

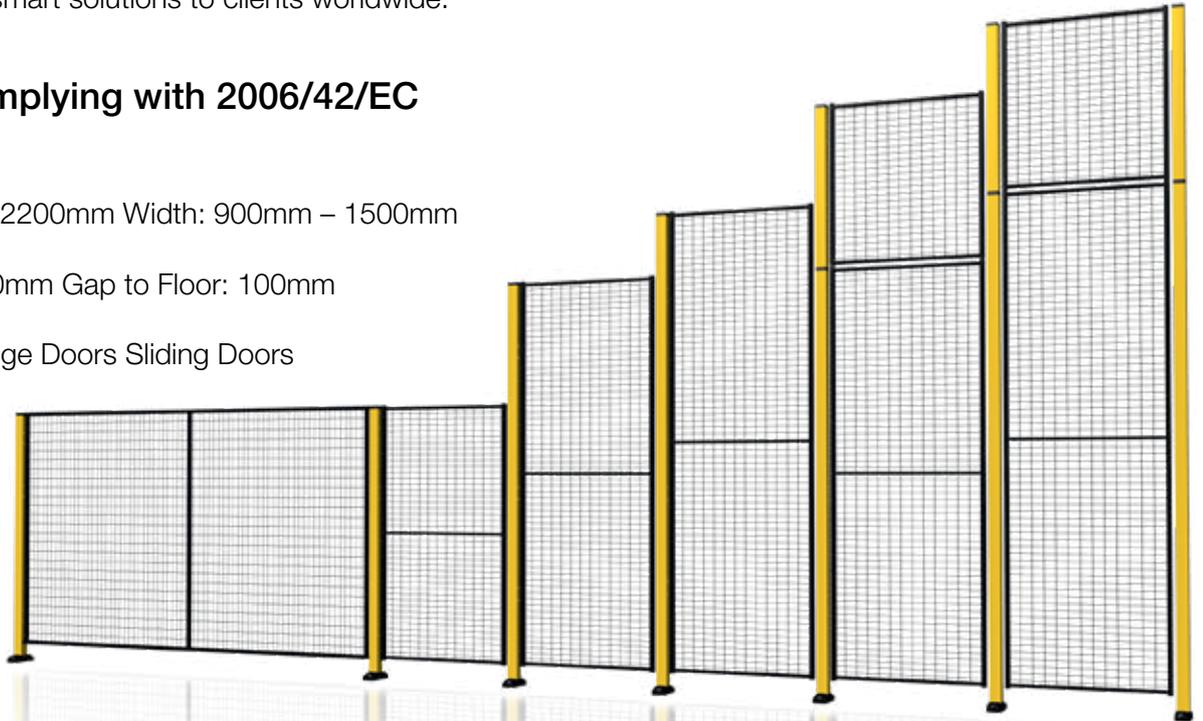
Height: 0750mm – 2200mm **Width:** 900mm – 1500mm

Posts

Dimensions: 50x50mm **Gap to Floor:** 100mm

Doors

Single & Double Hinge Doors Sliding Doors



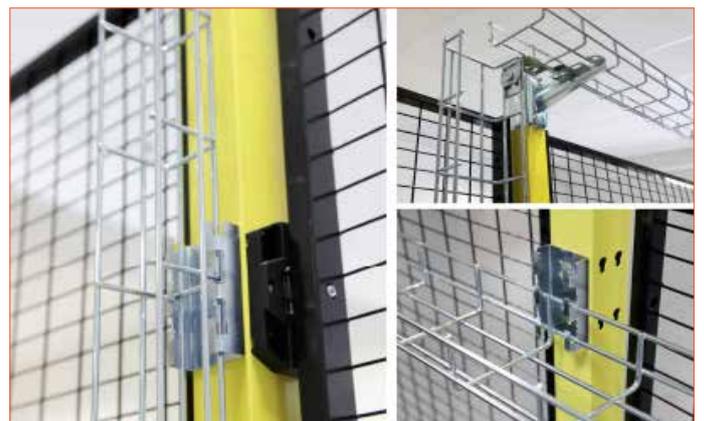
- Mesh Size 20x20mm – Hazard must be 120mm away
- Mesh Size 50x50mm – Hazard must be 850mm away

Source AS 4024.1-1801-2019



Cable Trays

1. Keyhole mounting: For fast installations in the post keyholes. Trays 60-120 mm.
2. Top mounting: Quick and discrete installation that follows.
3. X-Guard's top edge. Trays 60-120 mm.
Cantilever mounting: This option gives a stable installation over the machine guard and most possibilities/ solutions. The best solution for several doors/sliding doors. Trays 60-420 mm



Schlegel pushbuttons and switches stand for highest functionality and quality and for unique and multi-award winning design. As the link between human and machine, they are used in operator control panels of production plants, in dashboards of ships, in lifts or in the cockpit of industrial vehicles.



Mechan Controls, a UK-based company established in 1972, specializes in designing and manufacturing in Magnetic Safety Switches and RFID Safety Switches.

Magnasafe			
<p>52mm</p>			
MS5		MS5SS (stainless steel)	
<p>82.5m</p>		<p>81.5m</p>	
MS6		MS6SS (stainless steel)	
(1NO, 1NO + 1NC, 2NO, 2NO + 1NC (with door open))		MS8	
		MS8SS (stainless steel)	
		2NO, 2NO + 1NC (with door open)	
HE-Series			
<p>52mm</p>			
HE1 (Coded Magnetic)		HE1SS (stainless steel)	
*Other variations are available			
Magnasafe <ul style="list-style-type: none"> • Housing: Red ABS, Resin Encapsulated • IP67 & IP69K • Stainless Steel Variants • High Temperature Variants up to 125°C • Tamper Resistant 		HHE-Series <ul style="list-style-type: none"> • Solid State, Coded Magnetic Safety Switches • Standalone, Volt-Free Contact Outputs • Dual Colour Indication on the Safety Switch • Shock and Vibration Proof • IP67 & IP69K, Fully Sealed • Stainless Steel Variants 	

COMITRONIC-BTI is a European manufacturer of machine safety and automation components. Range of products includes coded contactless safety switches, polyvalent safety modules, RFID uniquely coded switches, EX solution which covers zone 0 to zone 20, innovative contactless interlocking solution and dual colour touch sensitive buttons and lighting products.

Comitronic-BTI products are well implemented into food industry- packaging, bottling industry etc.

<p>* Cat 4, PI e approved</p> 	 <p>* Holding force: 936N * 316 Stainless Steel</p>
<p>SM2 NDP OX (Electro magnetic locking)</p>	<p>SM2 (Power to unlock/lock version)</p>
	
<p>Optopus</p>	<p>Optopus Dec</p>
 <p>*Holding force: up to 580 N * INOX 316 L Mirror polished</p>	 <p>Holding force: up to 580 N</p>
<p>SM1 (Power to unlock/lock version)</p>	<p>SM1 PL (Power to unlock/lock version)</p>
	 <p>-30°C to +110°C.</p>
<p>Optopus Dec</p>	<p>Trithon</p>

Risk Assessment Plant and Equipment



Plant Assessment	Plant assessment report will provide an “overview” of the current safety status of your company’s production equipment.
Venus Provides	<ul style="list-style-type: none"> • An on-site examination of plant and equipment. • Analysis of primary hazards. • Evaluating existing risk reduction principles. • Comparison of machine compliance with existing regulations. • Priority list (hierarchy of risk).
Risk Assessment	Risk assessment report will identify hazards, evaluate risk and provide comprehensive risk control recommendations complying with AS4024.1-2006 (machine safety standard) and OHS regulations.
Venus Provides	<ul style="list-style-type: none"> • On-site inspection • Consultation with all relevant personnel • Provide a detailed report documenting risk control recommendations
Safety Design	Safety design includes component selection, Hardware (Safety Schematics), Software development and customer training.
Venus Provides	<ul style="list-style-type: none"> • Safety requirement specification • Detailed electrical, mechanical, software and control system design • Component selection
Validation	Validation analysis complying with AS4024.1502-2006
Venus Provides	<ul style="list-style-type: none"> • Assessment of existing design against safety requirements • Evaluate selected components • Test of safety related hardware and software

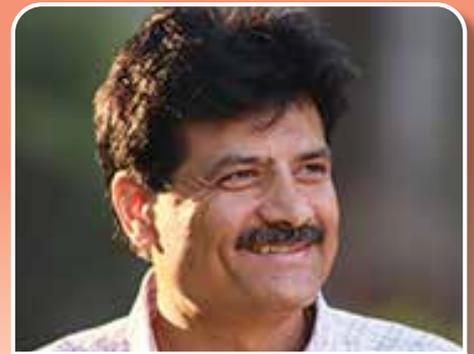
Safety Services

- ✓ Technically qualified and TUV certified safety engineer and trainer.
- ✓ Professional Indemnity Insurance Cover
- ✓ More than 22 years experience in Machine Safety
- ✓ Bachelor of Electrical Engineering
- ✓ Chartered professional member of the Institution of Engineers Australia



Venus provides expert training for machinery and equipment safety.

Our training is based on AS 4024.1-2014 *Safety of Machinery* and Work Health and Safety Legislation. Venus Automation is a solution provider for all automation tasks. We support your safety personnel and engineers whilst implementing your requirements and help you to achieve safe automation-economically and efficiently. With our applications and process knowledge, together with a comprehensive expertise in relevant safety standards, we can work with you to implement optimal automation solutions in any industry section. Topics covered for one day and two day training courses.



"Safety first" – It's every employers responsibility - Raju Kotecha

SAFETY Introduction (day 1)

This course has become very popular due to it's vast amount of information and value for money. It has been designed to provide basic knowledge on how to make machinery safe. The course has been updated to include the key points of machinery safety with reference to the new WHS legislation and Australian Standard AS 4024.1-2014 Safety of machinery.

SAFETY Advanced (day 2)

This newly developed course is a follow on from the Introduction Course and has been specially put together for technical staff who are given the very important task of building safety features into new machinery or upgrading the safety features on existing machinery. It delves into much more detail on the key aspects of mechanical and electrical safety design for machinery.

Customised courses.

We can create customised courses that cater for the specific needs of your organisation such as conveyor safety, Lock out tag out/energy isolation, risk assessment, machine guarding, safety control system design, etc.

Venus Machine Safety Training:

Introduction:

- Fundamentals of safety as per AS 4024.1-2014 (safety of machinery standard)
- Introduction to Workplace Health & Safety Act and Regulations
- Responsibility of stake holders incl. employers, designers, importers, manufacturers etc.

Risk Assessment

- Risk Assessment to AS 4024:1201:2014
- Step by step procedure for risk assessment based on real examples.
- Introduction to risk assessment using EN ISO 13849 and IEC 62061 Standard.
- Introduction to risk reduction using principles of AS 4024.1302-2014 & EN ISO 13849 (PI)

Guarding:

- Hierarchy of guarding as per relevant safety legislation.
- Hierarchy of controls as per relevant safety legislation.
- Type of guards, definitions and examples.
- Safety distance as per relevant sections of AS 4024.1302-2014. (safety of machinery standard)

- Advantages and disadvantages of fixed guards, interlocked guards, light curtains, two hand controls, safe timer devices.
- Introduction to hold to run devices
- Emergency stop devices requirements

Safety system design and Validation: (Topic of two day course)

- Introduction to Safety system design as per AS 4024.1501-2006 & AS 4024.1503-2014 and Validation as per AS 4024.1502-2006.
- Functional Safety as per EN ISO 13849 and Sistema: (Topic of two day course)
- Detailed review of EN ISO 13849-1 (Performance level)
- Practical example of risk assessment and validation using Sistema (free) software.
- Requirements of Hydraulic and Pneumatic systems for machine safety.

Customized Training Courses: (Tailored Course for your organization specific requirement)

Programming Safety controllers: (includes hands on wiring exercise)

- The available hardware for Programmable controllers and the maximum Input/Output configuration allowed (Options: Wieland-Samos PRO, Pilz- Pnoz multi, Reer- Mosaic controller)

- How the product is programmed
- How to upload and download a program to the controller.
- How to monitor a program's functionality.
- How to view a program's error messages and remedy any faults
- Additional topics such as standard communication, PMI/diagnostics display configuration and networking of safety controllers can be included as required.

Lock Out Tag Out:

- Detailed understanding of the requirements of LoTo (Lock Out Tag Out) in relation to machinery safety.
- Legal requirements and industry best practice.
- Know the responsibilities of those involved in Lock Out Tag Out Process.
- Have a clear understanding of the main procedures, documents and processes required to implement Lock Out Tag Out successfully.
- Be qualified to successfully and safely perform Lock Out Tag Out.

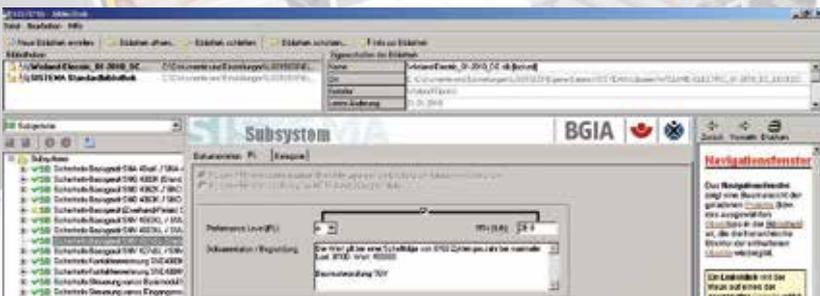
The seminar provides the necessary legal basics and understanding of standards to evaluate the safety of machinery and to design and calculate safety functions. The seminar is a co-operation between SGS-TÜV Saar and Wieland – Venus Automation. It covers the safety aspects of machinery with the focus on electrotechnical aspects.

Inform, Educate, Develop

Whether operations manager, machine designer or service technician-the safety of machinery and equipment affects everyone. That is why Venus Automation is offering the CESE Course for those interested. This focused course is held by qualified experts in different subjects such as liability issues, legal principles and technical or normative matters. We aim to help you gain an overview of functional safety! In these practical seminars, we provide you with up to date expert knowledge about laws, guidelines and standards in a concise form. You can keep up with developments without taking time away from concentrating on your core business.

Our training course is constructed to give you a professionally recognised qualification and become a competent practitioner and knowledgeable in the key areas related to machine safety. Our expert trainer and support team will be able to directly address your questions and concerns throughout this course - and not only for questions in the legislative and standards issues but also for electrotechnical and software areas. At the same time, the conception, structure and delivery of our training corresponds to the relevant laws and general standards. This is why our 3-day CESE seminar is certified by SGS-TUV Saar.

Description	The course conveys the required legal and normative principles needed to properly evaluate the functional safety of a machine and to design and calculate safety functions. This is a cooperative course between Wieland and SGS-TUV Saar covering the safety-technical aspects of machinery and equipment with a focus on electro technology.
Contents	EU directives, laws and standards Risk assessment according to EN ISO 12100 Functional safety according to EN ISO 13849-1 and -2 Safety-related sensor, logic and electrics Realising performance level PL Consideration and validation of safety-related entire systems
Schedule & Event location	Date: Please check www.venusautomation.com.au
Duration	• 3 days
Costs	• \$3,500 including TUV examination and TUV certificate
Target group	• Designers • Developers • Maintenance personnel • Safety officers Safety responsibility holders in machine engineering
Requirements	At least 2 years' professional experience in the areas development, construction and maintenance of functional safety systems
Course size	Max. 10 people



For further information regarding these products and services please contact Venus Automation

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