## **Equipped for Success.**

70 years of experience always ensure the ideal solution.

Electrical Explosion Protection Equipment





#### **Explosion Protection**

#### "Safety First!" for Process Industries

"Safety first!" As the world's leading supplier for and pioneer in electrical explosion protection, safety is our top priority. We protect and connect the global process industry with our products and solutions across all types of hazardous area protection and for a wide range of applications.

As a reliable industrial partner, we are aware of the special challenges you face every day. A team of more than 600 engineers is committed to developing tomorrow's solutions today—further expanding our expertise on topics such as functional safety, including the world's only complete SIL 3 portfolio and 10 million installed SIL components. Our commitment to optimizing the productivity of mobile workers is reflected in significant investments in the development of digital communications. With more than 500,000 mobile devices supplied worldwide, limitless connectivity and safer working conditions are becoming a reality, wherever you are.

We develop, manufacture and support our products through a network of eighty locations around the world. We provide support wherever it is needed—with products that are globally certified and suitable for your working environment. From initial application analysis to project implementation through one of our six Solution Engineering Centers we have across four continents, the only path to success is through strong partnerships with clear communication and good collaboration.

While the ethics of business that form the foundation of our company have not changed to this day, the entrepreneurial spirit to always develop the latest technologies to meet our customers' demands is greater than ever. Whether we are developing intrinsic safety interfacing and surge protection systems for conventional applications or introducing new technologies such as fieldbus or smart wearables, our drive for continuous improvement remains the same. This is particularly evident in the example of the new Ethernet-based Advanced Physical Layer (Ethernet-APL) for process automation: with this technology, we are at the forefront of the digital transformation in the context of Industry 4.0. Ethernet-APL enables companies to leverage technology and expertise to enhance their processes and implement IIoT-capable applications.

Whether conventional applications or complex tasks such as the digital transformation of your application to the IIoT level: by rethinking established technologies, we pave the way for future challenges.

Join us in the future of process automation!

www.pepperl-fuchs.com



#### Global hazardous area expertise

local approvals



#### **Solution Engineering Centers**

product specialists around the globe



#### **World-leading innovative products**

technology leaders



#### Reliable long-term partner

supporting customers for over 70 years



#### **Dedicated local support**

over 80 offices globally



#### Meets global quality standards

we manufacture what we design



#### **Global warranty**

products are supported worldwide



#### **Distribution centers**

products delivered directly to you on time





















#### Solutions for Electrical Connections. Rugged, Versatile Portfolio Designed for Your Needs.

Pepperl+Fuchs offers a wide range of terminal and junction boxes for installation in hazardous areas. Primarily used for distributing, connecting, or conducting signals and power in hazardous environments, these devices can be fully customized to the customer's requirements. Our extensive array of options ensures maximum flexibility for our customers. In addition, our solutions comply with regional directives and requirements, enabling their worldwide use.





Pepperl+Fuchs offers highly configurable terminal and junction boxes featuring the types of protection Ex d, Ex e, Ex i, and Ex op pr. The boxes are available with short lead times. They can be used in temperature ranges from -60 °C to +60 °C, covering an extensive temperature range without the need for additional mechanical protection for the cable glands.

#### **Cable Glands**

Cable glands are crucial in ensuring that components and solutions are perfectly adapted to customer requirements. Pepperl+Fuchs offers a complete portfolio in a wide variety of materials and types of protection. This includes plastic cable glands with maximum impact resistance in accordance with IEC and IP/type standards, eliminating any requirement for additional mechanical protection and therefore providing maximum efficiency.

#### Solutions available for the following specifications:





















#### Requirements

Components and solutions must be specially tailored to regional guidelines and requirements. Pepperl+Fuchs offers perfectly coordinated, ready-to-use, and fully certified systems for this purpose. These systems are all of the highest quality and can be implemented quickly and efficiently.

















#### Control and Monitoring

## Reliable Everywhere. Protection through Operation and Monitoring.

From cranes that move heavy loads to applications that require millimeter precision, Pepperl+Fuchs control systems and command and signaling devices are characterized by their reliability. The extensive range of control elements enables seamless operation and monitoring for any suitable application. For example, a small control unit can be equipped with up to five intuitive operating elements. In addition, the durable portfolio ensures investment security for customers across all industries.





Pepperl+Fuchs offers a variety of control stations and control units for use in Zone 1/21, Zone 2/22 and Division 2 applications. They can be configured in various types of protection, including increased safety Ex e and flameproof Ex d designs, making them suitable for monitoring and control applications. A wide range of enclosure sizes and designs are available in copperfree aluminum, stainless steel, glass fiber reinforced polyester, and polyamide. The portfolio is rounded off by a large number of operating elements for a wide variety of control functions—providing the right solution for every requirement.

#### **Applications and Requirements**

Control stations and units are used in almost all areas of process automation, including for pumps, centrifuges, crane controls, or analysis containers. Pepperl+Fuchs offers users a comprehensive and highly reliable portfolio of control stations and units that ensure a safe investment. Decades of experience and in-depth knowledge form the perfect basis for providing optimal support for MRO projects, including the provision of documentation for proper documentation.

#### Solutions available for the following specifications:

























### **Components or Custom Solutions— the Perfect Choice for Machine Builders.**

If a solar-powered UPS system is to be used on offshore platforms, special solutions are required to supply critical loads. Pepperl+Fuchs offers solutions tailored precisely to customer needs—from individual components to complete packages. Whether offshore platforms, petrochemical plants, or other sectors, your needs are in the hands of experts dedicated to delivering excellence.





The vast array of control and distribution panels from Pepperl+Fuchs offers nearly unlimited flexibility. Housing designs with various types of protection ensure reliable protection for every application. A wide range of aluminum and stainless steel enclosure sizes, suitable for Ex d IIB+H2 or Ex d IIC gas environments, offers the right solutions for every application. In addition to international certifications according to ATEX, IECEx, and UL, we also offer a variety of local certifications

#### **Applications and Requirements**

From elevators to power distribution boards and oil separators, control panels play a vital role in virtually every aspect of machine construction. Customers seek components that seamlessly integrate with their own equipment, as well as fully customized operating and control panels. Pepperl+Fuchs not only provides the right solutions to meet these needs but also offers certification and documentation services, ensuring a comprehensive package from a single trusted source.

#### Solutions available for the following specifications:



















#### **Purge Solutions**

## Highly Reliable, Efficient, and Flexible. Purge and Pressurization Systems for Plant Engineering.

As the Leaders in Purging Technology®, we manufacture innovative solutions that are remarkably simple to use and will easily handle just about any application. Pepperl+Fuchs offers a full range of purge and pressurization equipment to meet the needs of your application.





Pepperl+Fuchs holds global accreditations to build, certify, and label custom enclosure solutions with NEC, ATEX, IECEx, and other approvals. Combined with local service and support anywhere in the world, Pepperl+Fuchs strives for long-term, reliable partnerships with its customers. By offering all required services and products, customers receive a fully certified and ready-to-use solution from a single source.

#### **Applications and Requirements**

Purge systems can be used with a variety of process automation components without specific Ex approval. If these automation components are used in explosion-hazardous environments, purge and pressurization is the preferred type of protection. In this field, Pepperl+Fuchs offers absolutely reliable, cost-effective system solutions for protecting electronics from explosive gases.

#### Solutions available for the following specifications:







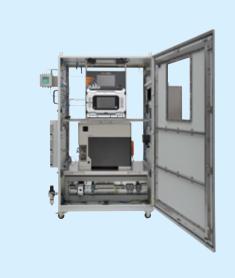
















#### Solution Engineering Centers (SEC)

#### **Custom-Designed Certified Solutions**

#### **Turning Products into Solutions**

Each process plant comes with its own challenges and requirements. Efficiency, reliability, and availability of the plant call for a process control system that not only offers insight into the operation of the process, but also provides a well-founded basis for informed decision-making.

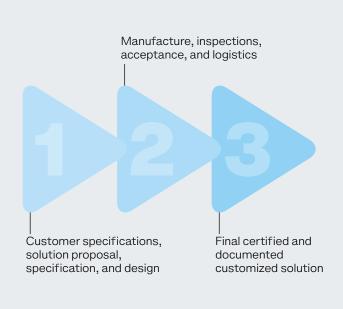
The Pepperl+Fuchs Solution Engineering Centers (SEC) are there to assist plant operators and provide them with custom-designed solutions tailored to individual specifications. This not only guarantees firsthand knowledge and experience, but also greatly reduces on-site efforts for engineering, installation, and configuration. Various types of protection and many housing variants as well as a high degree of flexibility enable the design of efficient control and distribution solutions for any application and industrial environment.

#### **Global Teams with Local Experience**

Pepperl+Fuchs has several Solution Engineering Center locations worldwide. They are familiar with local requirements and know the specific needs of the global process industry. By using their services, customers can rely on in-depth specialist knowledge and the outsourcing of necessary tasks. As a result, the customer receives far more than just components for upgrading systems and bridging technology generations. They receive a certified, turnkey solution that is guaranteed to integrate seamlessly into their existing processes, giving them more control and increased system transparency.







#### **Three Steps to Your Next Solution**

Plants in the process industry present increasingly complex challenges, not least in terms of explosion protection.

Numerous legal regulations must be complied with; after all, people and the environment need to be protected even more so than plants and machinery. Not surprisingly, these changes are impacting the types of problems and tasks that companies face. To ensure that companies can continue to focus on their own core business, customized solutions from Pepperl+Fuchs are developed in collaboration with our customers to meet the global approval standards of a trusted partner.

#### Our Solutions, as Individual as You.

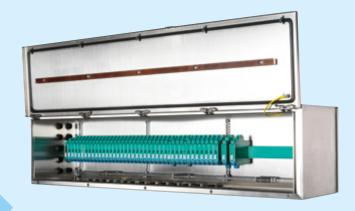


Remote I/O



**Ethernet-APL** 

Interface









#### Fieldbus



For more information, visiting pepperl-fuchs.com/
pf-solutions





Custom-Made Cabinets

WiFi Access
Points

НМІ





# Your automation, our passion.

- Industrial Sensors
- Industrial Communication and Interfaces
- Enterprise Mobility
- Hazardous Area Products and Solutions

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Pepperl+Fuchs Quality

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