

Automating functions. Simplifying operations. Modernizing protection.

Bebco EPS® 5500 Automation for
Purge and Pressurization



Your automation, our passion.

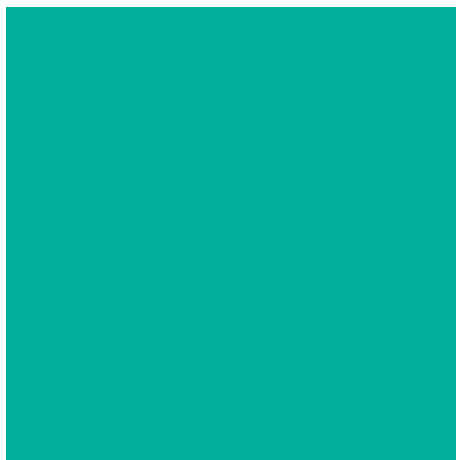
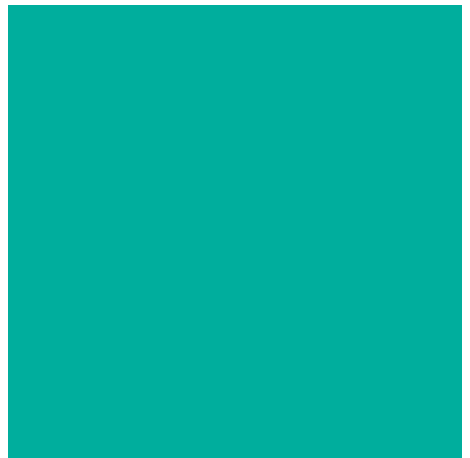
 **PEPPERL+FUCHS**





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Bebco EPS by Pepperl+Fuchs— The Leaders in Purging Technology®.

For nearly 25 years, Pepperl+Fuchs Bebco EPS has been reliably protecting equipment with purged enclosures.

The Bebco EPS brand stands for excellence in design, technology, distribution, competitive pricing, and delivery. Our reputation in the industry as the global leader in hazardous-area protection is unmatched. We meet customer needs by providing a wide range of products geared to your individual applications and operational preferences. Bebco systems provide a host of unbeatable benefits. User-

selectable programs and menu-driven configurations eliminate manual controls. Automatic temperature and leakage control keep shutdowns to a minimum. And clear status communication makes it simple to quickly adapt to any situation. Whatever your requirements might be, we have a solution that's right for you. We have decades of experience serving as a reliable partner for process industries around the world.

Automation opens up new applications.

The new, compact 5500 series is easy to use, offering absolute reliability and efficiency. It's fully automated and provides excellent enclosure protection for electrical equipment like motors, drives, control panels and cabinets, gas analyzers, and camera monitoring systems. Whether you need gas or dust protection in the oil and gas, chemical, maritime, or offshore industry—the Bebcu EPS 5500 can be used in process industries around the world for applications that previously required more expensive and heavy explosion-proof protection.



Common purge and pressurization applications

Pressurized enclosures operate within hazardous areas with general-purpose equipment and offer a simple solution when component energy requirements exceed intrinsic safety limitations. It's straightforward and flexible equipment protection that easily fits your design requirements.

Typical applications

- Gas analyzers
- Operating panels
- Purge HMI
- Motors
- Robots
- Water ballasts
- Hazardous location PC workstations
- Printer housings
- Connection boxes & relay panels
- Analysis cabinets
- Instrument operating panels
- Control room consoles
- Switch cabinets



Purge goes automated. Purge and pressurization has never been so simple.

Unparalleled convenience: The ability to configure your own automation options makes the 5500 series extremely easy to use. A wide selection of automatic programs provides excellent support for any application—simply select, connect, and you're all set.



The user interface can be rotated for top or bottom mounting of the control unit.

Performance at the Push of a Button

Automation is synonymous with convenience: minimal intervention, maximum operation. A universal design includes all the functions you need for day-to-day operations—just select the options you require. The user-selectable programs provided by the system make it easier to operate equipment in hazardous locations. Specialized knowledge is not required—all that you need to do is connect the air and power supplies and start the device.

Simple and Flexible

Advanced engineering: The 5500 series is a powerful and highly sophisticated system that sets new standards for ease of use, programming, and control. A user-friendly interface offers five standard programs plus additional configurations to meet any requirement. The user interface guides you quickly and intuitively through configurations such as user-programmable trip values, inputs and outputs, time settings, and delay functions, as well as numerous subprograms. The alarm, purge function, and power to the pressurized enclosure are also accessible through the user menu.

A Perfect Synergy of Intelligent Features

Every automated function of the 5500 series serves a single purpose: to provide greater availability. This coordination, along with preventive functions, leads to better protection of equipment, resulting in absolutely dependable processes.

Globally Certified for Zone 2/Div. 2

The system has complete third-party worldwide approvals in compliance with cULus, IECEx, and ATEX and can be used in Class I & II, Division 2, Zone 2 and 22, and nonhazardous areas.

Universal Vent Design

The clever design of the 5500 vent removes the guesswork from specification. The 100 % mechanical design and universal mounting allows vent installation that fits within your design requirements and delivers trouble-free operation!

The vent is made of anodized aluminum and has an optional stainless steel cap. Its universal design and completely mechanical operation allows internal and external mounting (vent can be internally mounted with cap external).

- Single spring design for large enclosures that require higher flow rates and have lower back pressure within the enclosure. Reduces purge cycle time and keeps enclosure pressure low.
- Double spring design for medium enclosures that require reduced flow rate and a tighter seal.
- Plunger design for low-flow applications requiring an increased seal and conservation of air is ideal for bottled air sources.



The vent ensures efficient purging flow and a tight seal regardless of the mounting location.

Automation means flexibility. The ideal system for OEMs and panel shops.

The automation and universal design of the 5500 series open up new opportunities for OEMs and panel shops. The result: the creation of a purge and pressurization system delivering such unparalleled flexibility and ease of use that it can be quickly deployed anywhere, without specialized knowledge, for a wide range of applications worldwide.



The user interface easily integrates flush in an enclosure or machine housing.

Menu-Driven Programming—Replacing Manual Settings

From automatic startup of the device to selecting programs: with the 5500 series, each stage can be carried out via the user interface. No operator intervention is required. No manual controls, no complicated operating instructions, no unwanted downtime, no specialized personnel. Just configure and start the device with the appropriate application program, activate the air supply, and you're all set—the simplest purge and pressurization system of all time.

All Inclusive: One Design Covers Many Requirements

By design, the new 5500 series was meant to adapt to a wide variety of circumstances. The unit is compact enough to be installed in the most limited spaces. The system has a selection of vents for most applications, meaning better operation of any system. Its sophisticated design provides numerous options for assembly, and the sleek design is a great fit for OEM and cabinet solutions.

Automatic Temperature Controls

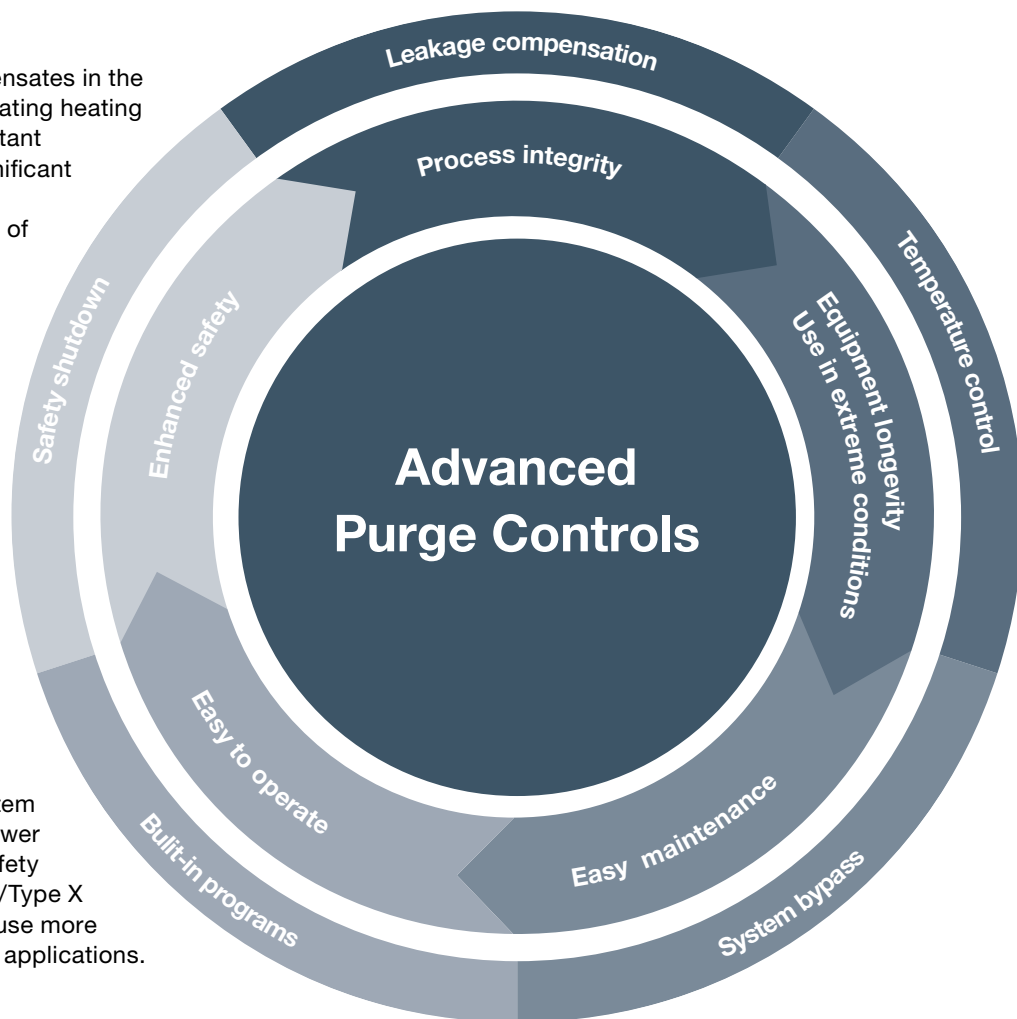
The 5500 series automatically compensates in the event of temperature changes by initiating heating or cooling functions. This is an important feature in extreme environments: significant temperature fluctuations result in pressure losses and premature aging of costly components.

Automatic Leak Compensation

The system continuously monitors and maintains the required pressure setting in the pressurized enclosure. The pressure is automatically compensated if leaks occur due to aging seals, extreme temperature shifts, or line pressure variations.

Preventive Safety Shutdown

In the event of pressure loss, the system can be programmed to shut down power to the protected enclosure. With a safety function typically found only in EX px/Type X systems, it's no longer necessary to use more expensive Type X systems for Type Z applications.



Total protection is what the Ex p method provides



Adding rugged versatility to automation. Robust and reliable in every environment.

Fully automatic, globally certified, and approved for gas and dust — the 5500 series is virtually unparalleled when it comes to flexibility. What's more, its robust stainless steel design stands up to even the most challenging industrial environments. Unrivaled in its versatility, it is the only solution worldwide that combines all of these characteristics in one compact system.



Ready for Anything: Stainless Steel Design

Dependable technology begins with careful material selection. Produced entirely from stainless steel, the robust and long-lasting housing can be used in harsh environments where dusts and gases or temperature extremes prevail. The entire 5500 series is certified globally to ATEX, IECEx, and NFPA 496 standards. Pepperl+Fuchs technical support is available worldwide: Whenever you need support, our experts are never far away.

It's Flexible and Can Be Installed Anywhere: Requirements-Based Assembly

Compact construction: The stainless steel housing can be installed inside or outside a pressurized enclosure. The component kit for internal assembly is intended for solutions requiring a smooth aesthetic look. The vent can be attached in any position, either inside or outside the pressurized enclosure, to facilitate proper air flow.

Technical Expertise and Certified Solutions

The more complex the applications, the more important the engineering. Collaborate with experts to construct made-to-order purge cabinet solutions, certified and ready for use anywhere in the world.

- Zone 1 and 2: Certifications based on ATEX BVS09 ATEX E 161
- Division 1 and 2: Certifications based on industrial controls for hazardous locations (NNNY & 698A)

Staying in touch. The world over.

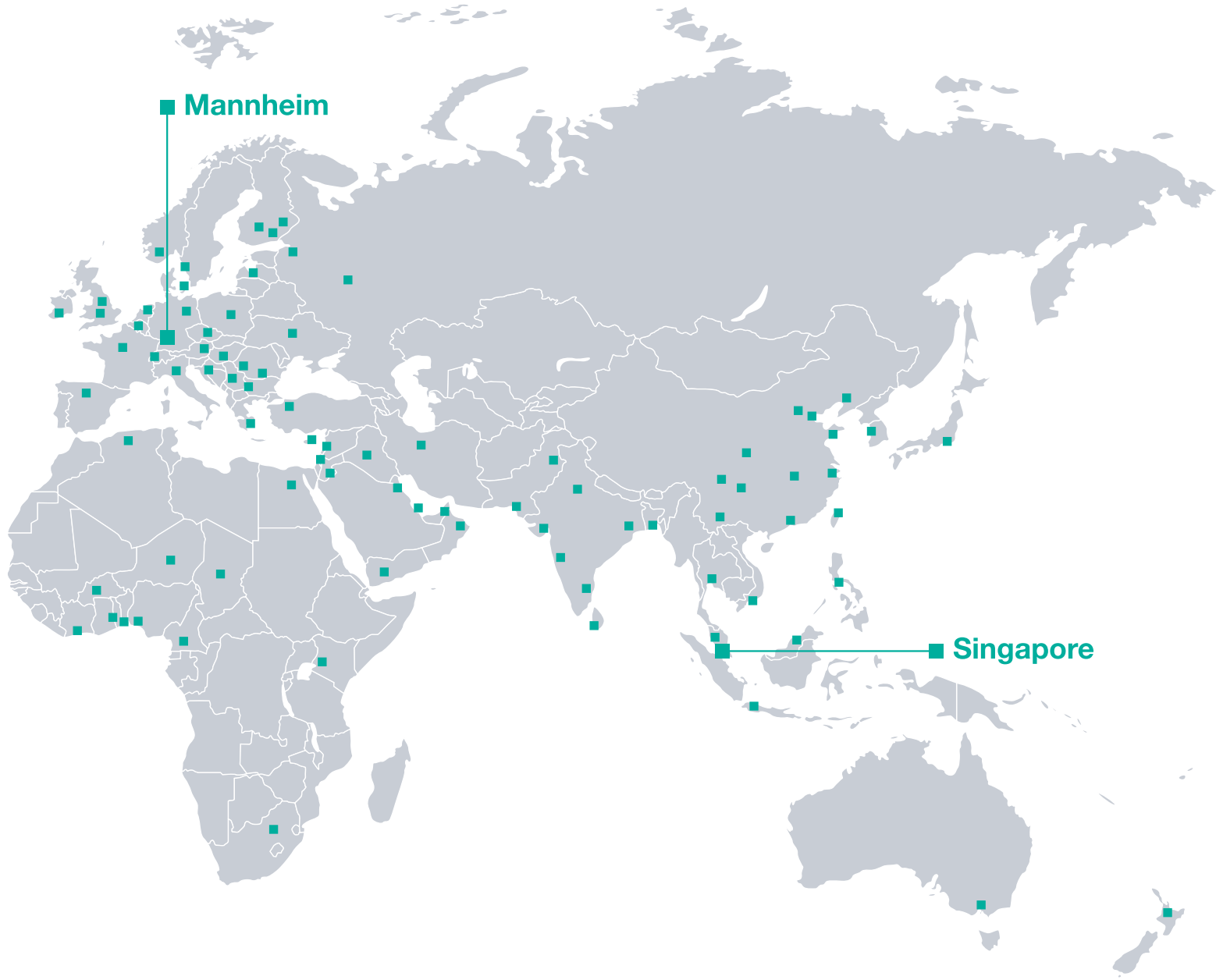
Good customer relationships need care and attention. They are an indication of genuine interest, trust, and a cooperative spirit: the foundation of Pepperl+Fuchs' strengths. No matter where you might be, we are always nearby. And we speak your language – in more than 140 countries the world over.



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.

Process Interfaces

- 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
- Explosion Protection Equipment
- Solutions with Process Interfaces

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