

**Streamline Automation.
Boost Efficiency.**



AVENTICS™ Series XV Valve System

Build agile, robust, and globally deployable automation systems with next-generation pneumatic valve technology.



Navigating the Complex Challenges of Modern Machine Building.

You face tough challenges every day. Building reliable, high-performance machines takes precision, tight integration, and deep technical skill. Managing complex motion, controls, and software while meeting cost and safety demands isn't easy. Every new component or spec adds risk and rework. And with shrinking timelines and rising expectations, delivering innovation without delays or downtime stretches even the best teams to their limits.

Skilled Labor Shortages: 58% of manufacturers identified the lack of skilled workers as a major challenge in implementing and maintaining advanced pneumatic systems.



Rising Energy Costs: Energy costs account for approximately 20-30% of the total operational costs in manufacturing.

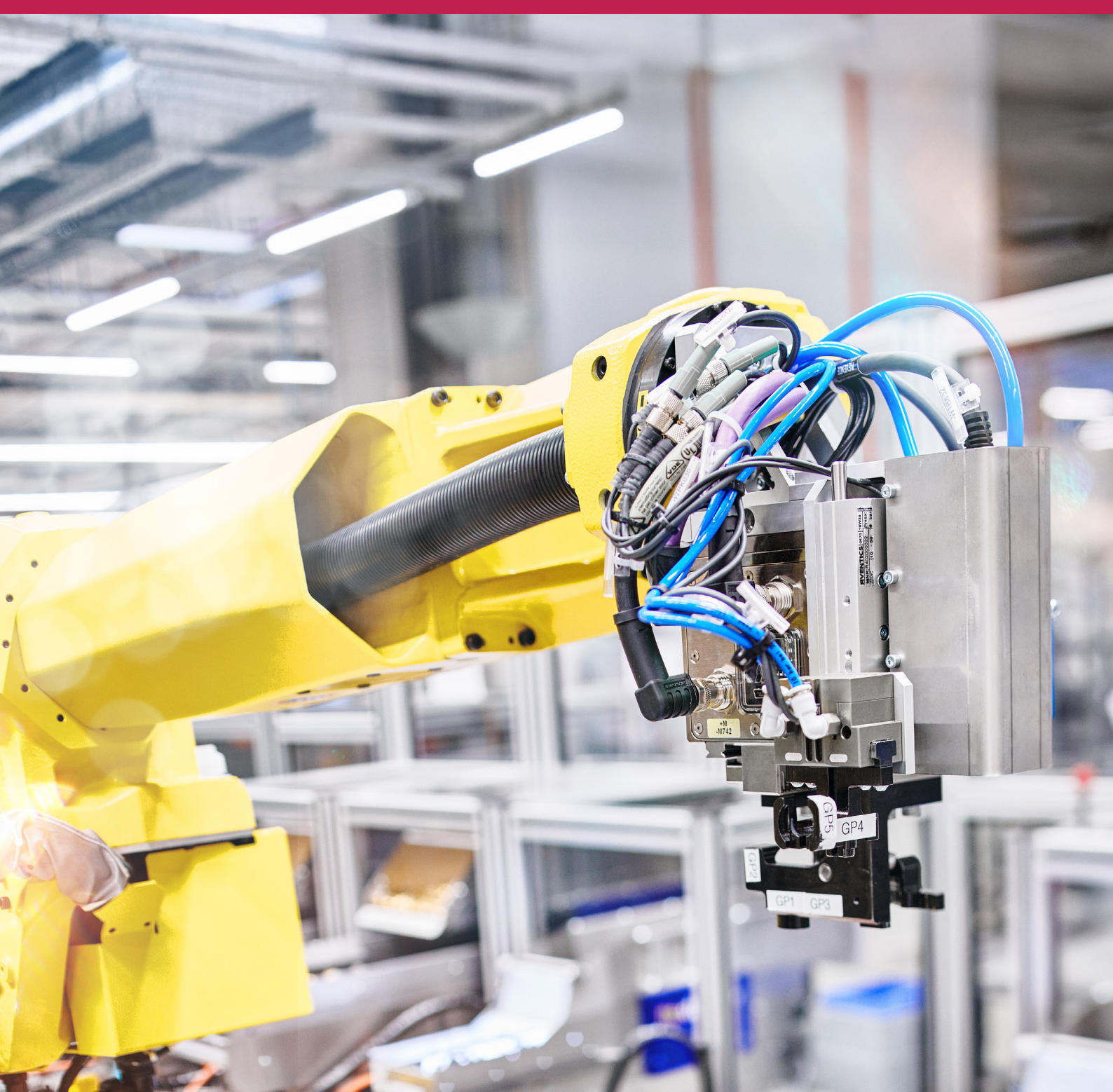


Regulatory Burdens: 45% of manufacturers reported difficulties in meeting regulatory compliance requirements.



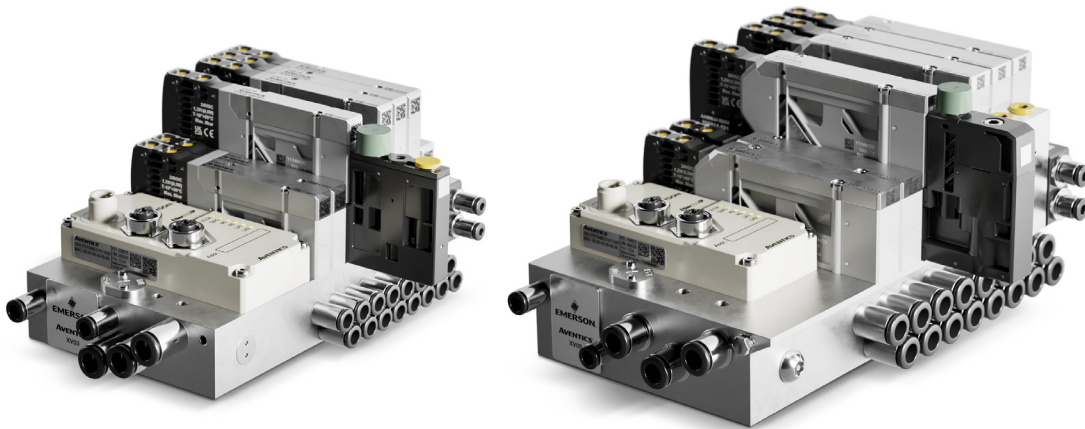
Sustainability Pressures: 67% of manufacturers are under pressure to improve their sustainability practices.





Instead of being stretched by shrinking timelines and resource constraints, what if you could improve productivity; hit the right quality every time; and reduce energy costs while still protecting your people and environment?

Build more agile and productive manufacturing systems with the AVENTICS XV Valve System.



The AVENTICS XV valve system is an advanced modular pneumatic solution designed for modern machine builders. Its innovative and flexible design allows for easy customization, optimizing space and enhancing performance. The system reduces installation times and simplifies maintenance with its user-friendly interface and robust construction. By providing superior control and responsiveness, the AVENTICS XV valve system minimizes downtime and maximizes productivity, making it an essential asset for maintaining a competitive edge.

AVENTICS™



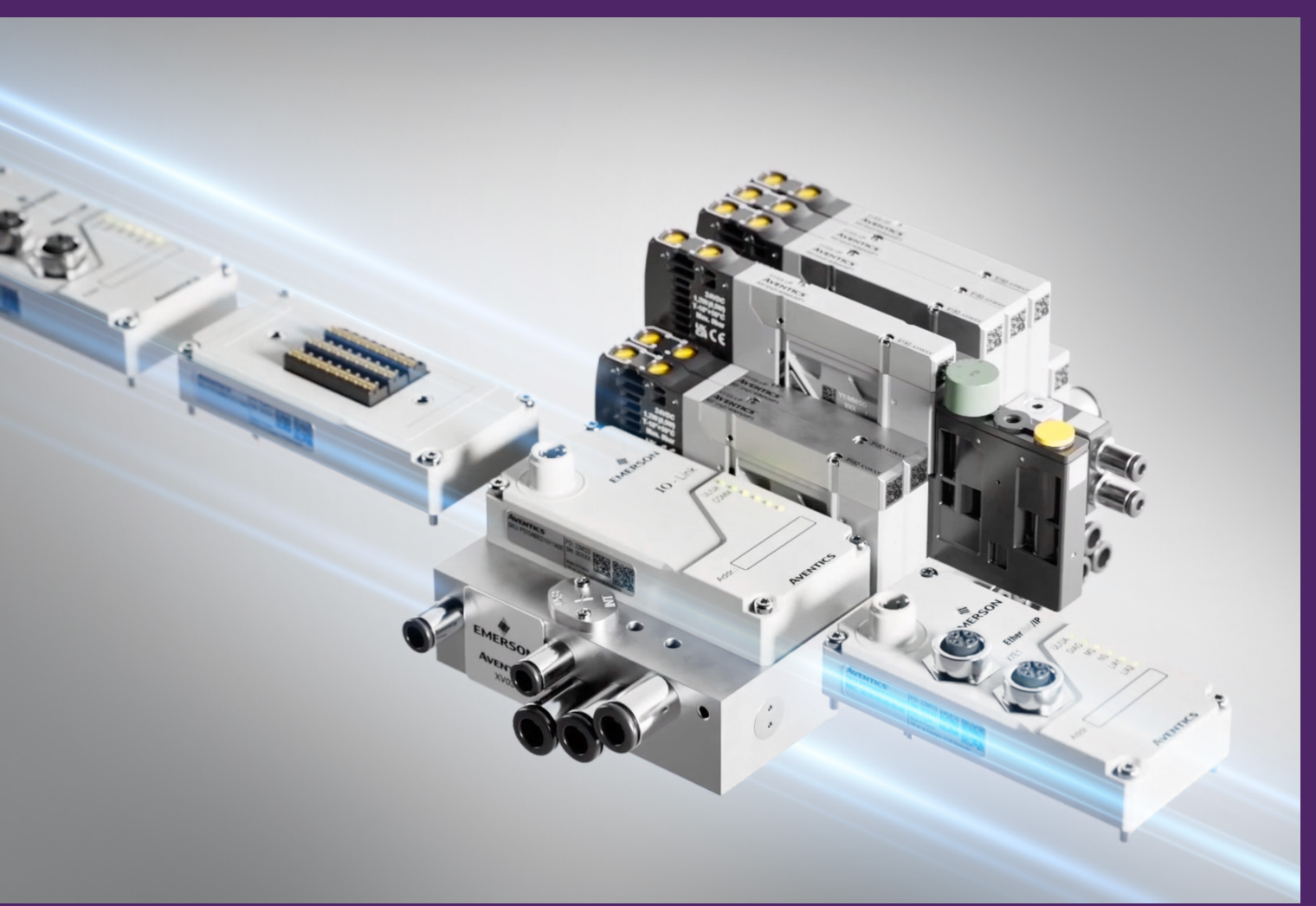
“The compact and rugged design of the AVENTICS XV valve system has delivered the reliability we were missing. Since switching, we’ve seen a noticeable drop in unexpected downtimes. Its consistent performance under demanding conditions has brought new stability to our operations and increased confidence in our system uptime.”
— Maintenance Manager, OEM Equipment Manufacturer.

Quickly Adapt to Client Demands: “The XV Valve system’s flexibility was important for our operations. It allowed us to tailor the solution precisely to our processes, which significantly improved our operational agility. This adaptability helped streamline workflows, reduce downtime, and increase overall efficiency—delivering benefits beyond what we expected from our previous setup.”

— Plant Operations Manager, APAC Food & Beverage Manufacturer.

Optimize Space Utilization: “The AVENTICS XV valve system’s extensive customization options, combined with its intuitive configuration tools, enabled us to quickly design and implement a tailored pneumatic solution. This ease of use kept our project on schedule and significantly boosted our product launch efficiency—allowing us to meet tight deadlines without compromising on performance or quality.”

— Lead Design Engineer, Industrial Automation Manufacturer.



Build with Confidence: Tackle Tough Challenges Using AVENTICS XV Flexibility

Designing adaptable, high-performance systems means tackling diverse requirements with precision and efficiency. The AVENTICS XV pneumatic valve platform puts flexibility within reach. Its broad accessory range and modular design make integration straightforward, even in complex setups. With support for leading communication protocols, XV ensures seamless connectivity across systems and networks. Universal thread options comply with regional and global standards, so your machines are ready for any market. This is a critical design decision for OEMs operating across international markets, simplifying supply chains and global deployment. From tight timelines to shifting specs, AVENTICS XV helps you manage complexity and stay ahead—equipping you with the tools to innovate and deliver, project after project.

What's your challenge?



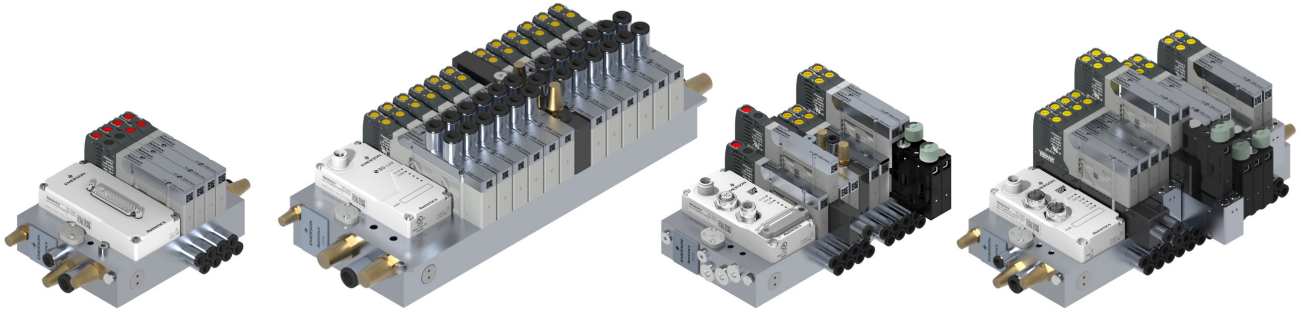
45% of manufacturers reported difficulties in meeting regulatory compliance requirements.

What's your opportunity?



Achieve seamless global machine deployment and streamlined compliance with universal thread options, eliminating regional compatibility hurdles.

Built for Modularity: Scalable and tailored to your needs.



Fully Modular: Customizable configurations consisting of valves, baseplates, connectivity options, and accessories. Accommodates up to 42 valves and 48 coils.

Broad Connectivity: Seamlessly integrate into any automation network.



EtherNet/IP™



ETHERNET POWERLINK

CANopen®



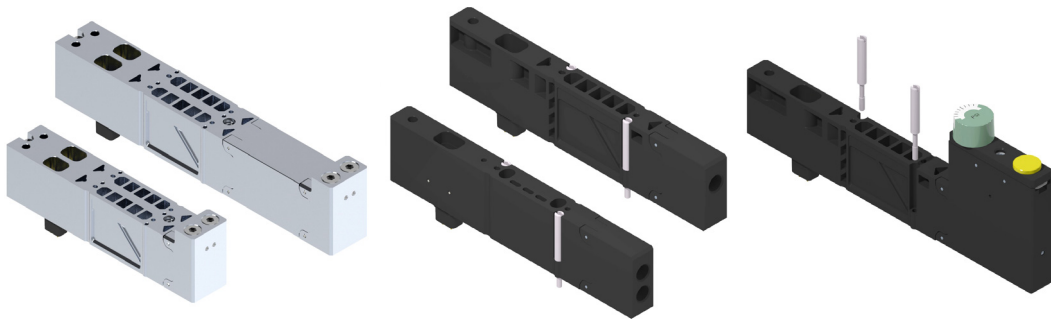
IO-Link

Support for leading communications protocols: Including PROFINET, Ethernet/IP, EtherCAT, Modbus TCP, IO-Link, and AS-I, for seamless integration into complex machine control networks.



Electrical wiring options:
Including D-SUB and terminal strip, for flexible setup that can be easily changed after installation.

Large Range of Accessories: Tailor systems for precise application needs.



Shut-off valves, pressure supply and exhaust modules, pressure regulators and many more: Offer extensive customization options for complex pneumatic layouts and specific application requirements.

Scan QR code for more information on the [XV Series](#).





Conquer Challenges with Ease: AVENTICS XV: Your Scalable Valve Platform Tailored for Success

Crafting systems that are both adaptable and efficient is no easy task. The AVENTICS XV pneumatic valve platform simplifies the process with an **intuitive, industry-leading configurator** that streamlines design and integration from the start. QR codes printed directly on each valve provide **instant access to detailed documentation**, making setup and troubleshooting faster than ever. Highly customizable and built to scale, XV gives you the flexibility to meet changing demands with confidence—turning complexity into clarity and challenges into seamless performance.

What's your challenge?



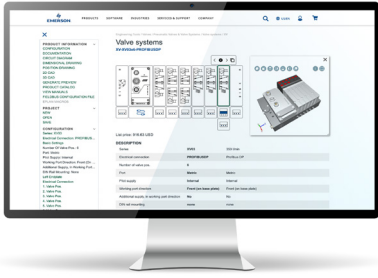
OEMs often face constraints around limited engineering resources, tight timelines, and restricted budgets — all of which slow down product development and innovation.

What's your opportunity?

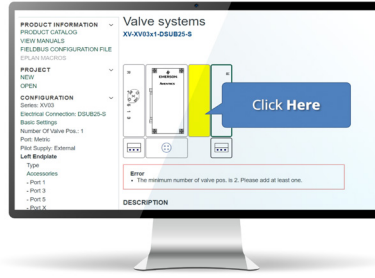


Accelerate your design cycles and reduce engineering complexity with intuitive online configuration tools, empowering rapid, error-free system creation.

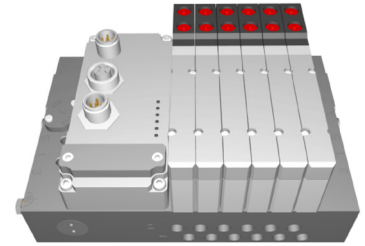
Industry Leading Configuration Tools: Streamline design & accelerate time to market.



One configurator for all XV-variants:
Simplifies selection and design across the entire product line.



Self-explanatory efficient operation:
Guides users through step-by-step configuration processes to reduce engineering time.

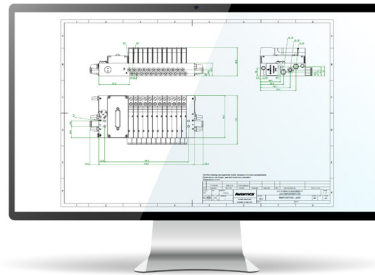


Overview scheme, real-time 3D illustrations: Provides visual clarity for complete system layout and accessory selection.

Extensive Documentation On Demand: Simplify setup, troubleshooting, & integration.



Immediate pricing and part number generation: Speeds up quoting and procurement.

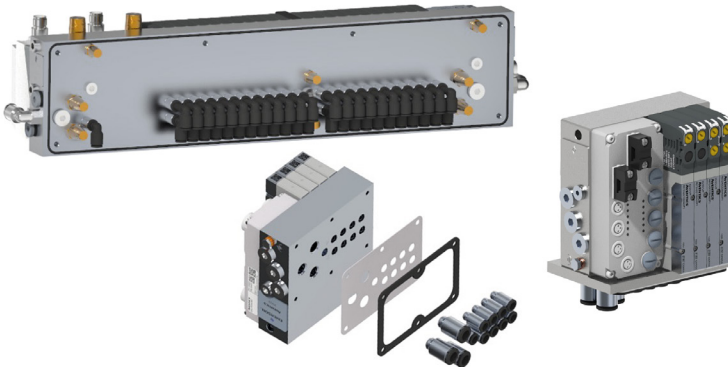


Documentation directly available in the online configurator:
Spare parts/Components list, Instruction manuals, 3D CAD, 2D Measurement drawings, Pneumatic Schematics

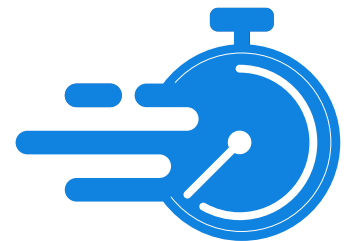


QR codes printed directly on each valve:
Instantly access key product information, simplifying support and enhancing efficiency.

Completely Customizable: Tailor systems to exact machine requirements.



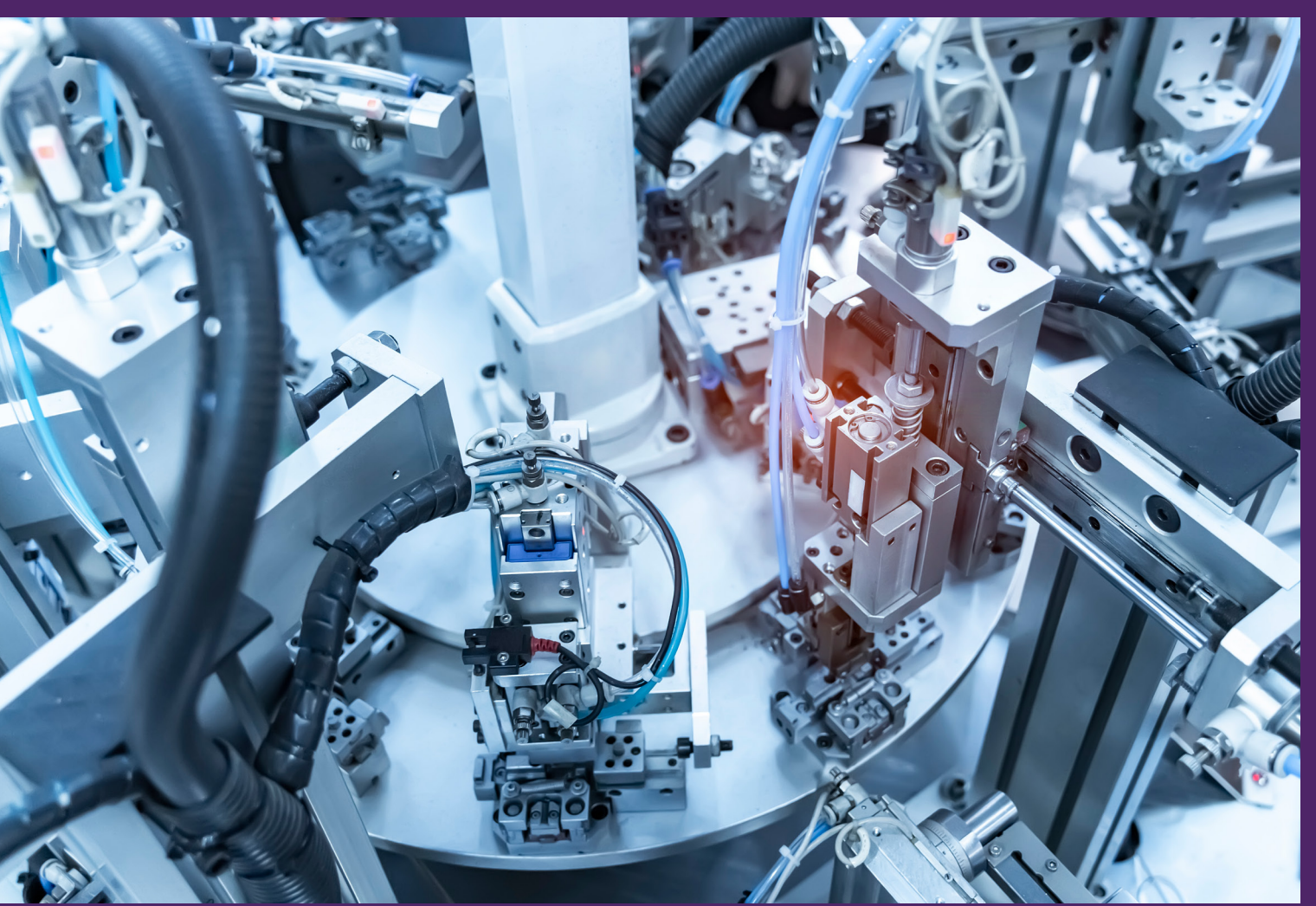
Custom designed solutions: From bottom-ported cabinet-ready designs to clean-in-place IP65 protection for F&B applications, the XV adapts to your system needs.



Customized to requirements with best-in-class lead times: Ensures precise fit for unique designs without compromising on delivery schedules.

Check out our industry leading [Configurator Tool](#):





Discover Compact Strength: Unleash Robust Performance with AVENTICS XV

Machine builders understand the importance of precision and reliability in every component. The AVENTICS XV pneumatic valve platform offers robust solutions tailored to your challenges, with its compact dimensions ensuring seamless integration into tight spaces without compromising power. Its advanced core valve technology enhances reliability, reducing downtime and boosting productivity. With an excellent flow-to-volume ratio, the AVENTICS XV delivers optimal performance, enabling your machines to operate at peak efficiency. Embrace innovation with AVENTICS XV and realize your projects with unparalleled precision and reliability.

What's your challenge?



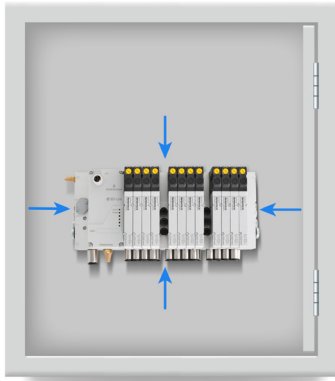
Many OEMs face difficulties with performance, efficiency, and integration when using their current industrial automation products. Their organizations are focused on solving these issues for customers in order to maximize operational performance.

What's your opportunity?



Maximize machine performance and increase uptime with a compact, reliable valve system built for demanding industrial environments.

Compact Dimensions: Optimize space and simplify machine integration.

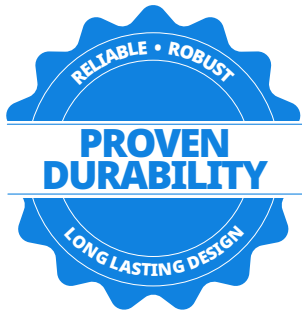


Space savings in control cabinets and machines: Enables smaller, more efficient machine designs and control cabinets.



Universal threads support regional standards and global availability: Simplify global deployment and supply chains for international OEMs and end-users.

Rugged and Reliable: Ensure consistent performance and extended service life.

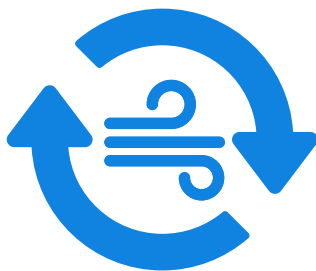


AVENTICS core valve technology: Increases machine uptime and reduces maintenance due to proven durability.

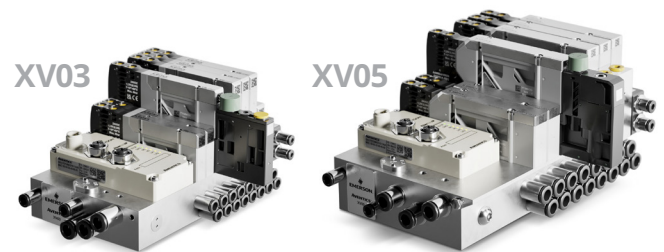


Includes metal threads in aluminum base plates: Provides superior durability and robust construction for demanding industrial environments.

Excellent Flow-to-Volume Ratio: Improve pneumatic system efficiency and utilization.



Improves pneumatic system efficiency & compressed air utilization: Leading to lower operational costs and optimized use of resources.



350 NL/min

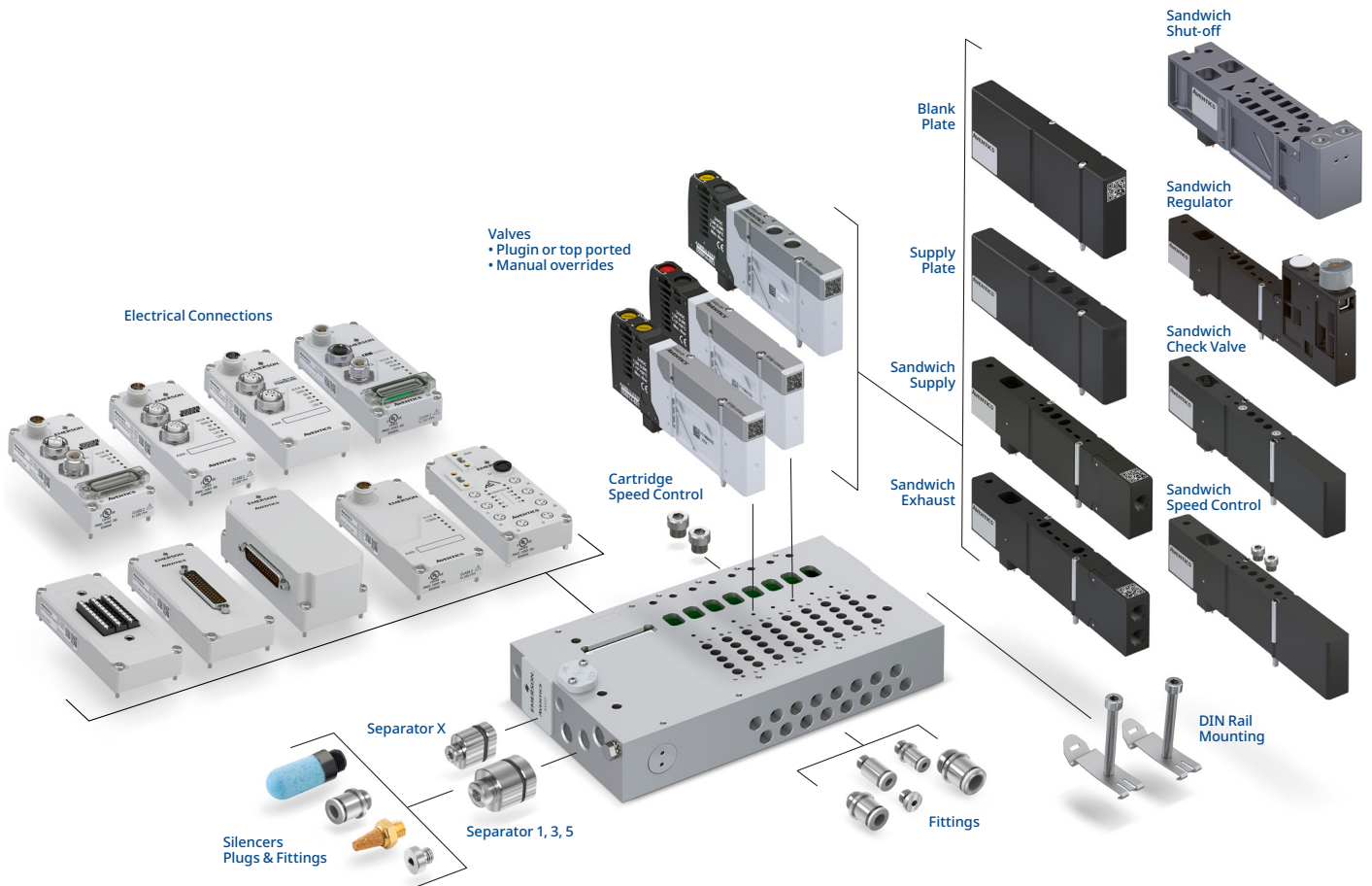
1000 NL/min

Scalable platform across 2 sizes: Provides high performance in a compact package, delivering optimal power for your machines.

Learn more about our robust AVENTICS [Valve Technology](#):

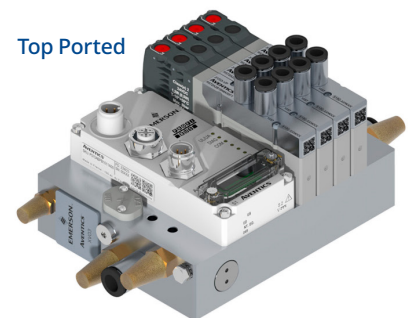
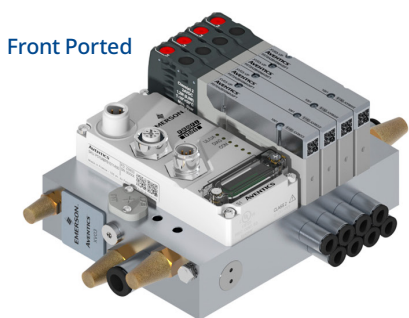


Engineered for Flexibility: Configure the XV Valve Series Your Way.



Multiple Port Options

The XV Valve System offers various port options, allowing for flexible installation and seamless integration to effectively address any space constraints posed by the application.



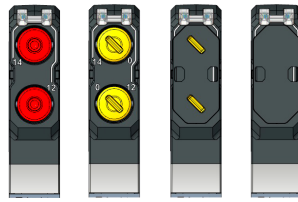
Valve Options – Series XV-Compact

Functions



- 5/2 (spring/air/bistable), 5/3 (center closed, exhausted, pressurized), and dual 3/2 or 2/2 functions.

Manual Overrides



- Push, push-turn, detent, and covered versions (no detent and no override) with LED status indication.

Valve Types



- Standard plug-in and top-ported versions
- Can be utilized for vacuum and up to 8 bar

Connectivity – XVES Electrical Interfaces

Parallel Wiring



- Parallel wiring options for simple, cost-effective connections.
- Available with D-SUB25, D-SUB44, and terminal strip modules.

IO-Link



- Includes IO-Link for easy setup, seamless communication, and simplified integration.
- Available in Class A, Class B, and Class AB for flexible connectivity and compatibility.

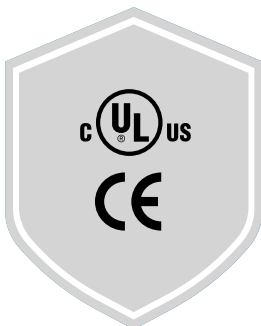
Fieldbus



- Supports Fieldbus communication for simpler wiring, global compatibility, and better diagnostics.
- Compatible with all major protocols: PROFINET, EtherNet/IP, EtherCAT, Powerlink, Modbus TCP, PROFIBUS, CANopen and AS-Interface (Asi).

Certifications – Global Confidence

Regional Compliance



- CE, UL, CSA

Regional Manufacturing

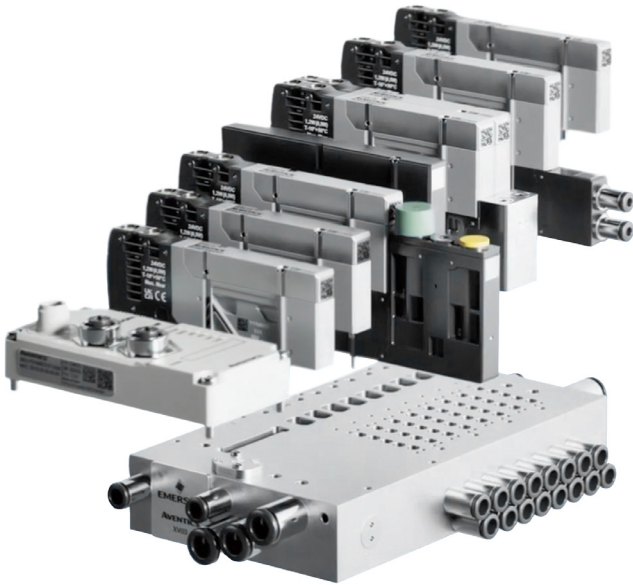


- Manufactured locally in EMEA, the Americas, and Asia-Pacific regions to guarantee optimal lead times.

One Platform, Infinite Possibilities.

Extensive range of accessories for tailored pneumatic solutions

The XV valve series is designed to address a wide range of pneumatic requirements and therefore supports a variety of accessories for enhanced customization. It includes sandwich modules that mount between the base plate and valve, allowing to stack of up to two modules beneath the valve. Additionally, pressure zone separators and various pressure supply options create distinct pressure zones. These components form a versatile toolbox that enables customers to design perfectly tailored configurations for their specific applications.



Pressure Zones & Supply

- Pressure zones with separators in Channels X, 1, 3, 5
- Pilot air through supply modules for pressure zone

Additional Supply/Exhaust via:

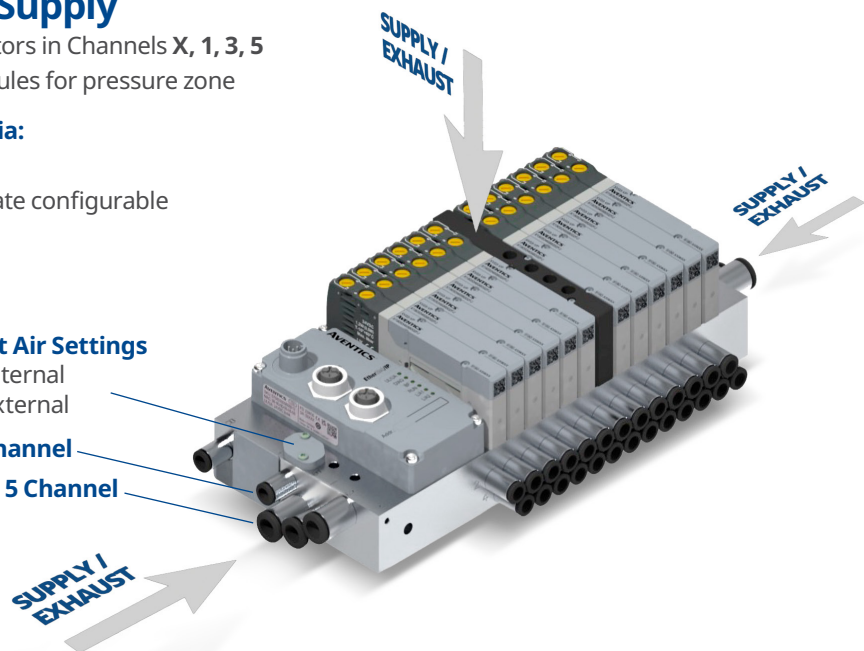
- Supply module
- Direct connection in baseplate configurable
- Flexible Pilot air settings

Pilot Air Settings

- Internal
- External

X Channel

1, 3, 5 Channel



Pneumatic Supply Module



- Flexible supply of compressed air in any position of the valve system to enhance flow performance
- Offers supply port 1, exhaust ports 3 and 5, as well as pilot air supply port X.

Sandwich Supply



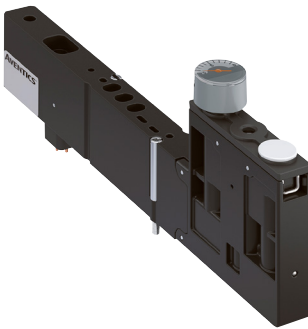
- Provides compressed air supply exclusively for one valve.
- Enables flexible management of the pneumatic supply port 1, e.g. supplying a different pressure.

Sandwich Exhaust



- Provides compressed air exhaust exclusively for one valve.
- Enables flexible management of the pneumatic exhaust ports 3 and 5.

Sandwich Pressure Regulator



- Allows for pressure adjustments to achieve the exact pressure needed for individual valves.
- Enhances energy efficiency by delivering the optimal pressure needed for each specific application.

Sandwich Shut-off Valve



- Shut-off with separate fixing points allows valve changes under pressure, minimizing system downtime during maintenance.
- Dedicated extended shut-off design enables the addition of another sandwich accessory on top, enhancing the platform flexibility.

Pressure Zone Separators



- Enable precise control and isolation of specific areas, accommodating different pressure requirements across the valve system.
- Available for pressure channels 1, 3, 5 and X

Sandwich Speed Control



- Sandwich module to fine-tune actuator speed via exhaust air channels 3 and 5.
- Utilizes cartridge throttle inserts with fixed orifice diameters, offering multiple diameter options and can also be used directly in base plate.

Sandwich Check Valve



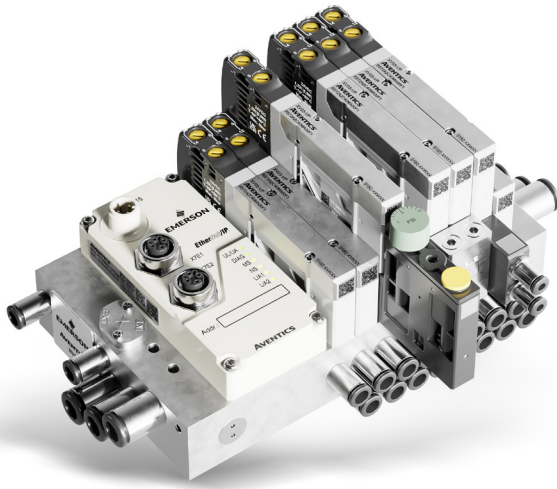
- Prevents unwanted pressure buildup in exhaust channels 3 and 5.
- Mitigates potential back pressure from exhausting cylinders.

Blank plate



- Enhances system adaptability by sealing unused ports and accommodating future expansions.

Build Smarter, Faster, and More Flexible Machines.







AVENTICS™

Unlock new levels of machine performance with modular design, global certifications, and seamless connectivity—the AVENTICS™ XV valve system delivers flexibility, speed, and reliability for automation across industries and applications.

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