

Intelligent manufacturing.

With **automation** and **IIoT** to the **zenith** of your production.

ELCO combines your production and the Industrial Internet of Things on a **strategical level**. According to this, we supplement your project with our newest hard- and software products.

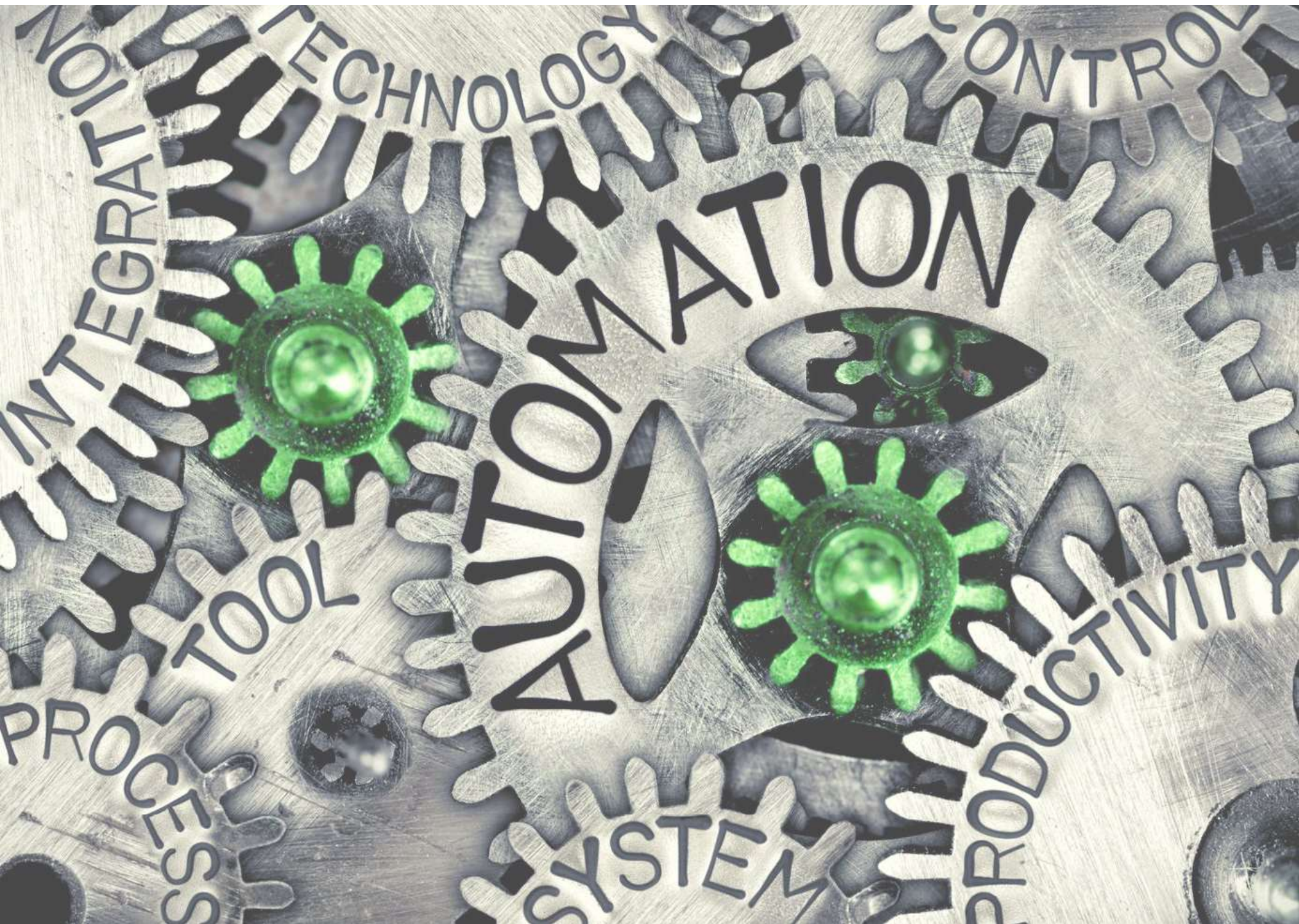


With ELCO as a partner, you profit from an **enormous product range**. You also have a **reliable service provider** by your side that guides your company into the digital age.



PRODUCT OVERVIEW







INDUCTIVE SENSORS

- ✓ Detection of metallic objects
- ✓ Various rectangular & barrel shapes
- ✓ Different body materials
- ✓ High switching distances
- ✓ Pressure-resistance up to 500 bar
- ✓ Short-circuit-proof & overload-proof
- ✓ Protection class up to IP69k
- ✓ Resistance against magnetic field interferences

CAPACITIVE SENSORS

- ✓ Detection of conductive & non-conductive objects
- ✓ Various rectangular & barrel shapes
- ✓ Different body materials
- ✓ Short-circuit-proof & overload-proof
- ✓ Sensitivity control by the means of potentiometer
- ✓ Protection class up to IP69k



PHOTOELECTRIC SENSORS

- ✓ Detection of movements & distances
- ✓ Detection of light, dark & transparent objects
- ✓ Red light, infrared light or laser technology
- ✓ Short-circuit-proof & overload-proof
- ✓ Range up to 150 m
- ✓ Protection class up to IP69k



SUPER SONIC SENSORS

- ✓ Object control & filling level control
- ✓ Analog & digital output
- ✓ Location check & status check with high range
- ✓ & many more features



SENSORS

PRECISE DETECTION. ALWAYS & EVERYWHERE.



Today, it is already about time to think of the challenges we will be facing tomorrow: That motto perfectly describes our approach to the topic of **sensor technology**. According to this, we place an emphasis in **efficient systems that have proven themselves in very harsh environments**. Together with our customers and clients, we keep redefining the boundaries of the possible.

ELCO sensors enable the detection of (final) positions and filling levels. We **keep optimizing** our products' **compatibility** as well as their **resistance** and their **degree of efficiency**. Even now, ELCO already offers **special solutions for almost every type of application**.

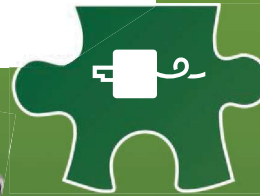
It would be a pleasure for us to design a fully customized solution in cooperation with you as well. Just let us know.

ELCO sensors – when performance is needed.

ENCODERS

INCREMENTAL ENCODERS

- ✓ Optical or magnetical position detection
- ✓ High-precision scan
- ✓ Excess current & short circuit protection
- ✓ Very high mechanical strength
- ✓ Various housing sizes for space-saving installation
- ✓ Housing made of full alloy



ABSOLUTE ENCODERS

- ✓ Optical or magnetical position detection
- ✓ Single turn resolution up to 18 bit
- ✓ Multi turn resolution up to 30 bit
- ✓ Various housing sizes
- ✓ Supports different bus protocols:
 - ✓ Ethernet PROFINET I/O
 - ✓ Ethernet/IP
 - ✓ EtherCAT Interface
 - ✓ and other



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ENCODERS FOR SPECIAL ENVIRONMENTS

- ✓ Explosion protection
- ✓ High corrosion protection due to stainless steel housing / anti-corrosion layer
- ✓ Temperature tolerances from -40 °C up to +110 °C
- ✓ Solid shaft, blind shaft or hollow shaft
- ✓ Fit for harsh environments (metallurgy / petrochemistry)



A variety of product properties –
precisely matched with your application.

TECHNOLOGY THAT PAYS OFF.



Clear stage for ELCO's **core competency**: encoder technology. With extensive experience and the inventiveness of one hundred development engineers, we are known for a wide product range. Our daily business: designing and offering high-performance **encoders that meet various requirements, environments, and applications.**

Regardless of your specific needs: Our informed employees at sales, development, and production define **solutions that go perfectly along with the situation at your operation site.** We oversee each and every step of your project and we are always on spot if you need us – from the initial requirement analysis up to the finished OEM product.



ROUND PLUG SERIES

- ✓ M8, M12 & 7/8" connection, flanges
- ✓ Common codings with flexible line length
- ✓ Various cable types (PUR / PVC)
- ✓ Shielded models
- ✓ Fabricated one-sided or both-sided
- ✓ Self-connecting models
- ✓ Optional status LED
- ✓ Protection class IP67

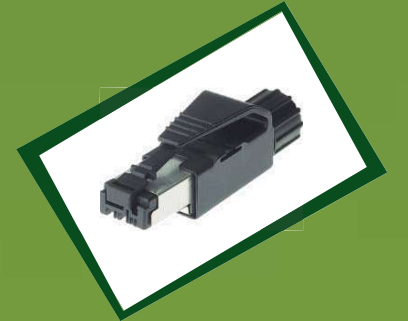
FIELD BUS CABLES

- ✓ M8, M12 & RJ45 connection
- ✓ Supports common bus systems
- ✓ Self-connecting RJ45
- ✓ Various cable types (PUR / PVC)
- ✓ 360° lacing
- ✓ Highly flexible cables with bending radii up to 26 mm (flex.i.wire)
- ✓ Certified according to UL



Y-DISTRIBUTORS & T-PIECES

- ✓ M8, M12 & 7/8" connection
- ✓ Y-distributors with flexible line length
- ✓ Various circuit diagrams
- ✓ Optional status LED
- ✓ Protection class IP67



SPECIAL SOLUTIONS

- ✓ Brand label products
- ✓ Customized printing
- ✓ Customized circuitry
- ✓ Assemblies
- ✓ On request: one batch size in stock in GER



CONNECTORS



ELCO – connect and get started.

EXCELLENT SIGNAL TRANSFER.



ELCO connectors are reliable industrial lines that offer **high protection against various environmental influences**. Besides preassembled connectors, ELCO also supplies you with a **variety of user-configurable lines** in the industrial standards M8, M12, and 7/8".

Our connectors are equipped with a **high-quality overmold** that increases their durability. They simplify the installation and networking of your machines. In addition, our connectors provide a **high degree of protection from contact problems** as well as a **high reverse polarity protection**.

At ELCO, **you can define your desired line length** in 10-centimeter-steps, starting at a total length of 10 centimeters. We also would be pleased to supply you with our power and signal distribution boxes (I/O systems).



PASSIVE DISTRIBUTION BOXES M8 & M12

- ✓ Compact & classic design
- ✓ Up to 8 or rather 12 slots with metal sleeve
- ✓ Status LED display
- ✓ M12 / M23 connection
- ✓ Master cable or removable cover
- ✓ Scheme logic PNP / NPN
- ✓ Protection class IP67

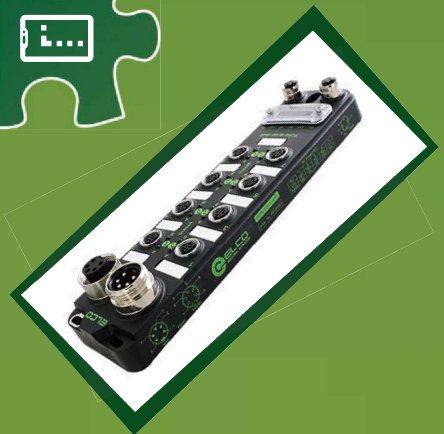
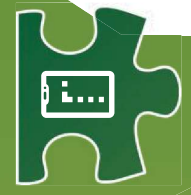


ACTIVE DISTRIBUTION BOXES COMPACT67

- ✓ Compact design with M8 or M12 threads
- ✓ Slots with metal sleeve
- ✓ Scheme logic PNP / NPN
- ✓ Up to 16 freely configurable I/Os
- ✓ Diagnosis via module level & channel level, and via controlling system
- ✓ Status LED display
- ✓ Protection class IP67



I/O SYSTEMS



COMPACT67 IO-LINK SERIES

- ✓ IO-Link V. 1.1
- ✓ Master with up to 8 IO-Link ports
- ✓ Class A and/or class B ports
- ✓ IO-Link hubs with up to 16 channels in M8 & M12
- ✓ Status LED display
- ✓ Protection class IP67



ACTIVE DISTRIBUTION BOXES SPIDER67

- ✓ Gateway for common field bus systems
- ✓ Compact design
- ✓ Status LED display at the node
- ✓ Slots with metal sleeve
- ✓ Digital & analog extension modules
- ✓ Diagnosis on module level & channel level, and via controlling system
- ✓ Scheme logic PNP / NPN
- ✓ Up to 8 freely configurable I/Os
- ✓ Protection class IP67



PROCESS OPTIMIZATION & DEVICE MAINTENANCE IN ONE.



How about highly efficient industrial interfaces? With our bus I/O modules, you multiply your company's turnover and profit: thanks to a **perfect match with different environments and application scenarios.**

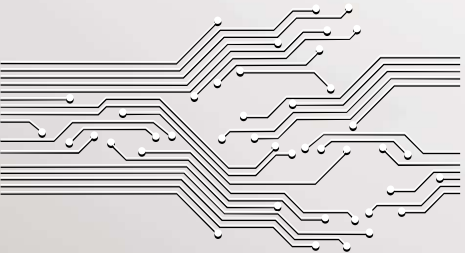
Our field bus modules of the **Compact67** and the **Spider67** series enable the **fast connection and networking of your machines and devices.** As their name implies, all ELCO I/O systems are IP67-tested and they are therefore **fit for harsh industrial environments.**

The application range of our I/O modules includes **power supply, signal transmission, bus communication, and even system diagnosis.** Due to the enormous product selection, we always have the right solution available.

Various possibilities – summed up in one system.



INDUSTRIAL AUTOMATION
ALL SERVICES FROM A SINGLE SOURCE.



... SO WHY NOT DIGITIZE WITH ELCO AS WELL?