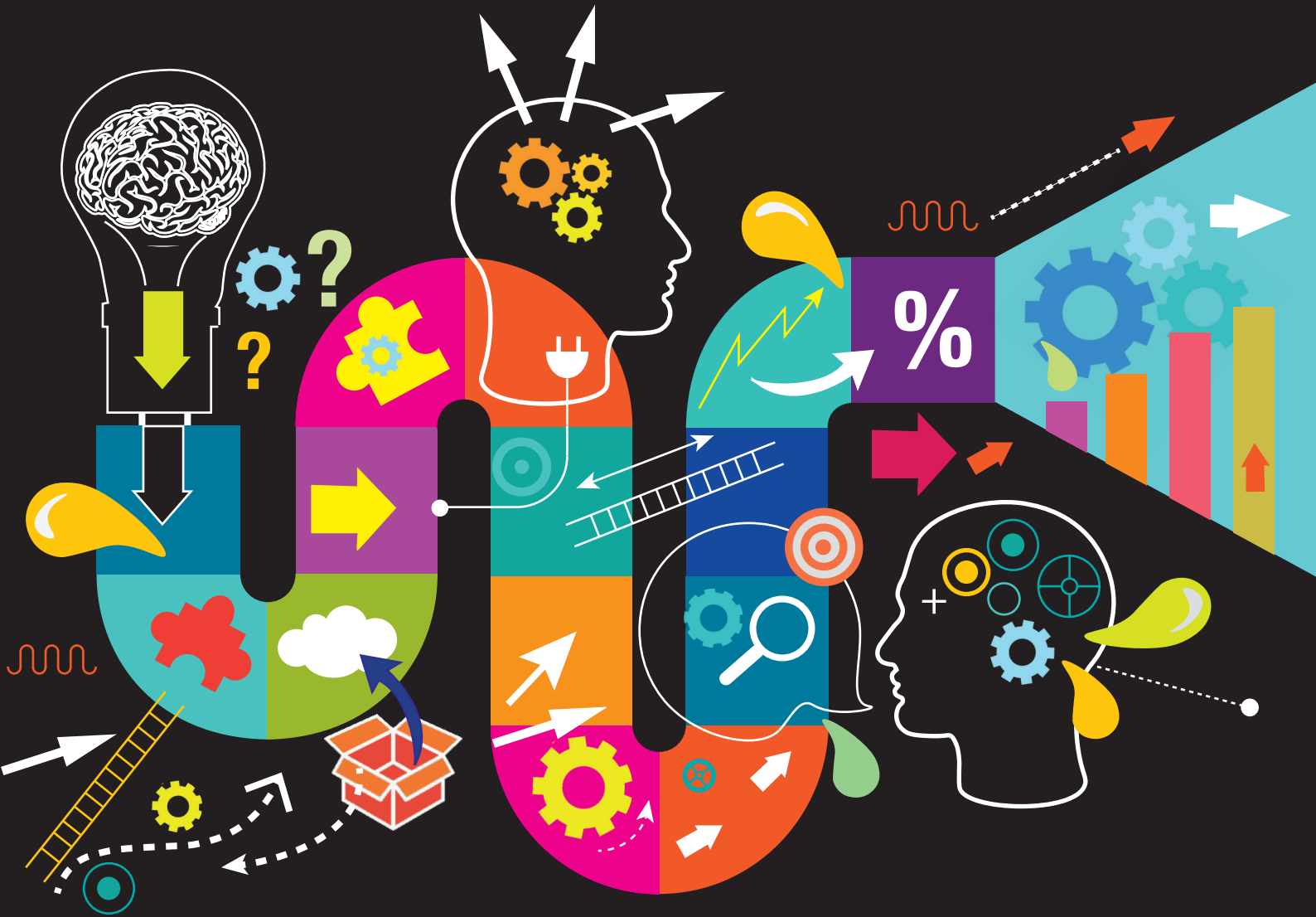


# magazine







page  
**02**

News

page  
**06**

Company

page  
**16**

Products

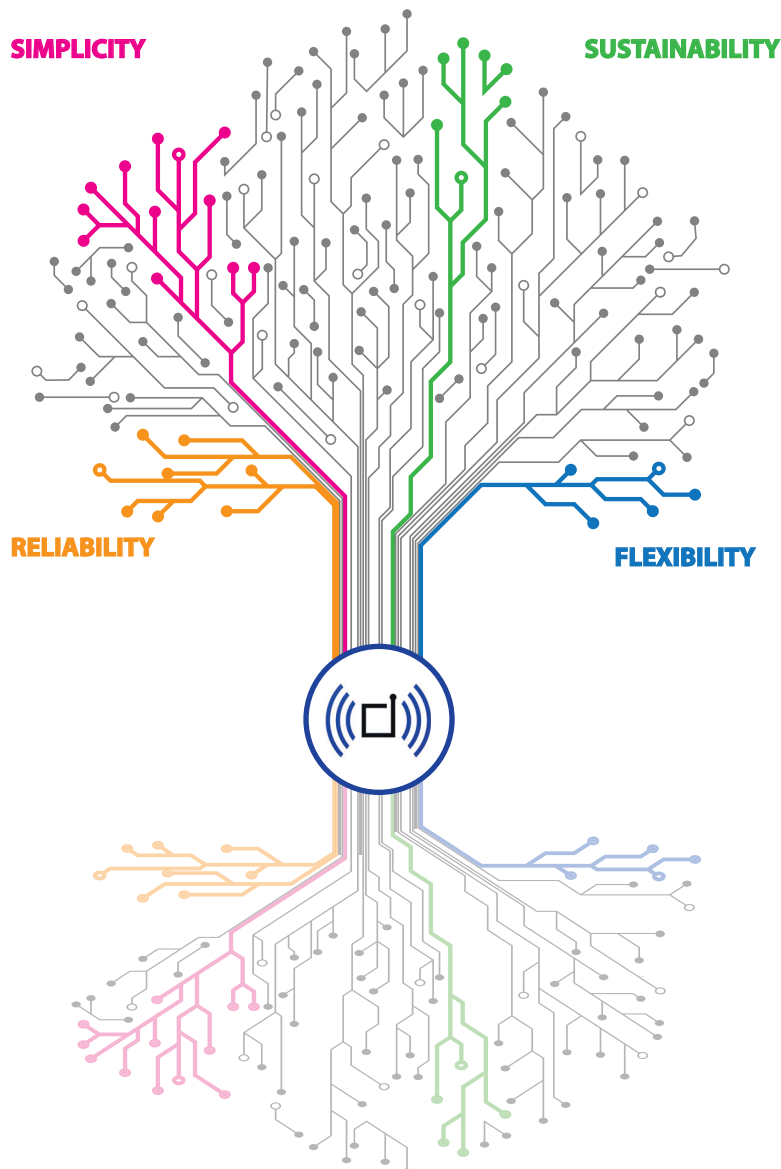
page  
**30**

Projects

page  
**32**

Publications

# WIRELESS & BATTERYLESS System



The Wireless&Batteryless technology integrated in COMEPI automation systems is based on four concepts.

**FLEXIBILITY:** exceeding the cable physical limit.

**SIMPLICITY:** quick and easy installation and configuration.

**RELIABILITY:** certified and safe EnOcean communication protocol.

**SUSTAINABILITY:** batteryless and maintenance free, minimum environmental impact.



News



# WIRELESS & BATTERYLESS System

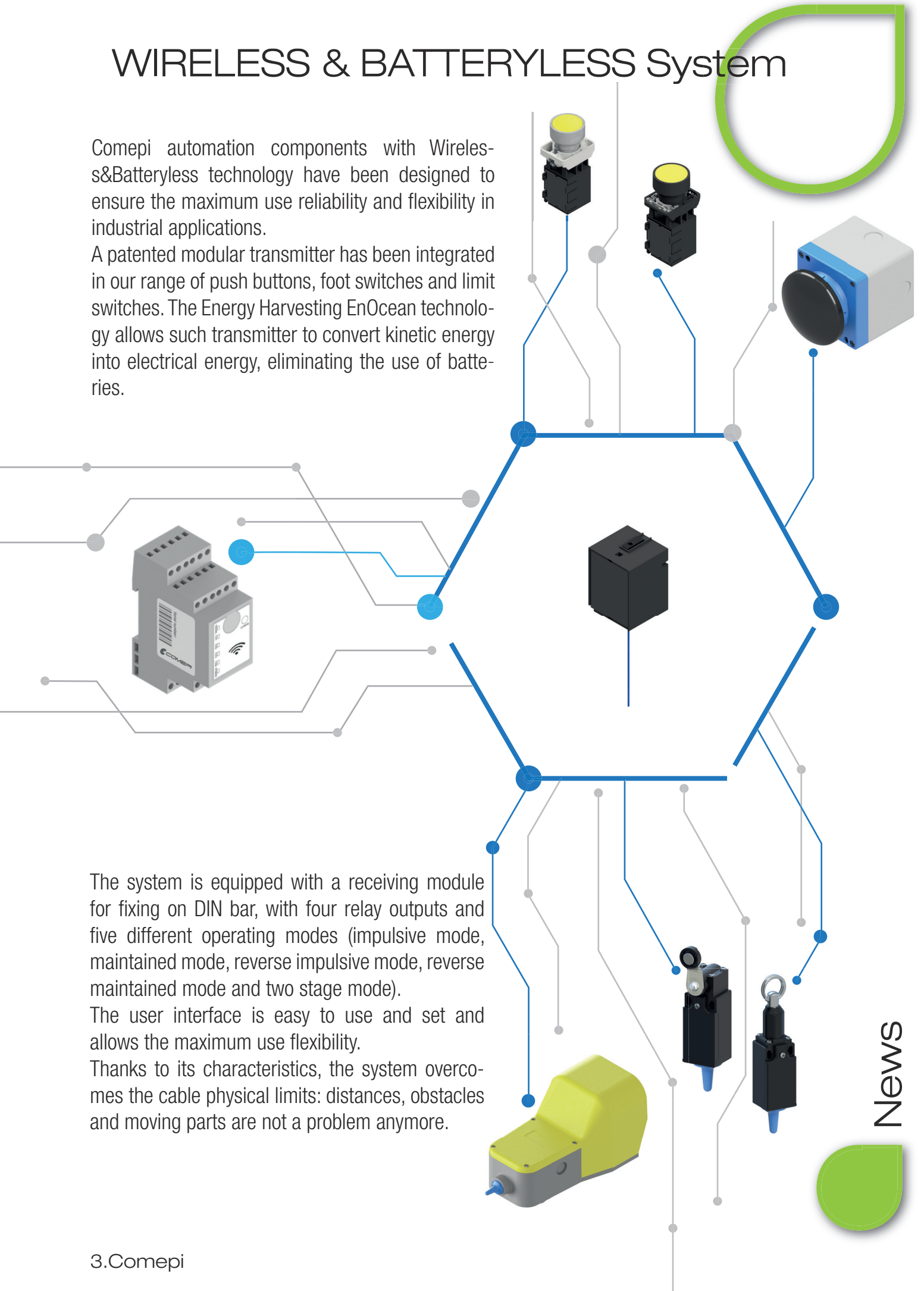
Comepi automation components with Wireless&Batteryless technology have been designed to ensure the maximum use reliability and flexibility in industrial applications.

A patented modular transmitter has been integrated in our range of push buttons, foot switches and limit switches. The Energy Harvesting EnOcean technology allows such transmitter to convert kinetic energy into electrical energy, eliminating the use of batteries.

The system is equipped with a receiving module for fixing on DIN bar, with four relay outputs and five different operating modes (impulsive mode, maintained mode, reverse impulsive mode, reverse maintained mode and two stage mode).

The user interface is easy to use and set and allows the maximum use flexibility.

Thanks to its characteristics, the system overcomes the cable physical limits: distances, obstacles and moving parts are not a problem anymore.



# WIRELESS&BATTERYLESS System

There are many application sectors: automated production lines, controls on automated guided vehicles, logistic hubs, opening of automatic doors and gates, start of machines and devices, aids for disabled people.

The absence of battery is an innovative element, avoiding maintenance costs and solving the problem of battery disposal.

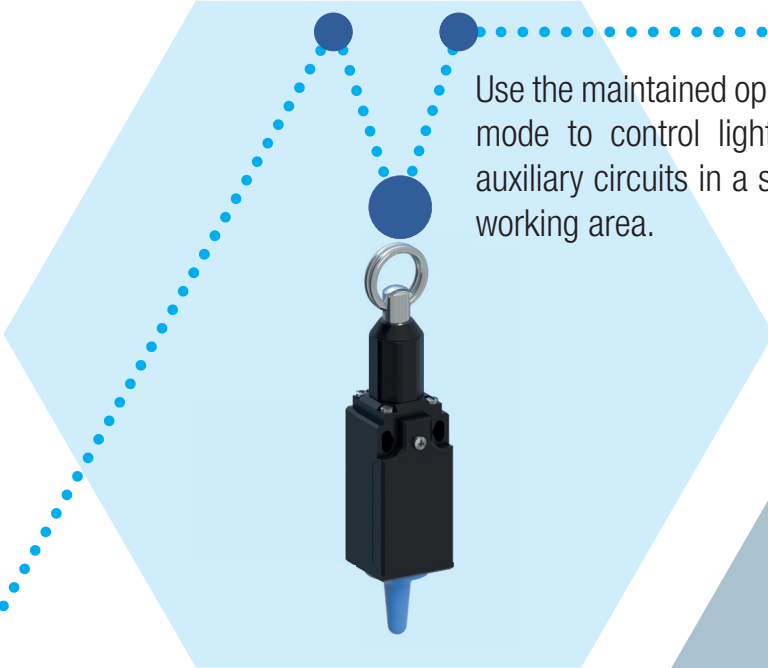


Optimum performances on transmission distances make the Comepi Wireless&Batteryless products with EnOcean technology the reliable and sustainable solution for civil and industrial automation.

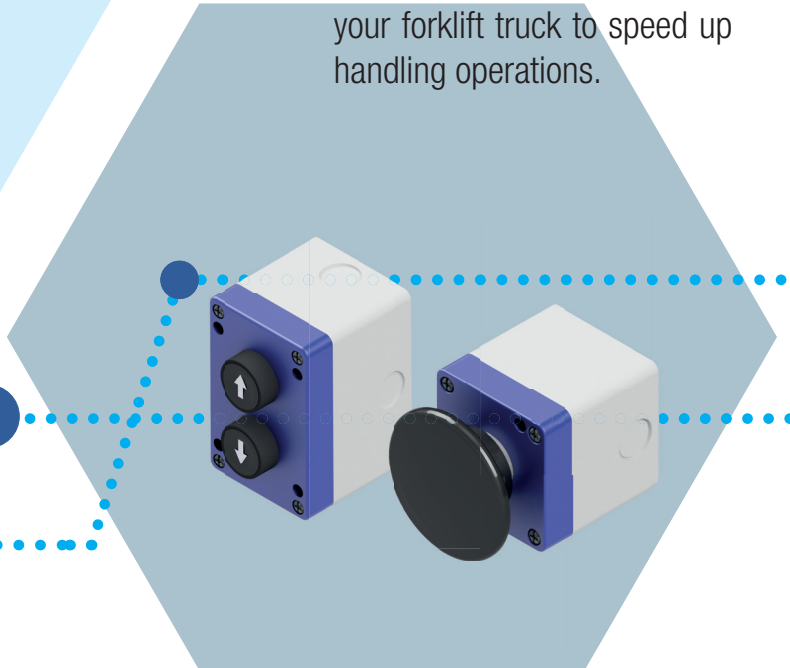
All the components are available with 868MHz and 902MHz operating frequencies; therefore, they can be used in the European Union and in Northern America (USA and Canada) according to the Directives and Regulations in force.



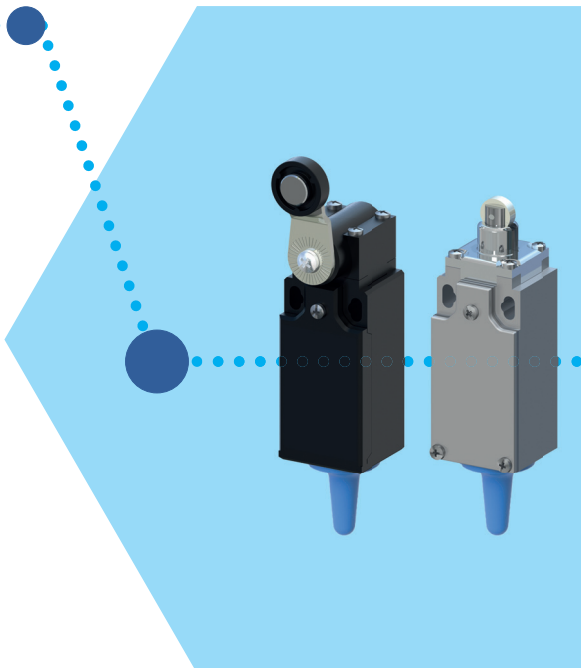
# WIRELESS&BATTERYLESS System



Use the maintained operating mode to control lighting or auxiliary circuits in a specific working area.



Place the wireless control on your forklift truck to speed up handling operations.



Place them anywhere and forget about maintenance. Cables and batteries cannot limit your ideas anymore.



# Made in Italy

For more than 50 years, Comepi has been promoting Made in Italy, investing in the development of the company internal know-how and in its growth together with its local suppliers.

**Do not simply WRITE “Made in Italy”,  
LIVE “Made in Italy”.**



Company



# Comepi LAB

A strong commitment to quality has always been important to us. Our laboratory in Robbiate allows to carry out many tests to evaluate the product performances both in normal and extreme conditions.

Our new climate chamber  $-40/+180^{\circ}\text{C}$  has joined the existing machines, increasing our skilled technicians' capacity of performing product validations and specific tests in the shortest time.



The tests carried out in our new climate chamber allow us to ensure the product reliability even in extreme environmental conditions.

**$-40^{\circ}\text{C}$**   
 **$+180^{\circ}\text{C}$**

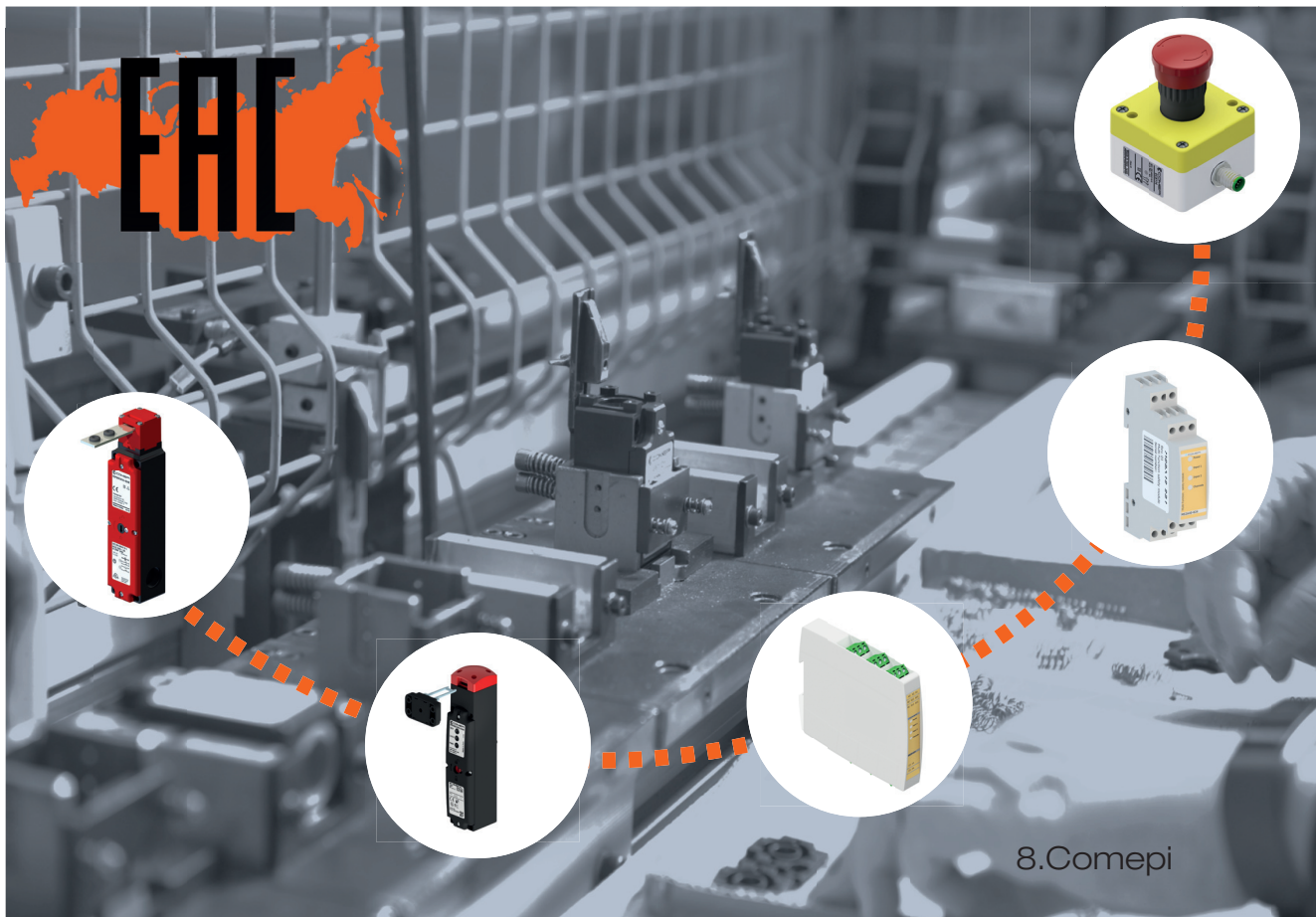
Company



# EAC Certification

Focusing on our product compliance with the regulations in force in each country and aiming to make our devices available all over the world, Comepi has recently updated the EAC certifications, renewing the authorization to export products to Russia, Belarus and Kazakhstan.

On the occasion of such updating, the new products which have been recently placed on the market have been added to the list.



Company



# CQC Certification

The standards regulating the imports of our products into the Chinese market underwent important changes in 2020. Therefore, all Comepi CCC certificates have been immediately updated according to the new CQC rules. Our product range keeps on fulfilling all the necessary requirements for exporting to China.



Company

# UL CFSP MACHINERY Certification

## Functional Safety

In last November, an interesting and intense training course was held in our company by UL Italia. The course topic was Functional Safety and it was possible to train some COMEPI technicians in order to obtain the qualification of Professional of Functional Safety in Machinery Directive, with particular emphasis on standards EN ISO 13849-1 and IEC 62061. This has been an important occasion to achieve ever better results in design and technical support, always keeping on growing and learning.



### UL Certified Functional Safety Professional

CFSP: Machinery Program  
ISO 13849 and IEC 62061



## Team Comepi Operation Director

Graduated at Milan's Politecnico university, GRETA has been working in Comepi for 13 years. She is very appreciated for her dedication, competence and professionalism.

Today, she plays a key role in our company and she most represents it.

### Women's Week

*"Having a family, raising a son, working with commitment and passion.*

*The same routine as many women like me. I LOVE this everyday reality and I am proud of it."*

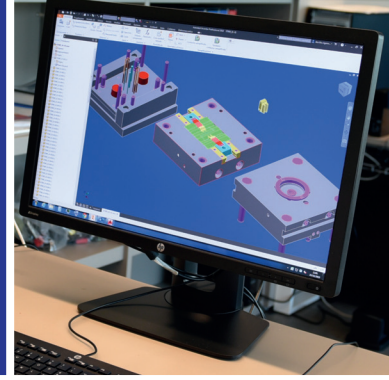
*Greta*



Company

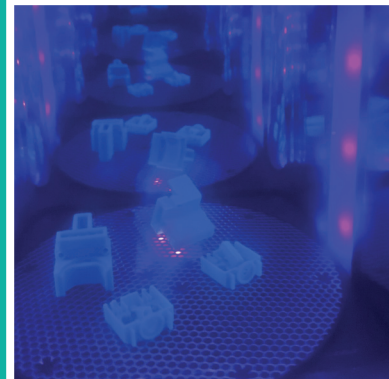
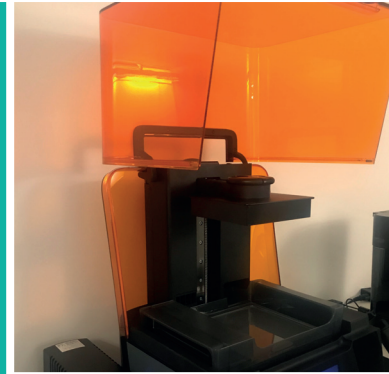


# Team Comepi Technical Office



## RESEARCH

## INNOVATION



## development



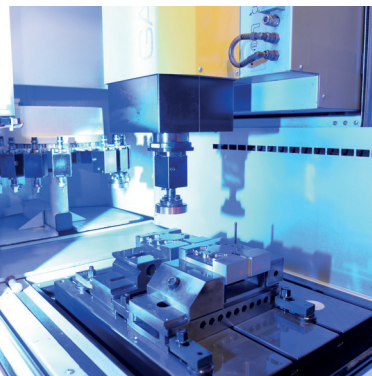
Company

Egidio, our expert in mechanical design and product industrialization, has been working in COMEPI for 34 years and has developed many of the products listed in our catalogue.

His commitment and curiosity lead him to meet new challenges with enthusiasm and the desire to discover new technologies and applications.

At leisure, he loves wakeboarding and reading detective books.



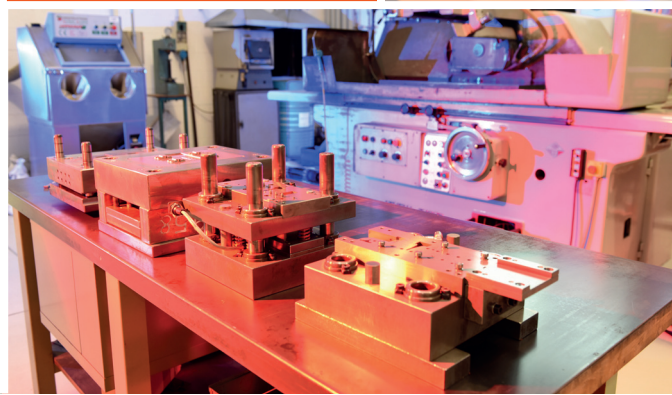


Accuracy



# Team Comepi Tooling Department

PRECISION



expertise

Bruno, 26 years old, has been working in COMEPI for 6 years and he is the youngest worker in the tooling department.

He manufactures moulds; his desire to learn and meet challenges has lead him to play an important role in our process of product industrialization.

At leisure, he loves dedicating his time to his great passions: motors and cooking.

Company



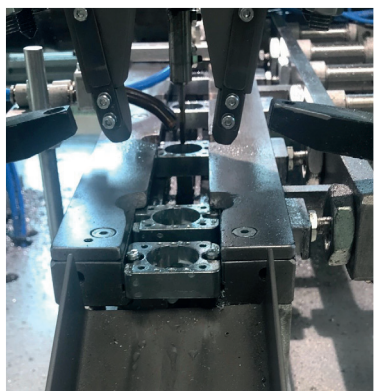


# Team Comepi Shearing Department

RELIABILITY



expertise



TIMELINESS

Company

Alberto, works in the shearing and metalworking department. His expertise and skill are the result of his great commitment during 30 working years.

His motto is "never stop learning" and he approaches every new project with passion.

Fan of the soccer team Inter!



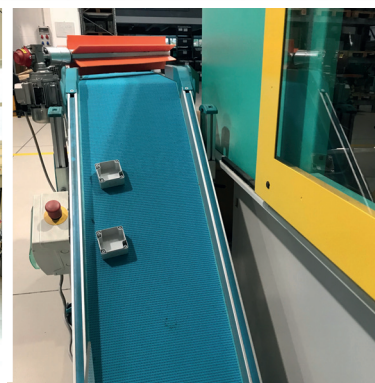


efficiency

# Team Comepi Molding Department



**indipendence &  
autonomy**



**HIGH  
PRODUCTIVE  
CAPACITY**



Massimo works in the molding department. He works with the same passion he has for soccer and for the boys he coaches.

Company



# New products time-line **2020**



EM-EP limit switches  
with 2NO contacts

**FEBRUARY**



E-STOP ECS series

**APRIL**



**JANUARY**

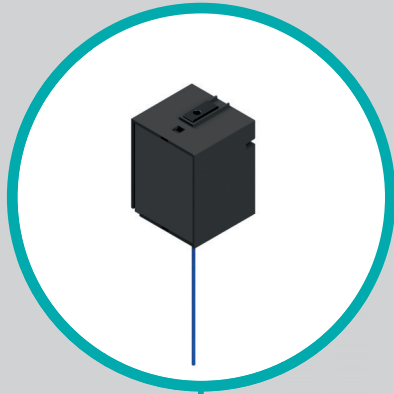
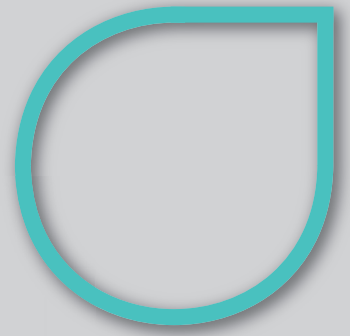
Hinge mounting safety  
limit switches



**MARCH**

Emergency push button





Safety modules  
MS1 series

**SEPTEMBER**



Key release electromagnetic  
safety device

**NOVEMBER**



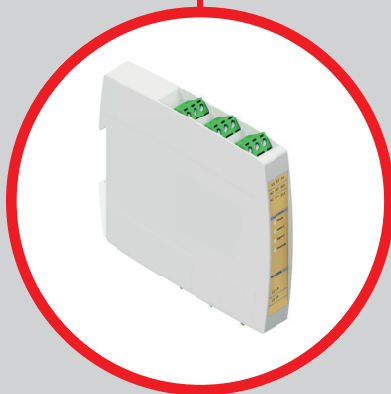
**MAY**

Wireless Batteryless



**OCTOBER**

Limit switch with integrated  
DEUTSCH connector





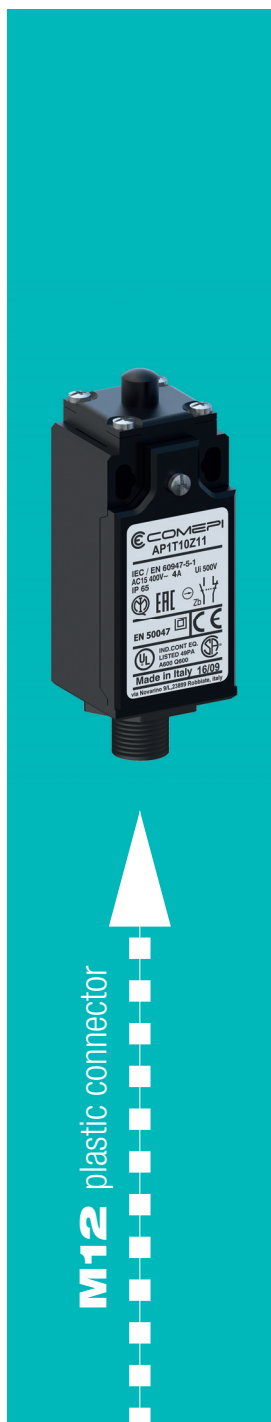
# Pre-wired limit switches

## Available solutions

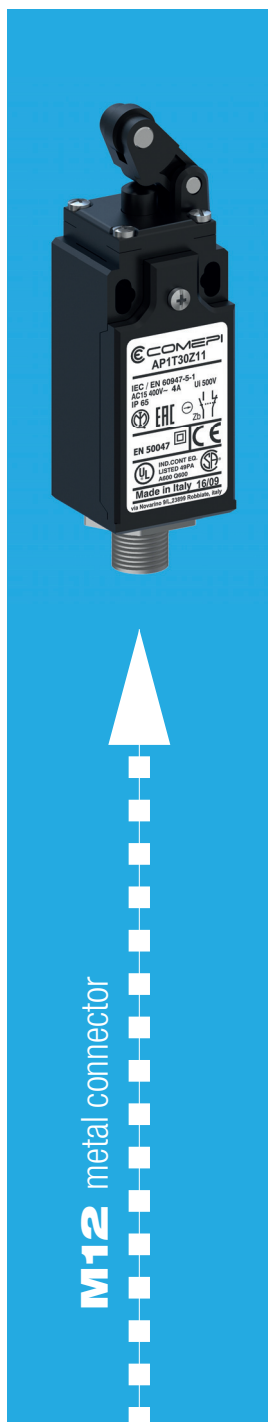
Providing specific solutions and ready-to-use products to our customers is one of our most important goals. For this reasons, over the years, COMEPI has developed pre-wired solutions with integrated connectors that are suitable for any kind of application. M12 metal connectors, DEUTSCH and AMP connectors are standard products available on our catalogue and help customers to reduce installation and maintenance costs.

The solution range has recently widened with the pre-wired limit switches with M12 connector in thermoplastic material.

Products



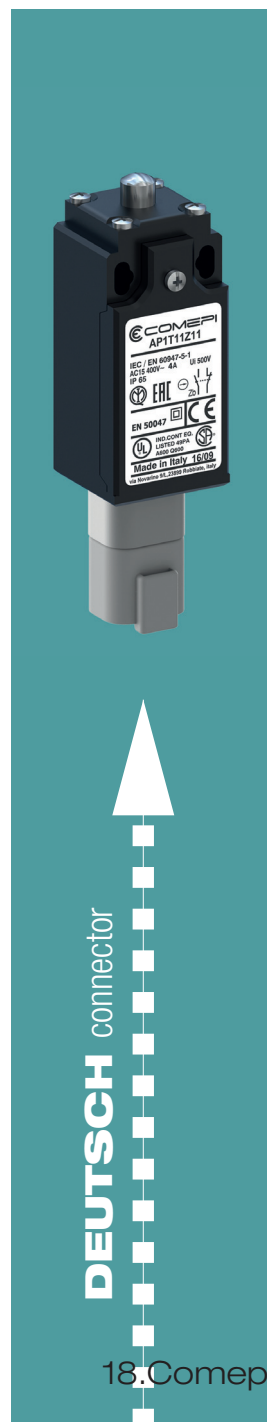
**M12** plastic connector



**M12** metal connector



**AMP** connector



**DEUTSCH** connector

# Pre-wired limit switches

## M12 connector

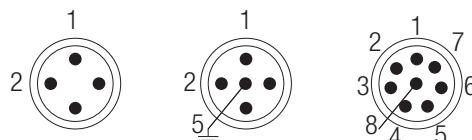
- 1 . **Cost-effective**
- 2 . **Ready-to-use solution**
- 3 . **Reduced installation time**



**M12**  
plastic connector




**M12**  
metal connector

products



# Safety devices

## Monitoring of safety guards

Comepi range of safety devices is improving continuously. Different technologies are available to suit several kinds of applications thus providing complete solutions to our customers.



**Safety hinges**



**Hinge mounting safety limit switches**



**Key release electromagnetic limit switches**

**Safety magnetic sensors**



**Safety limit switches with separated actuator**



**Electromagnetic limit switches with separated actuator**



Products

# Safety devices

## Emergency stop devices

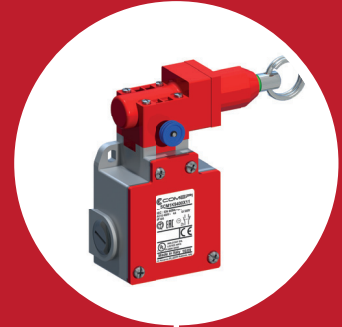
Comepi range of safety devices is improving continuously and includes several emergency stop devices. Our switches comply with the regulations in force, ensuring operating reliability and easy installation.



**E-STOP device  
SA series**

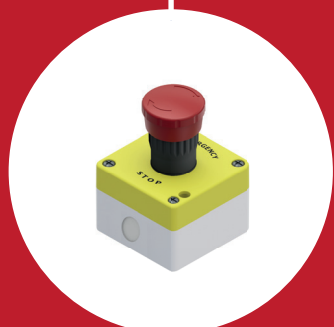


**Safety limit switch  
with rope**

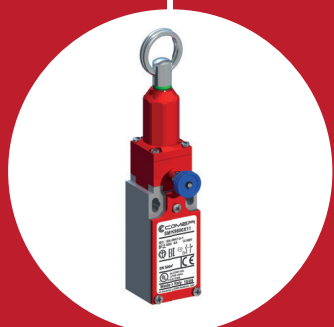


**Safety limit switch  
with rope**

**E-STOP device  
ECS series**



**Emergency stop  
push-button  
ECX series**

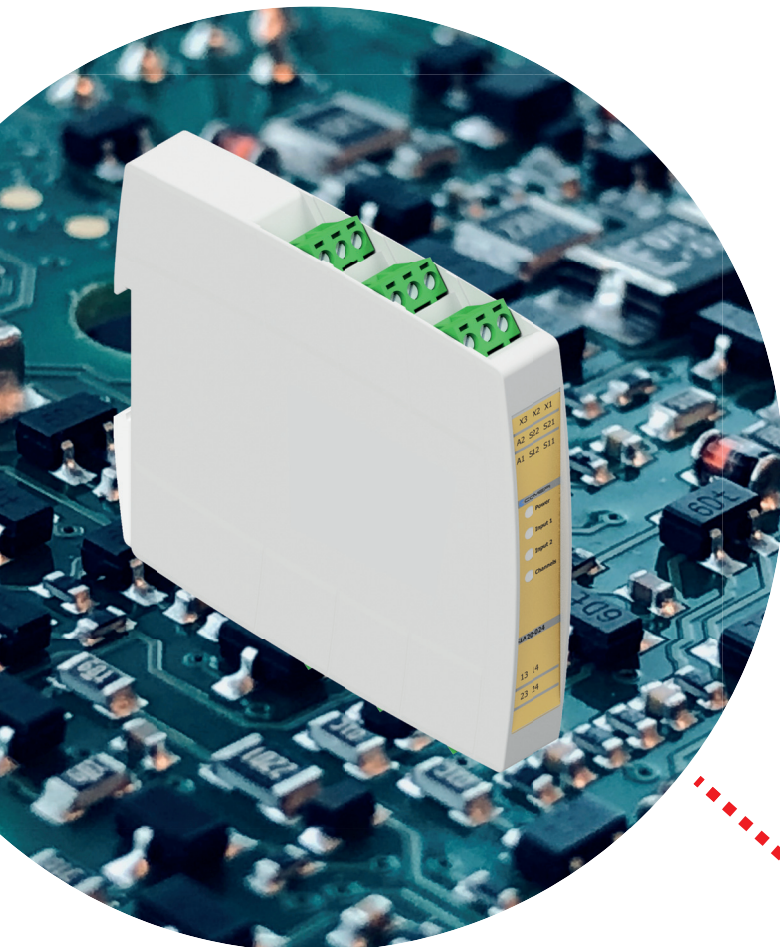


Products

# Safety modules

## MS1A31-MS1A20

Modules MS1, designed to ensure the utmost safety of machinery and personnel, comply with the international standards. The safety functions can be enabled by different kinds of input signals. Safety and expansion modules MS1 provide electromechanical outputs.



They meet the requirements of Standard LIFT 2014/33/EU and comply with standards EN 81-20 and EN 81-50.



### Suitable for controlling:

- Limit switches for safety guards
- Interlock with solenoid control
- Safety magnetic sensors
- Stop emergency devices
- Safety gates

Products



According to Machinery Directive 2006/42/EC and standard EN 13849-1.

# Safety modules

## **MS1H21-024**

Safety module MS1H21-024 is suitable for controlling two-hand devices. Start is enabled only if the two push-buttons on the console are pressed by the operator at the same time or with a maximum time of 500 ms from each push-button.



IIC Synchronism control according to standard  
EN ISO 13851



# Safety modules

## MT2A22-024

Safety device MT2A22-024 combined with FEP devices is especially suitable for controlling movable guards since safety outputs can be delayed up to 30 s.



Have you tried **FEP** devices combined with module **MT2A22**?



Perfect when combined with **MIH** safety handle and key release.

Products

# Key release limit switches

## FEP LOCK

The range of safety devices with protection by COMEPI widens with the new FEP-LOCK models.

The traditional auxiliary screw release can be replaced by a key release. This solution ensures more flexibility, thus more application possibilities, while keeping the standard product size and reliability.



**FEP  
LOCK**



**FEP  
RFID  
LOCK**

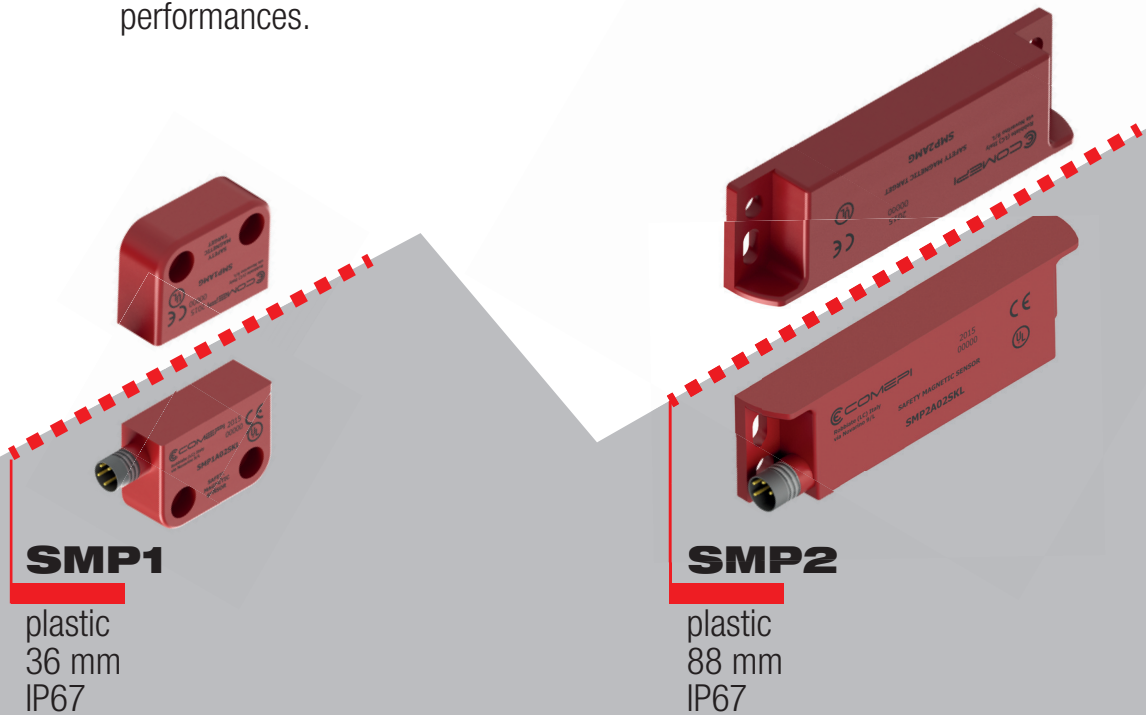


**FEP  
LED  
LOCK**

# Magnetic sensors

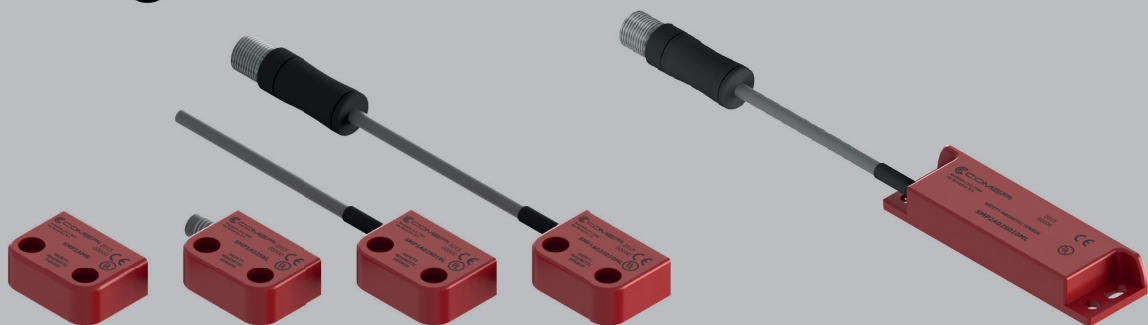
## Revision of SMP series

Available in different sizes, SMP magnetic sensors are suitable for controlling machinery protection guards in compliance with standard EN ISO 14119. When combined with COMEPI MS or MT series safety modules, they can ensure the best safety performances.



### What's new?

- **Better hole position and usefulness**
- **UV printed label**
- **Better LED quality, now visible on both sensor sides**
- **Better quality and precision in operation and compliance with the SAO and SAR distances**
- **cUL<sub>us</sub> certification**

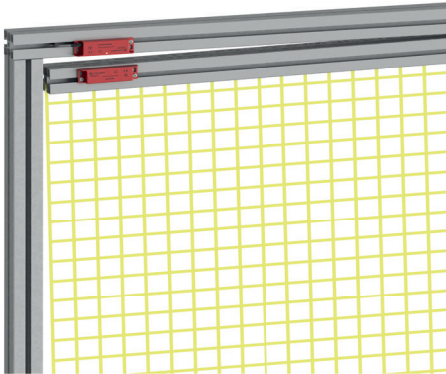


# Magnetic sensors

## **SMP2CMG actuator**

Among the new products of the SMP2 range, the SMP2CMG actuator provides a greater commutation distance, thus offering new solutions and applications.

This kind of actuator is recommended to prevent false enabling on guards or light protections that cannot be closed completely.



**Ensured SAO actuation distance = 18 mm**

**Ensured SAR actuation distance = 30 mm**

### **COMEPI talks about:**

Dario, our Product Manager, talks about this new upgrade:

“With this product upgrade, COMEPI wishes to underline its commitment to develop ever more technologically advanced products, starting from consolidated knowledge to take on new challenges. The safety magnetic sensors are the first devices of a new generation products that will join our best sellers, keeping our advantages on the market and in the relationship with customers.”

**...in short, as we like repeating  
in our motto:**

**“Switch Off Your Limits!”**



# Emergency stop devices

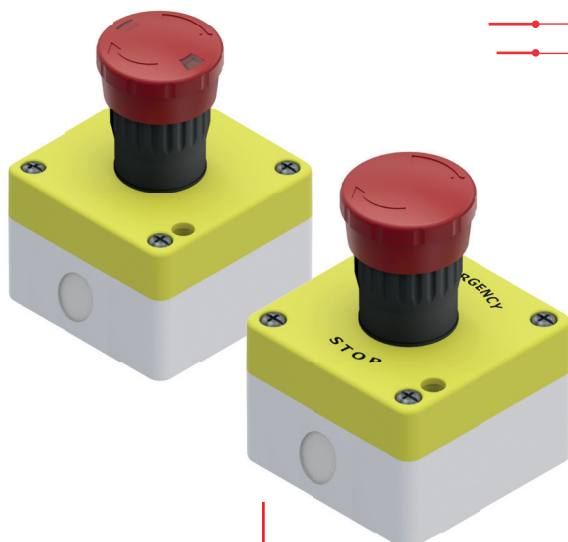
## **ECS series - SA E-STOP series**

### **ECS**



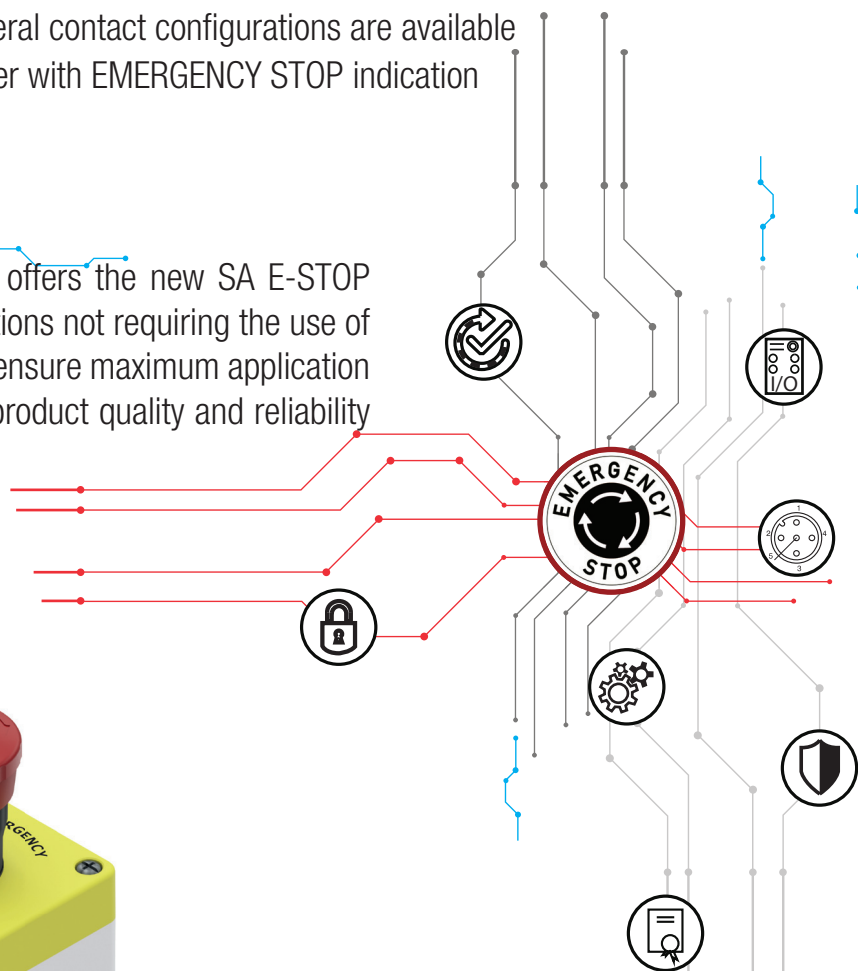
- Ready-to-use solution
- Quick connection with M12 connector  
5 or 8 poles
- Operating temperature from -40°C to +70°C
- IP65 protection degree
- Shock resistant ABS cover
- Several contact configurations are available
- Cover with EMERGENCY STOP indication

Besides the ECS series, COMEPI offers the new SA E-STOP series which is perfect for applications not requiring the use of the M12 connector. Our goal is to ensure maximum application flexibility together with the usual product quality and reliability we provide.



### **SA E-STOP**

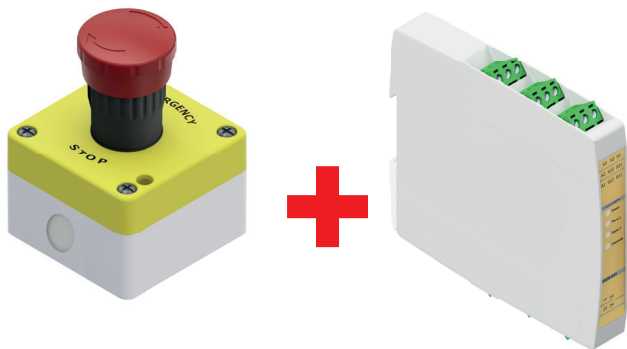
- Two knock-out holes
- Certified emergency push-button
- Several contact configuration
- Possibility of placing the EMERGENCY STOP indication
- Possibility of fixing the casing without opening the cover



# Emergency stop devices

## SA E-STOP + MS1A31-024 series

Comepi provides a simple and complete solution for controlling the emergency stop signal in every application. Our MS1A31-024 and MS1A20-024 safety modules can be used with E-STOP devices, like our SA E-STOP or ECS devices for emergency stop from the minimum to the maximum required Performance Level.



**Solution for  
controlling  
emergency  
stops**



### COMEPI talks about:

Dario, our Sales Manager for the Italian market, talks about this new product: "The E-Stop device is a fundamental element for machinery manufacturers and installators. The SA series E-Stop by Comepi is a reliable and easy-to-install solution for emergency stop. Available in several versions, this product is supplied by Comepi to customers who need a certified product that can be used all over the world ensuring the requisite quality at competitive prices".



Products

# Innovation week

## 2019 Project

We would like to mention the innovating 2019 project carried out in collaboration with the students of Milan's Politecnico university, Chiarina Day Mendoza and Valentani Penati whose goal was to improve productive capacity, reducing the waste of resources. The project mainly aimed to optimise the working flow on the production line of the 40 mm limit switch series according to lean production concepts, with the ultimate goal of creating a COMEPI team always focused on continuous improvement. At the end of the project, daily productivity increased by 10%, a value that the Comepi team kept and keeps on increasing. Thank you to engineers Valentina and Chiarina for the great results achieved!

Rearrangement of our  
productive departments  
according to the  
**LEAN  
METHODOLOGY**

### ACHIEVED GOALS:



Added value to the product  
providing better customer  
satisfaction



No waste of resources



Creation of a Comepi team  
focused on continuous  
improvement



# Innovation week

## Project 2021

In March, a collaboration project between two students of Milan's Politecnico university and Comepi started. The project, which is taking place at our production site in Robbiate, aims to achieve the ambitious goal of optimising the production capacity of one of our strategic production lines.

This activity is part of the Industrial Management Lab course led by Prof. Alberto Portioli Staudacher, responsible for the Lean Excellence Centre research group ([www.lean.polimi.it](http://www.lean.polimi.it)). The students will be able to rely on the methodological support of Engineer Miguel Martín Cortez Aguilar and of the whole COMEPI team, lead by our Operations Manager Greta Manzoni. We thank the two students, Stefano Riga and Andrea India Vaccarini for their competence and readiness during this project!





# Safe workplace at Comepi

## Perpetuum Online Magazine

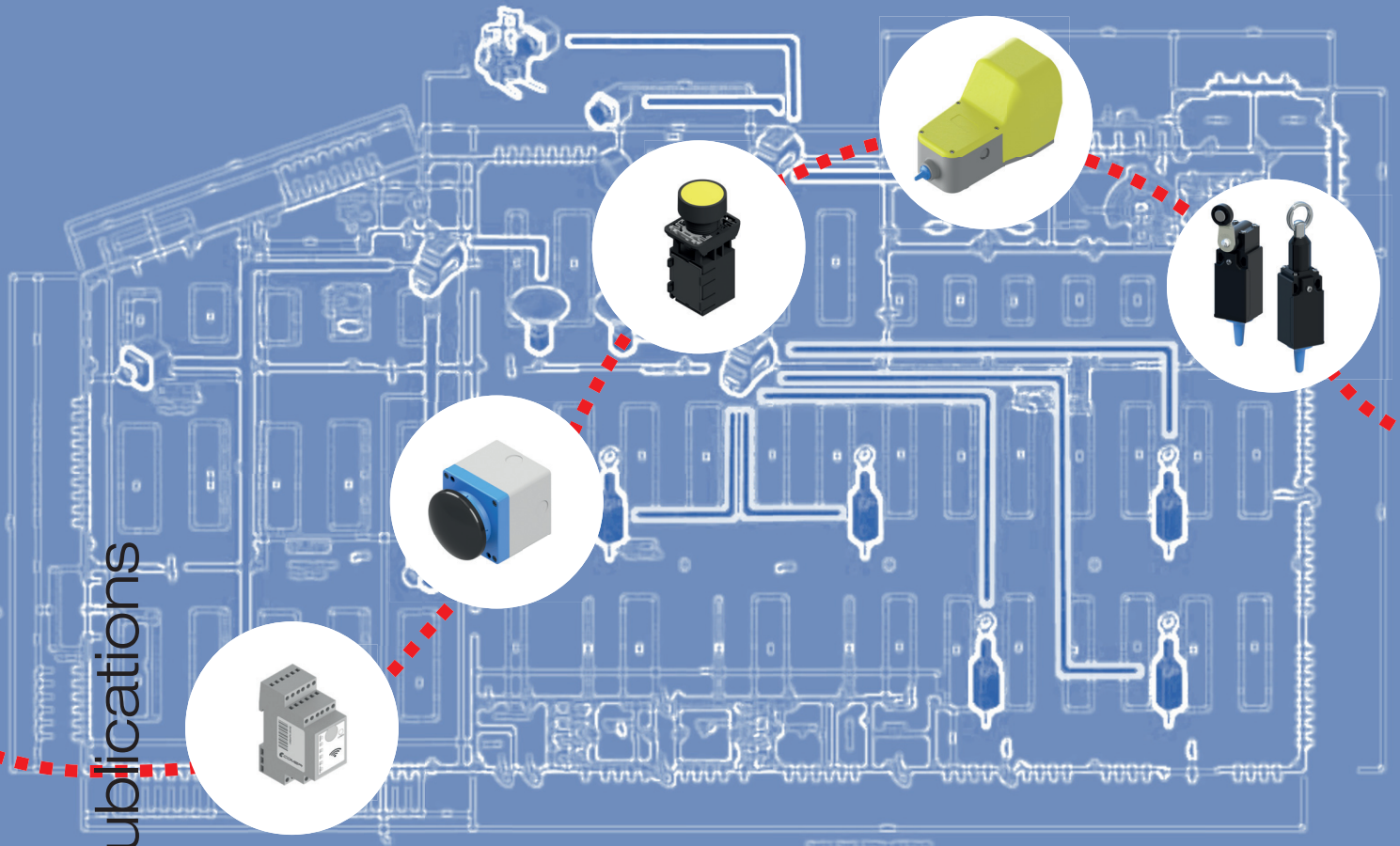
How has the workplace arrangement changed due to the pandemic? The article published in Enocean Perpetuum Online Magazine shows how effectively the wireless technology can help to reduce the contagion risk.



Read the full article on [www.perpetuum.enocean.com](http://www.perpetuum.enocean.com)



## Smart technology for safe workplaces



Publications

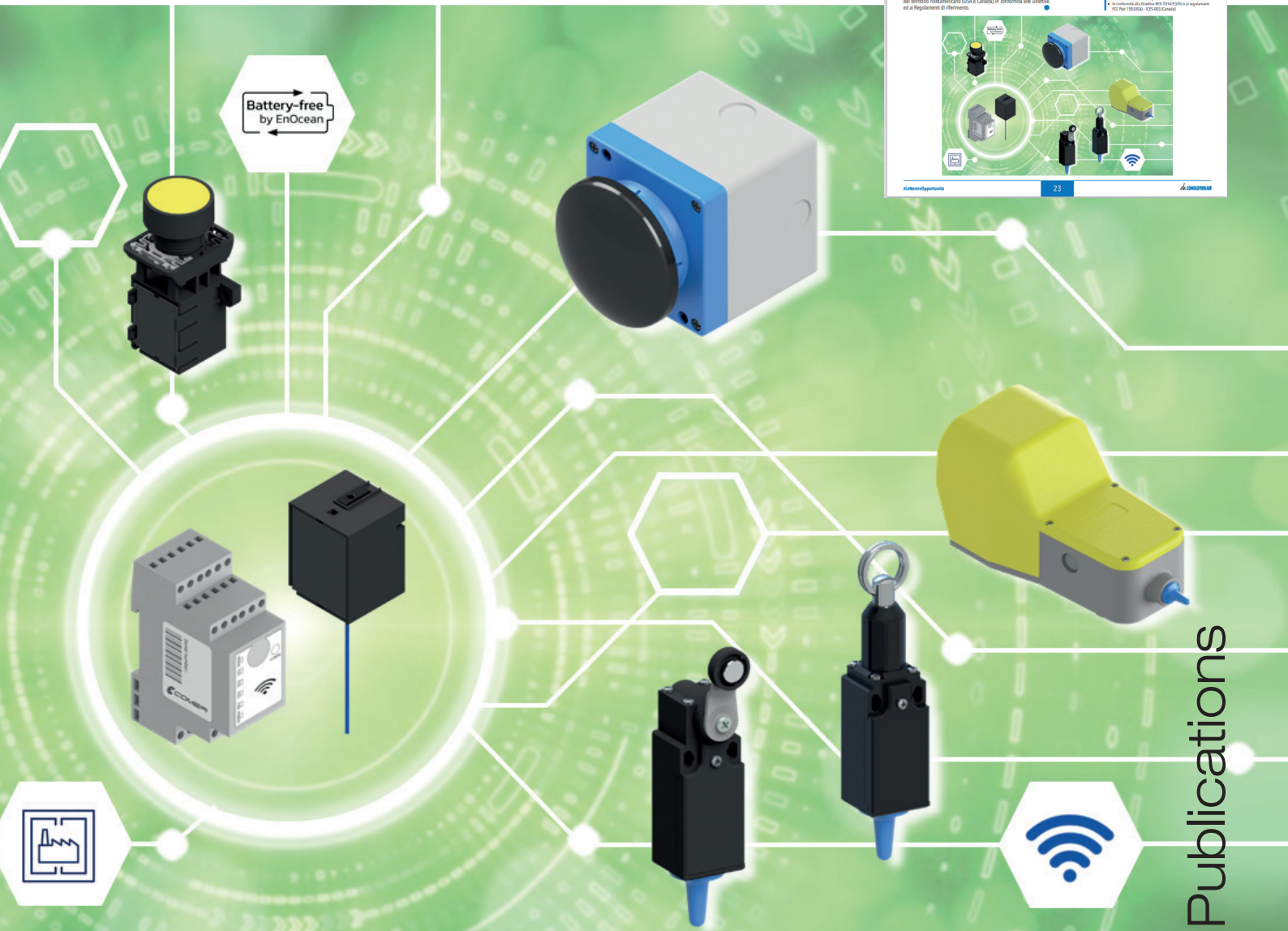


# Wireless&Batteryless system

## Comoli Ferrari Magazine

Last February 2021, Comoli Ferrari Magazine published our article about the integration of the Wireless and Batteryless technology in Comepi automation components.

<https://www.comoliferrari/magazine.html>





# comepi.eu

## Related products

A new important function is available in COMEPI online technical catalogue. The relationships among the products in the catalogue of safety devices have now been underlined to make browsing easier and to find new ideas to design complete systems. This is now possible thanks to CADENAS Italiana S.r.l. which helps us to provide our customer with an immediate online technical support on a 24-hour basis.



Aggiungi al confronto	
Azienda	Comepi
Descrizione	ECS - ECS
Lista materiale	ECS116
CODE Codice	ECS116
MATCASING Materiale custodia	Termoplastico
MOUN Montaggio	Scalola precabata
FIX Fissaggio	Due viti M4
WEIGHT Peso	0.17
TERMN Terminali di collegamento	Connettore M12X1 8poli
OUT Uscite 1	2NO + 1NC
APP1 EN 60947-5-5 EN ISO 13850	Conforme

Accessori consigliati	Raccomandazioni	Parti sin
		M_OSSD - M_OSSD comepi 18.11.2020
		<b>MS1 - MS1</b> comepi 18.11.2020
		FEP_5_KR1 comepi



comepi.eu  
Make your search easier  
to find the best solution



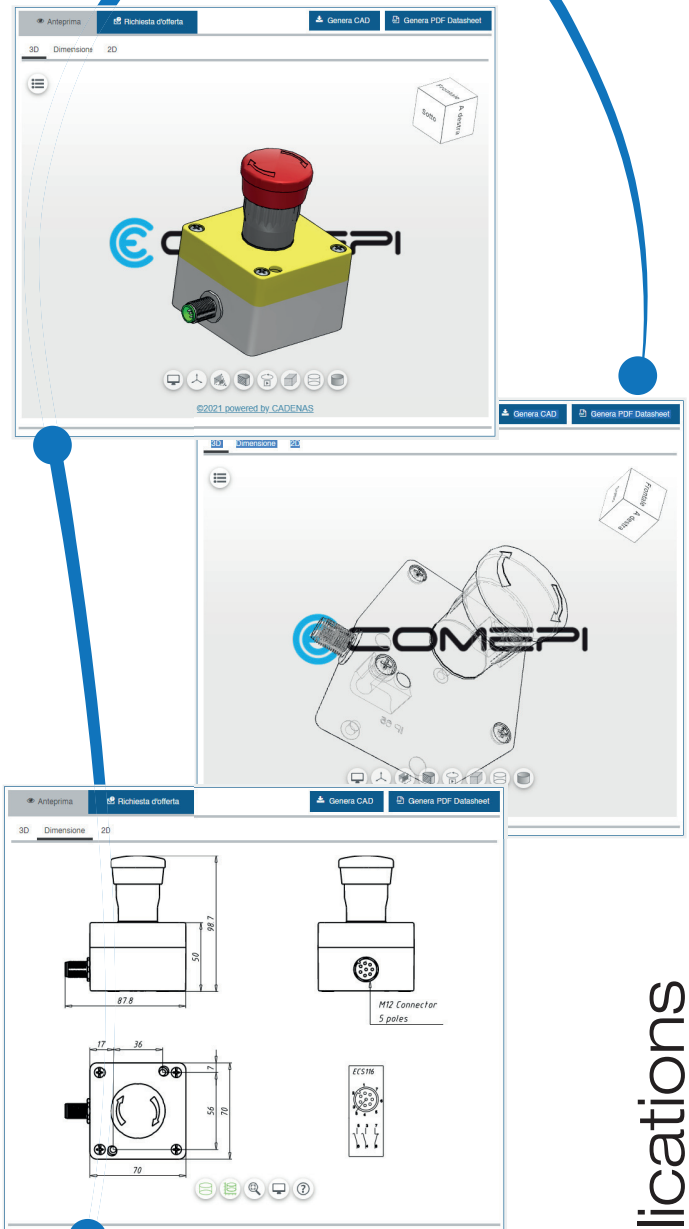
# comepi.eu Online technical catalogue

Comepi online catalogue is continuously improving and it provides 3D models, 2D drawings and datasheets of all the accessories and boxes with push-button, both in plastic or aluminium, ensuring continuous 24/7 technical support.

comepi.eu

24 hours online support through the online catalogue which is always updated and available

View the datasheets of all new products



Publications

# comepi.eu 2021 General catalogue

The new COMEPI 2021 catalogue in Italian is now available!  
Discover the new layout and updates and the integration of the new section relating to Safety Devices.



1. NEW COVER

2. NEW PRODUCTS

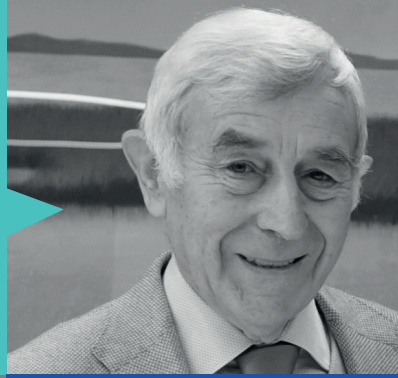
3. NEW LAYOUT

Publications





The STEPS  
taken in the  
past allow us to  
RUN into the  
future.



The BEST way of  
doing something  
is doing it.



I LOVE to see  
people smiling  
around me.



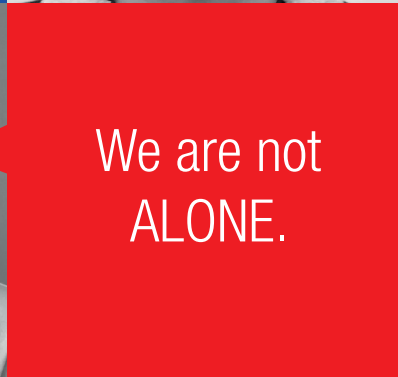
PER ASPERA,  
AD ASTRA.



Two things  
save us in life:  
LOVING and  
LAUGHING.



We are not  
ALONE.



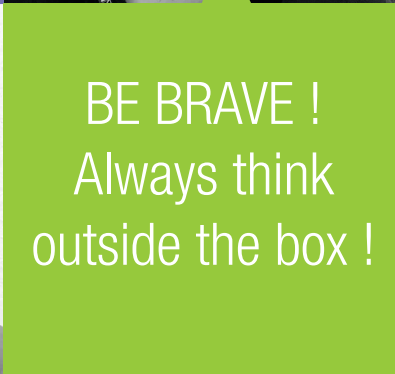
COMMITMENT  
and utmost  
READINESS.



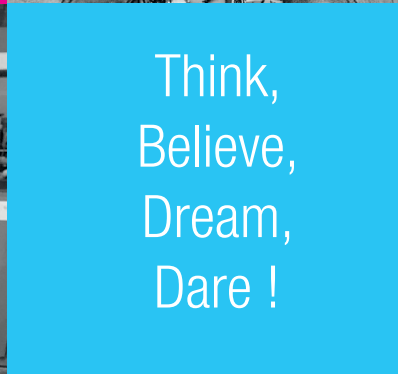
The only things  
one never  
regrets are one's  
MISTAKES.



BE BRAVE !  
Always think  
outside the box !



Think,  
Believe,  
Dream,  
Dare !



IT CAN'T  
rain all the time.



... that's all right  
for me ....  
speechless.





Always keep an eye on the FUTURE.



I like anything that's PINK.



Enjoy the journey.



LIFE is LOVE.



A SMILE is the most beautiful accessory you can wear.



Aim for the MOON. Even if you miss her, you'll land among the STARS.



I LOVE nature and sea.



LIFE is a journey and those who TRAVEL live twice.



Learn to OVERCOME your limits.



May the FORCE be with you!!



One who finds a FRIEND, finds a TREASURE.



TEAMWORK divides the task and multiplies the SUCCESS.







23899 Robbiate  
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