ERNI CONNECTOR SOLUTIONS FOR AUTOMATION

A connection that lasts. Solid and reliable.

ED. 03 | 08.2019
Catalog E 074675

ERNI connectors for PLC, DCS, and remote I/O systems.

SEE THE BIG PICTURE. DOWN TO THE SMALLEST DETAIL.

Automation processes are in a state of permanent upgrade, with machines becoming more intelligent. They not only handle workpieces, but also larger and larger amounts of data. They solve increasingly complex tasks and exchange information with one another. Everything is connected.

ERNI acts as the nervous system that keeps this highly developed organism running, deploying high-density miniaturized connectors that are both precise and reliable. Even in challenging industrial environments, they ensure smooth operation in terms of the flow of data into and between programmable logic controllers (PLC), central processing units (CPU), input and output modules (I/Os), communication modules, and power supplies. All this over the course of many years.

1 MicroSpeed
Safely shielded: the optimized design ensures outstanding electromagnetic compatibility, minimal interference emissions, and high signal integrity.

2 SMC
Peace of mind: the double-sided spring contact ensures superlative vibration resistance, while the high wipe length guarantees reliable data transfer.

3 MicroSpeed Power
Suitable for high loads: featuring unrivaled current-carrying capacity, the space-saving connectors are ideal for use in miniaturized high-power systems.

4 MicroCon
Meeting the toughest demands in the smallest of spaces: with a high contact density, this solution is ideal for miniaturized systems.

ERNI connectors for drive technology.

HIGH PERFORMANCE MEETS DURABILITY.

Every drive needs something to act as its driving force, or to hit the brakes if necessary. Something that identifies situations immediately and responds accordingly. ERNI connectors take on truly crucial tasks – and above all, they take responsibility. In their role as connections between circuit boards, they are as reliable as they are energy efficient. Deployed in cutting-edge frequency inverters and highly dynamic servo drives, they transfer high levels of current and data in the high-speed range. This makes them particularly suitable for a wide range of automation solutions.

While providing to all these requirements, they make few demands of their own. Thanks to their very high level of shock and vibration resistance, they ensure reliable operation even under the most challenging conditions, whether in the drives of assembly machines, production lines, machine tools, packaging machines, or industry and process automation.

1 SMC
Full of possibilities: available in a wide range of variants and ready for extremely diverse applications.

2 MicroCon
Robust performance in the smallest of spaces: outstanding shock and vibration resistance coupled with very reliable plugging thanks to the Blind Mate design.

EMBRACING FUTURE CHANGES. THE NETWORKING OF TOMORROW.

The fourth industrial revolution is never truly going to stop, with the revolution developing into a permanent technical evolution. A highly flexible industry based around full automation that is networked with suppliers, partners, markets, and customers. Here, products are no longer provided off the rack, but are instead produced according to specific needs and requirements. Everything will communicate with everything else – machines will communicate with workpieces, power plants will interact with electronic vehicles, and food stores will exchange information with refrigerators. The list could go on forever.

With the Internet of things, our world is developing into a huge universal machine. However, networking is an essential tool for tapping into these advantages, and one that requires the ability to bring things together. ERNI connectors are already able to handle the data volumes of tomorrow without any problems, which also makes them an interesting option in terms of applications that have not yet even crossed our minds.

1 ERmet
Connecting to the future: what was once primarily used for networks, data communication, and high-performance computers has now become the standard for applications involving daughter cards and backplanes.

2 ERmet ZD
High speed on all levels: built for differential high-speed signal transfer with high data rates of up to 25 Gbit/s.

3 DIN
Well-established versatility: highly robust connector system featuring a number of variants and connection techniques in addition to the standard types.

4 MicroSpeed
Built for maximum performance: extremely vibration resistant, with outstanding EMC characteristics for data rates of up to 25 Gbit/s.

5 MicroSpeed Power
Big performance in the smallest of spaces: supplies high currents to power assemblies and features a particularly compact design.

6 Modular Jack
Future-proof solution dating back a number of years: the standard for network connections, whether in analog telephone systems or applications handling gigabits of data.

7 ERbic
BUS to Industry 4.0: variable connection technology for an endless array of application options.

ERNI connector solutions for increased productivity.

ALWAYS ON THE SAFE SIDE.

1 MicroStac
Small with high responsibility: ideal for space-saving use in a wide variety of sensors such as light barriers.

2 MicroCon
Doubly secure: features a two-sided contact, making it extremely reliable and ideally suited to use in HMIs.

3 SMC
Performance in the smallest of spaces: fulfills all safety-related requirements for use in highly sensitive devices, even in the case of major vibrations.

4 M8/M12
Well rounded: stands out due to its robustness and plays an important role in a number of applications thanks to the easy integration in the system.

Keeping things going. In order to enable production processes to run as smoothly as possible, ERNI develops connectors that play a crucial role in safety-related applications. These include condition monitoring or predictive maintenance systems that permanently monitor all processes and intervene in the controls when necessary, as well as those that forecast and schedule maintenance procedures before potential damage occurs.

The connectors correspond to the latest production standards, meeting all requirements relating to machine safety and industrial security. This is a vital factor, particularly in industries that involve the use of hazardous substances.

ERNI connector solutions for automation.

A CONNECTION THAT LASTS. SOLID AND RELIABLE.

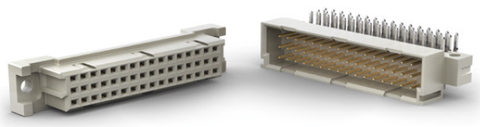
SMC
- 1.27 mm pitch
- 12 to 80 contacts
- 1.7 A current-carrying capacity
- Stack heights of 8 to 40 mm

MicroSpeed Power
- 2.0 mm pitch
- Current-carrying capacity up to 18 A per contact
- Extremely robust Blind Mate variants
- Lossless 3-point contact

MicroStac
- 0.8 mm pitch
- High current-carrying capacity up to 2.6 A
- Hermaphroditic connector

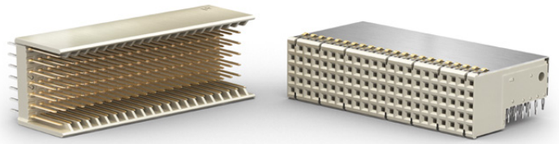
MicroSpeed
- 1.0 mm pitch
- Data rate up to 25 Gbit/s
- Shielded design
- For stacked, orthogonal, and coplanar applications

MicroCon
- 0.8 mm pitch
- High current-carrying capacity up to 2.3 A
- 12 to 100 contacts
- Robust Blind Mate design

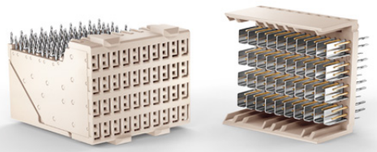


proportions deviate

DIN 41612
- 2.54 mm pitch
- Highly robust connector system
- High current-carrying capacity up to 2.6 A
- Pin counts from 20 to 160

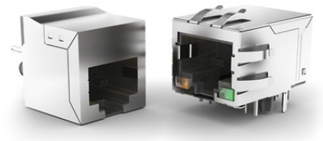


ERmet
- 2.0 mm pitch
- Data rate up to 2 Gbit/s
- Sequential plugging for hot-swap applications



ERmet ZD range
- 2.5 mm pitch
- Data rate up to 25 Gbit/s
- High contact density, 40 differential pairs per inch

M8/M12
- SMT variants
- Highly variable assembly kit system
- Featuring contact security and robustness
- Provides ingress protection to IP67



Modular Jack
- With and without integrated filter
- Data rate: Fast Ethernet; Gigabit Ethernet
- Single-port and multi-port designs
- Low-profile variants

proportions deviate

ERbic
- For PROFIBUS and CAN
- Connectable termination resistor
- Optional PG interface
- Vertical and horizontal cable outlet

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