Establishing connections. Sharing signals. Enabling automation.

Connectivity Product Overview





Your automation, our passion.



Connectors. Cordsets. Automation. Connectivity from Pepperl+Fuchs.

Automation is our world: Pepperl+Fuchs develops sophisticated sensors for your applications. Keeps your processes running smoothly. Provides high-performance sensor technology with connection technology to match. Our product portfolio offers you an integrated solution. Sensors and the ability to connect them. We supply everything you need for optimum connectivity in one place.

Perfectly paired products from a single source

Innovation, application expertise, and working closely with our customers – these are the principles that have made Pepperl+Fuchs a global pioneer and innovator. Decades of practical experience have allowed us to develop a portfolio of connection technologies that is perfectly adapted to your automation needs. By providing you with sensors and their corresponding connection components from a single source, we can boost your productivity and increase the availability of machines and plants.

Excellent quality in any environment

Pepperl+Fuchs products are used in a wide range of applications. These applications, including those that take place in the harshest conditions and hazardous areas, require sensors that can stand up to the challenge. This is why we set the highest quality standards for our entire product portfolio – including our connection technology. Because in the field of automation, only well-thought-out solutions with maximum reliability will stand the test of time.

Solutions that best fit your application

Our goal is to make our customers' applications as simple, efficient, and reliable as possible. Benefit from our application expertise: The experts at Pepperl+Fuchs have the exact connections that you are looking for – we know which sensors go with which applications, and which connection components to use with each sensor.





Find Your Connection Technology in Just a Few Clicks. Online Product Selector from Pepperl+Fuchs.

Go online. Specify your requirements. Select your connection technology. Find the right cable for your application in just a few clicks. The portfolio – arranged by specific automation requirements – makes the selection process easier for you and guides you to what you need. If you have any questions, our experts are available to take your call.



www.pepperl-fuchs.com/connectivity



Standardized and Perfected: M8/M12 Product Overview.

Connectors with M8 or M12 connections are at the heart of industrial automation. The Pepperl+Fuchs brand is synonymous with exceptional product properties and uncompromising quality – carefully designed down to the last detail, and developed based on practical requirements.



Quality with no ifs, ands, or buts

Pepperl+Fuchs does not compromise on quality. We use select cable material suppliers and cable types from certified European manufacturers to guarantee exceptional reliability and quality. Optimized production ensures gas-tight crimps, which guarantee maximum durability and the longest possible service life.

Practical and quick connectivity

Fast and secure connections save time and increase productivity. Cordset technology from Pepperl+Fuchs makes it easy to connect sensors, actuators, and control system components. Tool-friendly knurled coupling enables fast and permanently secure attachment at exactly the correct torque.

Designed for heavy-duty continuous use

We rely on connectors to do their job – even if they are continuously exposed to mechanical vibrations and high levels of mechanical stress. Pepperl+Fuchs has developed vibrationresistant coupling connections that guarantee a secure connection, even in the most extreme conditions.

In-house production and zero-defect tolerance

Sensors do what they were designed to do when they are connected using the best possible solutions. Cordset technology from Pepperl+Fuchs is subject to an automated 100% functional test providing high reliability. The latest manufacturing technologies at our production site in Hungary allow us to implement a zero-defect tolerance policy – guaranteeing smooth operation and a long service life.



Stainless steel nut for harsh environments.



LED version facilitates diagnosis.



cRUus-approved models.



Perfection in detail

- Highest quality gas-tight crimps
- IP67, IP68, and IP69K degree of protection
- FKM seals (Viton[®]) for high quality sealing
- Different cable qualities to meet a wide variety of application needs, from basic to extreme
- Stainless steel couplings for harsh application conditions and secure connection
- Mechanical vibration protection system for maximum vibration resistance
- Gold-plated contacts ensure low and consistent contact resistance
- Specially shielded versions for high electromagnetic compatibility requirements

Key advantages

- Pepperl+Fuchs provides sensor and connection technology from a single source
- Global availability of standard lengths available from stock
- Support every step of the way, from application consulting to dedicated technical support
- Experienced application development for individual solutions and special requirements
- cRUus-approved for global market access

Specific Applications Require Specific Materials. Pepperl+Fuchs Cables Cover a Wide Variety of Application Requirements.

No two applications are alike. Each installation environment has its own set of requirements. The mechanical and chemical properties of the connection technology are crucial in determining the best solution. Pepperl+Fuchs offers the right cable for every situation.

PVC – Solid and economical

Cables with PVC sheathing are designed for use in areas subject to moderate mechanical stress and are suitable for use in the food industry:

- Medium mechanical strength
- Good resistance to chemical agents
- Suitable for use in the food industry
- Available in cRUus-approved styles

PUR – Durable and highly flexible

Cables with PUR sheathing are characterized by long-lasting flexibility, as is required, for continuous use in machine tools:

- High mechanical strength
- Good resistance to chemical agents
- Good oil resistance
- Halogen-free

PUR U – Highly flexible with UL approval

These highly flexible cables with PUR sheathing are designed for particularly harsh operating conditions. Typical applications include drag chains, swivel, and rotary tables:

- Very high mechanical strength
- Good resistance to chemical agents
- Good oil resistance
- High flame resistance
- Halogen-free
- Suitable for drag chains

PUR A – Resistant to welding sparks for the automotive industry

PUR A cables are an alternative to irradiated PUR cables. Their resistance to welding sparks makes them ideal for use in the automotive industry:

- Very high mechanical strength
- Good resistance to chemical agents
- Good oil resistance
- Highly flame-retardant
- PUR sheathing resistant to welding sparks
- Easier to recycle than irradiated sheathings
- Halogen-free
- Suitable for drag chains

POC – Specifically for welding areas

These highly temperature-resistant cables are used in the immediate vicinity of welding processes. They are used in areas where other cable types cannot stand the heat. Automotive, weld cell, and steel industries are the main areas of application:

- Extreme mechanical strength
- Thermal resistance of 150°C continuous operating temperature
- Resistant to high-temperature welding slag

STOOW – Designed specifically for the American market

As a heavy-duty PVC compound, STOOW offers heavy gauge conductors and a durable outer jacket for the automotive industry:

- Good resistance to chemical agents
- Good oil resistance
- Highly flame-retardant
- Heavy-duty PVC compound in accordance with STOOW
- Rating up to 600 V
- Available with 7/8 inch connectors for AC sensor connectivity

PUR-OD – Robust for tough outdoor applications

PUR-OD cables are very robust and can be used at a wide range of temperatures. For this reason, these cables, which are designed specifically for outdoor applications, are used predominantly in the mobile equipment field:

- Very high mechanical strength
- Highly flame-retardant
- UV-, sea-water-, oil-, and diesel-resistant
- Temperature range of –50°C to +105°C
- Halogen-free
- Suitable for drag chains
- UL approval



More than Cordsets: Connectivity Product Portfolio.

In addition to connectors and cables, Pepperl+Fuchs offers other components that guarantee long-term functional reliability and machine availability. Among these are fully encapsulated Y-splitters providing the ultimate standard in robustness. And field-attachable connectors providing a convenient solution to customize your cable cordset to the application.



T- and Y-splitters

Splitters enable you to easily merge two signals into one junction block port. These are also suitable for cost-effective looping of bus signals to minimize wiring:

- Fully encapsulated housing provides IP68 rating
- Available with sockets or molded cables
- Standard splitter cable lengths available



Field connectors

A wide range of field-attachable connectors suitable for a diverse range of applications. Ideal for maintenance, easy repair, or plant expansion on-site:

- Plastic or metal version
- Shielded and unshielded versions
- Different connector types, including M8, M12, 7/8", and others, with screw attachment or insulation displacement technology
- Allows for precise configuration on site



Junction blocks

M8 and M12 multiport sensor connection blocks with master cable or connector for reduced installation costs:

- Fully encapsulated housing meets IP68 rating
- 100% tested for complete reliability
- Integrated LEDs for easier diagnostics
- Large socket spacings (M12) or offset sockets (M8) for easy fit connection



Receptacles

Signal routing from the control cabinet directly into the field.

- Sealing in accordance with IP67/68
- Multiple connection types and pin counts
- Available with PG or metric thread
- Cabinet wall mounting, front or back



Fieldbus cables

Fieldbus cables enable you to create a permanently reliable network between the different components of your automation system:

- PROFIBUS
- PROFINET/Ethernet
- CAN/DeviceNet



Valve connector cordsets

As a system provider, Pepperl+Fuchs provides ready-made components with exceptionally robust designs:

- Fully overmolded housing design provides IP68 rating
- Overmolded, captive seal
- Various internal circuit types to provide built-in noise suppression
- Versions in accordance with DIN and industry standard



Mounting tools for connectors

Speed and precision are crucial for both installation and maintenance. These mounting tools enable our knurled coupling connectors to be attached securely at exactly the right torque:

- Tightening bit for M8 and M12 coupling nuts, available separately
- Preset torque so you can quickly make connections

Your automation, our passion.

Explosion Protection

- Intrinsically Safe Barriers
- Signal Conditioners
- Fieldbus Infrastructure
- Remote I/O Systems
- HART Interface Solutions
- Wireless Solutions
- Level Measurement
- Purge and Pressurization Systems
- Industrial Monitors and HMI Solutions
- Electrical Explosion Protection Equipment
- Solutions with Explosion Protection

Industrial Sensors

- Proximity Sensors
- Photoelectric Sensors
- Industrial Vision
- Ultrasonic Sensors
- Rotary Encoders
- Positioning Systems
- Inclination and Acceleration Sensors
- AS-Interface
- Identification Systems
- Logic Control Units



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