

**Simplifying protection.
Delivering reliability.
Optimizing productivity.**

6500 Series Ex px/py for Zone 1/21



Your automation, our passion.

PEPPERL+FUCHS

Bebco EPS® Purge and Pressurization Systems

Engineered for simple operation, the Bebco EPS 6500 Series Ex px+py purge and pressurization system sets a new standard for global purge solutions. Specifically designed for Zone 1/21 locations – this innovative automatic system delivers all the features you need for reliable hazardous location protection within a small, streamlined solution.

Unmatched Products and Reputation

The Bebco EPS brand stands for excellence in design, technology, distribution, competitive pricing, and delivery. As global leaders in purge and pressurization solutions, our reputation in the industry is unmatched. We're committed to working together with you as a partner, to understand the needs of your market, and to develop cutting-edge solutions that confront the demands of hazardous location protection.

Unmatched Service and Support

With decades of experience in hazardous location protection, Pepperl+Fuchs has the ability to provide exceptional customer service and support that you can rely on. With offices in over 140 countries across the globe, we are always nearby and ready to assist anywhere in the world.

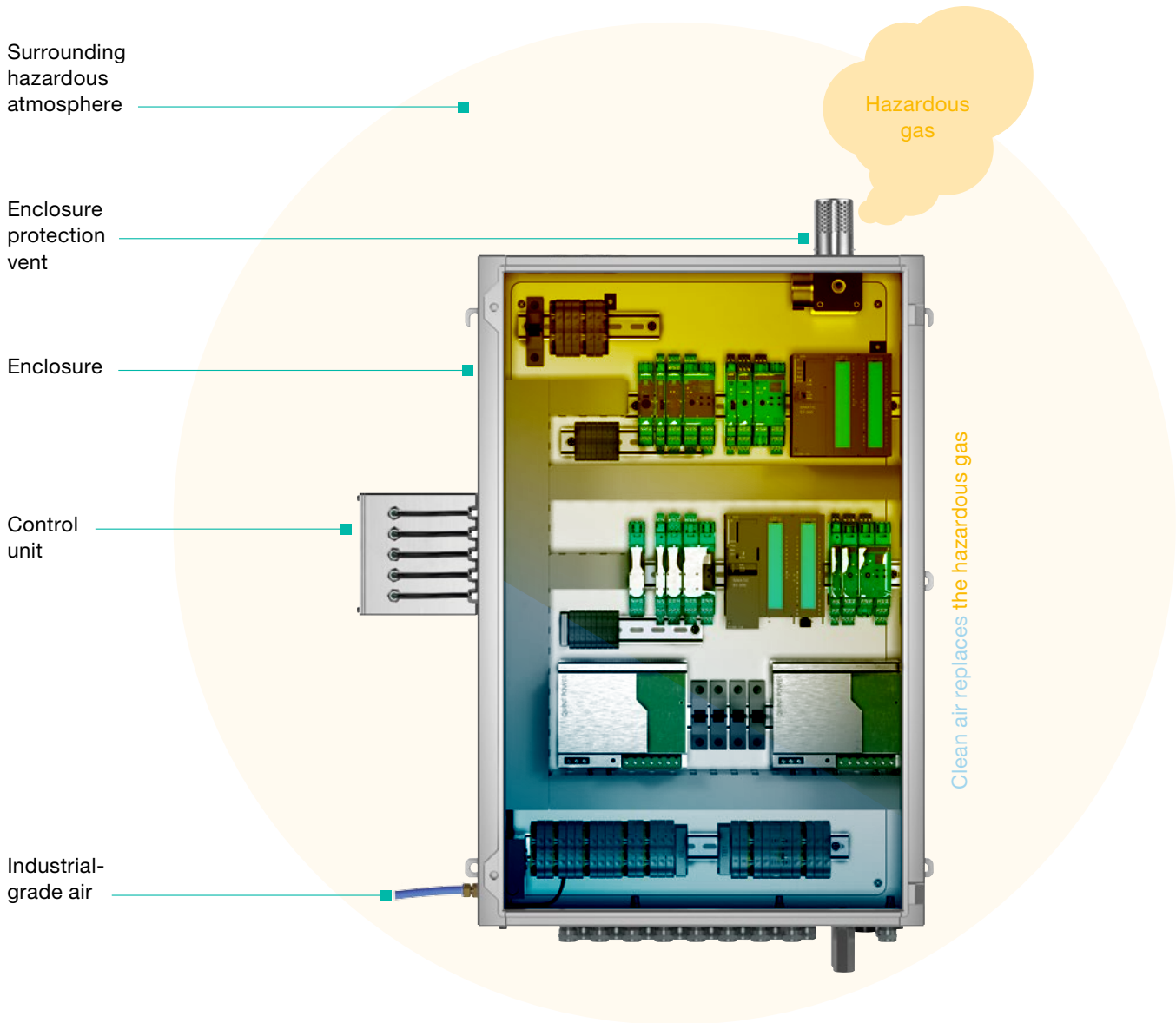
Key Industries

- Analyzer industry
- Oil and gas
- Pharmaceutical
- Chemical
- Power industry
- Waste water
- Food and beverage



| Technical Data | |
|-------------------------------|--|
| Approvals | ATEX/IECEX Zone 1/21 |
| Purge type | Type Ex px - general-purpose equipment in Zone 1/21 locations Type Ex py - Zone 2/22 equipment in Zone 1/21 locations |
| Rated voltage | Universal AC/DC |
| Size | 152 x 140 x 140 mm |
| Weight | 5 kg |
| Material/degree of protection | Control unit – 316L stainless steel/IP66 Vent – Anodized aluminum body (stainless steel or aluminum vent cap)/IP 66 |
| Operating temperature | -20 °C ... +70 °C |

| Accessories |
|-----------------------------|
| Cable gland kit |
| ATEX/IECEX digital |
| ATEX proportional valve |
| Mounting bracket kit |
| Programming software |
| 6500 series smart phone app |
| RS485-USB converter |



Straightforward and Reliable Protection

When it comes to placing electrical equipment in hazardous locations, few protection methods offer the versatility and efficiency of purge and pressurization. When compared to heavy explosion-proof enclosures or technical intrinsic safety methods, purge and pressurization delivers an unmatched combination of cost-effectiveness and simplicity for hazardous location protection.

Purge and Pressurization Process

Purge and pressurization allows protection of electrical devices from a surrounding hazardous atmosphere by placing them inside a lightweight, positively pressured enclosure. This enclosure is then purged with industrial-grade air, or an inert gas, and maintained at a pressure higher than the dangerous external atmosphere, preventing the flammable mixture of gas or dust from coming in contact with the internal components.

System Components

- Control unit – Automatically controls essential operating functions
- Manifold/Solenoid – Electronic valve controlling purge cycles and air flow
- Relief vent – Digitally controlled pressure relief vent
- Common, lightweight enclosure/cabinet – Separates safe area from surrounding atmosphere

Flexible Protection for Demanding Process Control

With its universal design, the 6500 Series can deliver reliable hazardous location protection for a wide range of demanding Zone 1/21 applications. From large control cabinets to complex custom solutions, the 6500 Series provides field-proven safety that you can trust.

Eliminating the Complexity of Explosion Protection

Because purge and pressurization eliminates the need for heavy, explosion-proof enclosures, the 6500 Series is an ideal solution for Zone 1/21 control cabinets and panels – helping reduce overall cost, weight, and space requirements. With the ability to safely protect electrical enclosures up to 12.7 m³ the 6500 Series can handle applications such as:

- Large process control cabinets
- Indoor or outdoor control panels
- Skid-mounted control systems
- Enclosed HMI systems/operators
- Hazardous location motors
- Unmanned, remote control panels

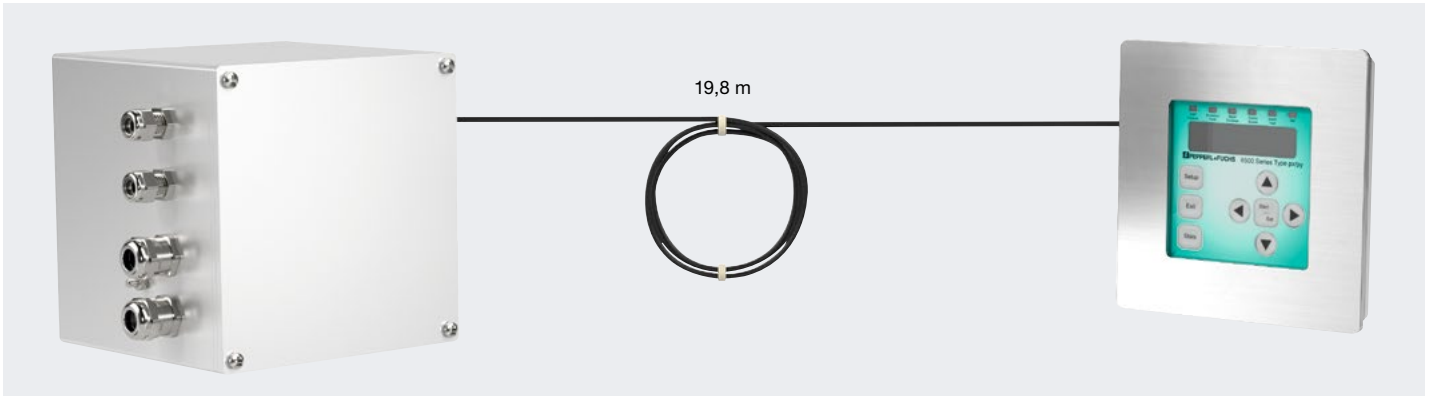
Highlights:

- ATEX, IECEx, Zone 1/21 certifications.
- Control unit automatically controls power, pneumatics, and monitoring of enclosure temperature and pressure.
- Intrinsically safe, LCD touchpad user interface allows configuration and monitoring during operation.
- Remote monitoring capabilities via RS485/HART and Bluetooth connection.
- Password protected control unit.
- Digital pressure relief vent for various flow rates and continuous flow/dilution.

Engineered for Simplicity

The 6500 Series was designed to be adaptive, yet simple. With ATEX/IECEx certifications for both gas and dust, this compact 316L stainless steel unit provides a single, streamlined solution for many Zone 1/21 applications – making it an ideal solution for global OEMs, panel builders, integrators, and end users.





Universal Design for Easy Integration

The 6500 Series was designed to reduce the burden of typical purge installations. With universal AC/DC power requirements and internal or external mounting options, the 6500 Series makes it easy to integrate, specify, and install into a wide variety of applications. Also available as a component kit, the 6500 Series allows the control unit and user interface to be separated up to 19.8 meters.

Application-Focused Relief Vent

The 6500 Series relief vent, which is a required component of the 6500 system, provides one of the only fully digital vent units on the market, allowing continuous monitoring of flow rates and pressure. In addition, the 6500 Series vent was designed to be easily installed and specified into any application with internal or external mounting options of the vent body and various flow rate models including:

- High flow – For large enclosures requiring high volumes of air exchange
- Low flow/sealed – For common enclosures or bottled air and mobile applications that require a tight seal and conservation of air source
- Continuous flow – For dilution applications and gas analyzer



Dependable, Zone-Rated Components

The 6500 Series is also available with multiple Zone-rated solenoid valves. Options are available that include ATEX/IECEX-rated digital valves or proportional valves to deliver reliable flow rates for a wide range of applications.

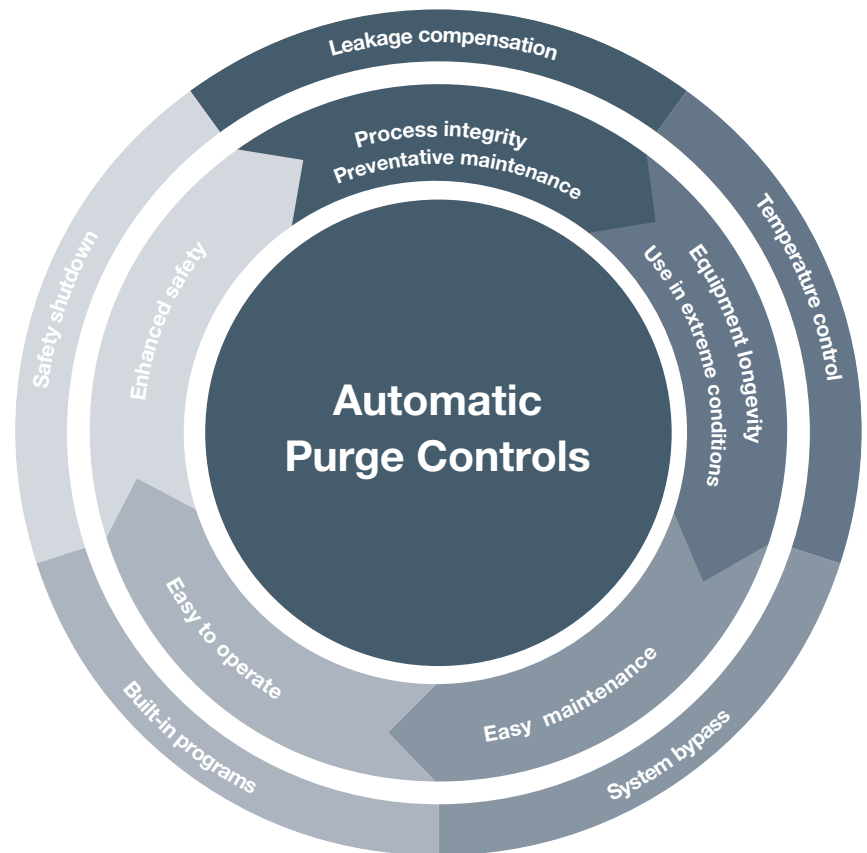


Automatic Technology for Safe Operation

Automatic Monitoring for Process Reliability

Shutting down a critical process on the plant floor can be a costly waste of time and manpower. With its ability to continuously monitor the purged solution, the 6500 Series can automatically control essential functions to keep the application running day and night, 24/7. The control unit can be easily programmed to handle a variety of functions including:

- Automatic pressure monitoring and control to compensate for enclosure leakage or pressure differentials
- Automatic temperature control via RTD input, with output signals to activate a solenoid valve or external heater/cooler
- Automatic power control for immediate shutdown in the event of complete pressure loss (required for Zone 1/21 applications)
- Automatic diagnostic feedback and system status through RS485 communication



Increased Equipment Longevity

Along with ensuring continuous operation, the 6500 Series' automatic functionality can be used to eliminate equipment malfunctions inside the enclosure due to heat exposure, moisture buildup, and corrosion. Eliminating these problems can prevent premature aging or failure of the equipment and help reduce excess inventory.

Intelligent Programming

The 6500 Series' intrinsically safe user interface delivers one of the only control units that can be configured during operation. In addition, its menu-driven programming and the backlit LCD screen simplifies setup while allowing detailed user input and configuration including:

- Pressure, flow, and temperature
- Bypass controls
- Enclosure contacts
- Manifold actuation
- Auxiliary outputs for alarms or enclosure door locks
- Diagnostics



Real-Time Communication for Optimized Productivity

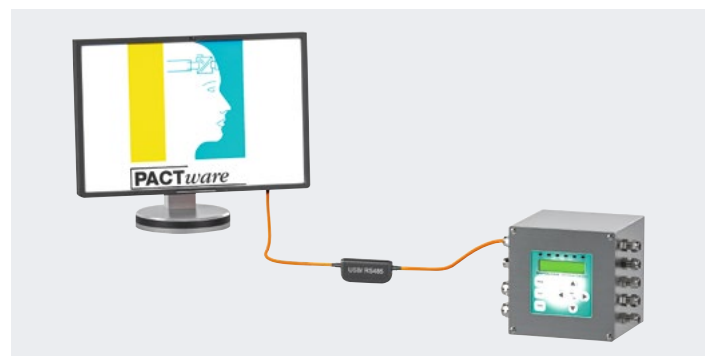
For demanding hazardous locations, continuously monitoring a particular application is essential to maintaining a process safety. The 6500 Series delivers on this need and offers advanced diagnostic capability either with a hardwired RS485 or Bluetooth connection for complete control of the application.

Remote Connection for Simple Diagnostics

The 6500 Series control unit is equipped with an RS485 communication port with HART protocol. This added feature allows real-time monitoring and troubleshooting capabilities directly in the control room. Integration to a user's AMS or PLC can be completed easily with downloadable DD, DTM, or EDDL files.

For more info, visit:

www.pepperl-fuchs.com/6500-dtm



Bluetooth Monitoring Capabilities

Additional monitoring and diagnostic information is available using the 6500 Series' innovative Bluetooth connectivity. Through the use of our free Android or iOS app, the 6500 Series allows users to wirelessly connect and monitor multiple control units for up-to-date statistics of the purge system.

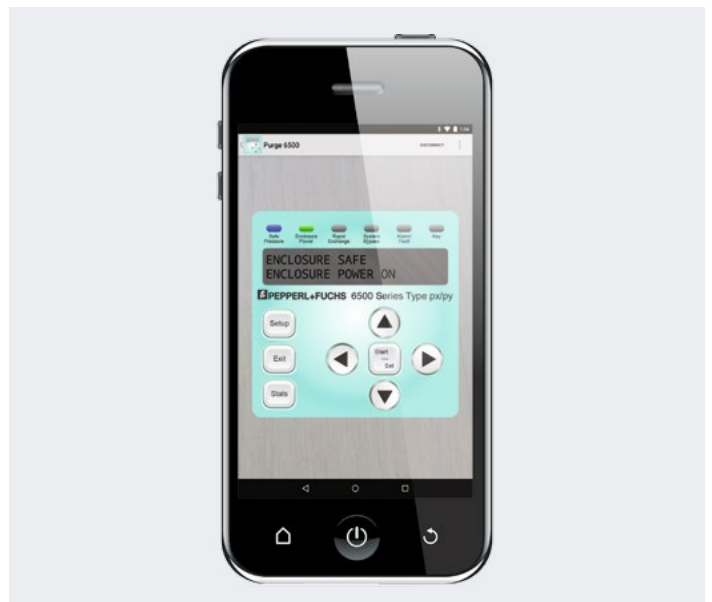


Smartphone App for Enhanced User Insight

Available for use on smart phones or tablets with Android or iOS operating system, the free 6500 Series app utilizes the system's Bluetooth connection to actively keep tabs on essential information such as enclosure pressure, temperature, and flow. In addition, this free app doubles as a training tool, offering a step-by-step simulation software for easy configuration after installing the unit.

For more info, visit:

www.pepperl-fuchs.com/6500-app



Ignition Protection for Process Analyzer Applications

The measurement and monitoring of trace gases or liquids has become an essential process for the process automation industry. Highly sophisticated electronic gas analyzers used for these applications are continuously exposed to dangerous gases and demand reliable ignition protection for their internal electronics. With its advanced programming and dilution capabilities, the 6500 Series provides a reliable and effective solution designed specifically to handle these tough applications.

Difficult Applications Made Easy

The 6500 Series delivers a dependable and cost-efficient solution for today's analyzer market. With its intrinsically safe proportional valve and continuous flow vent, the 6500 Series can provide a steady flow of air around the enclosed gas analyzer, creating a safe dilution of hazardous gases surrounding the analyzer's electronic components. In return, this provides a simple and lightweight solution for gas analyzers over traditional explosion-proof solutions.



Solution Engineering Center – Custom Solutions Tailored For Your Needs

Not all purge and pressurization solutions are created equal. At Pepperl+Fuchs' Solution Engineering Centers (SECs), we have the unique ability to offer engineering and tailor-made system solutions for customers all over the world. From conventional purged enclosures to highly customized solutions – there is no job that we can't handle.

Comprehensive Range of Services

Pepperl+Fuchs' SEC works across a variety of industries and scales to satisfy our customers' needs, from single, small-scale solutions to complex, global installation projects. Our SEC is highly trained in the manufacturing and certification of Ex p solutions and can provide a cost-efficient solution no matter how unique and demanding the application may be.

Custom Application Examples:

- UV ballast water reactors
- Hazardous location printers
- Mobile weighing systems
- Security/infrared cameras
- GPS/communication hotspots



Staying in touch. The world over.

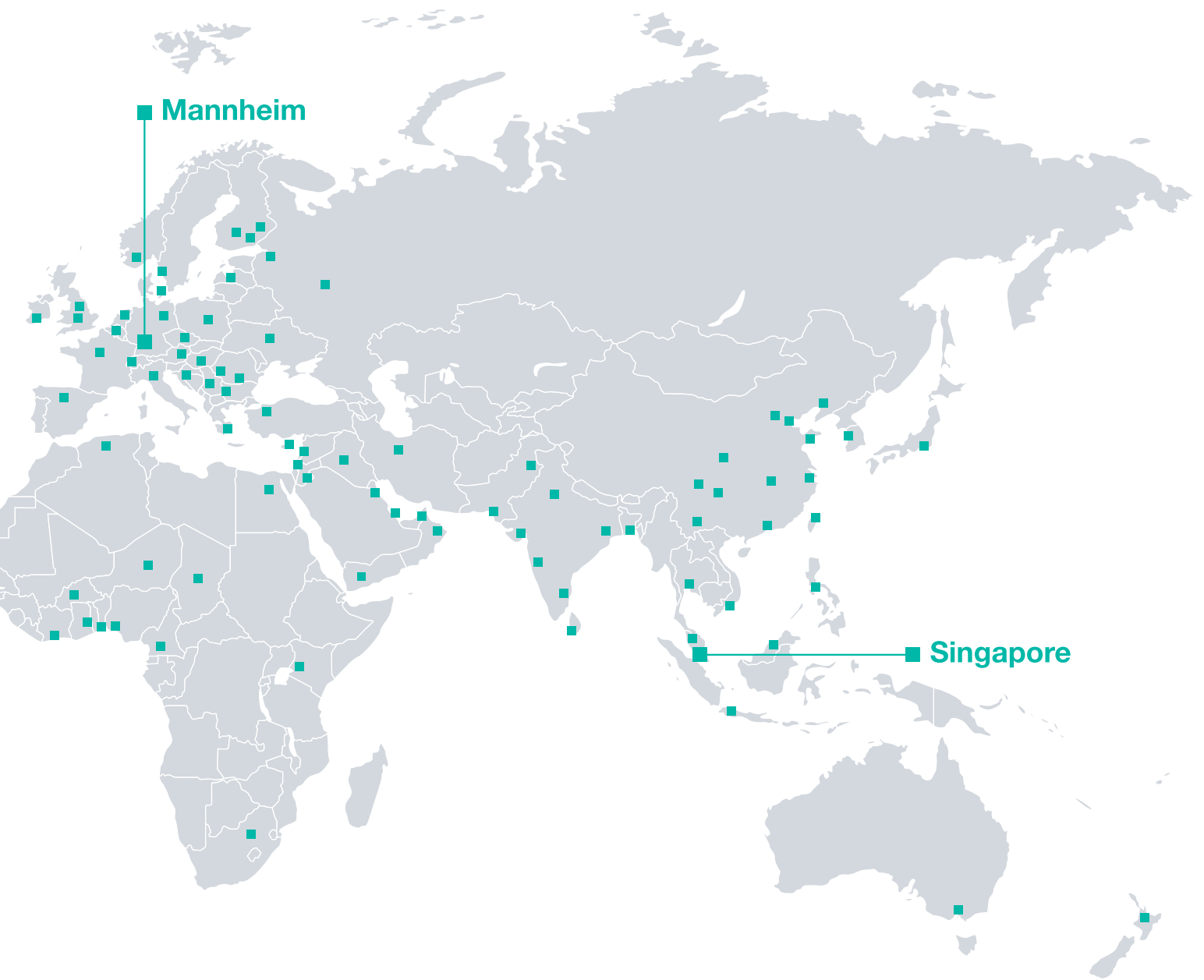
Good customer relationships need care and attention. They are an indication of genuine interest, trust, and a cooperative spirit: the foundation of Pepperl+Fuchs' strengths. No matter where you might be, we are always nearby. And we speak your language – in more than 140 countries the world over.



At home on all continents

Our customers are at the center of all our activities. Our world-wide network ensures that we provide them with the best possible service and support. Our world headquarters in Mannheim services Europe through a network of more than 40 affiliates. Asia is handled by our office in Singapore, with more than 1,000 employees in manufacturing, service, and sales. And our North American headquarters in Twinsburg, Ohio, is responsible for a comprehensive network of offices and sales partners in the USA, Canada, and Mexico.

No matter where in the world you may be, Pepperl+Fuchs is right nearby – and always there for you.



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 for 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
- Connectivity