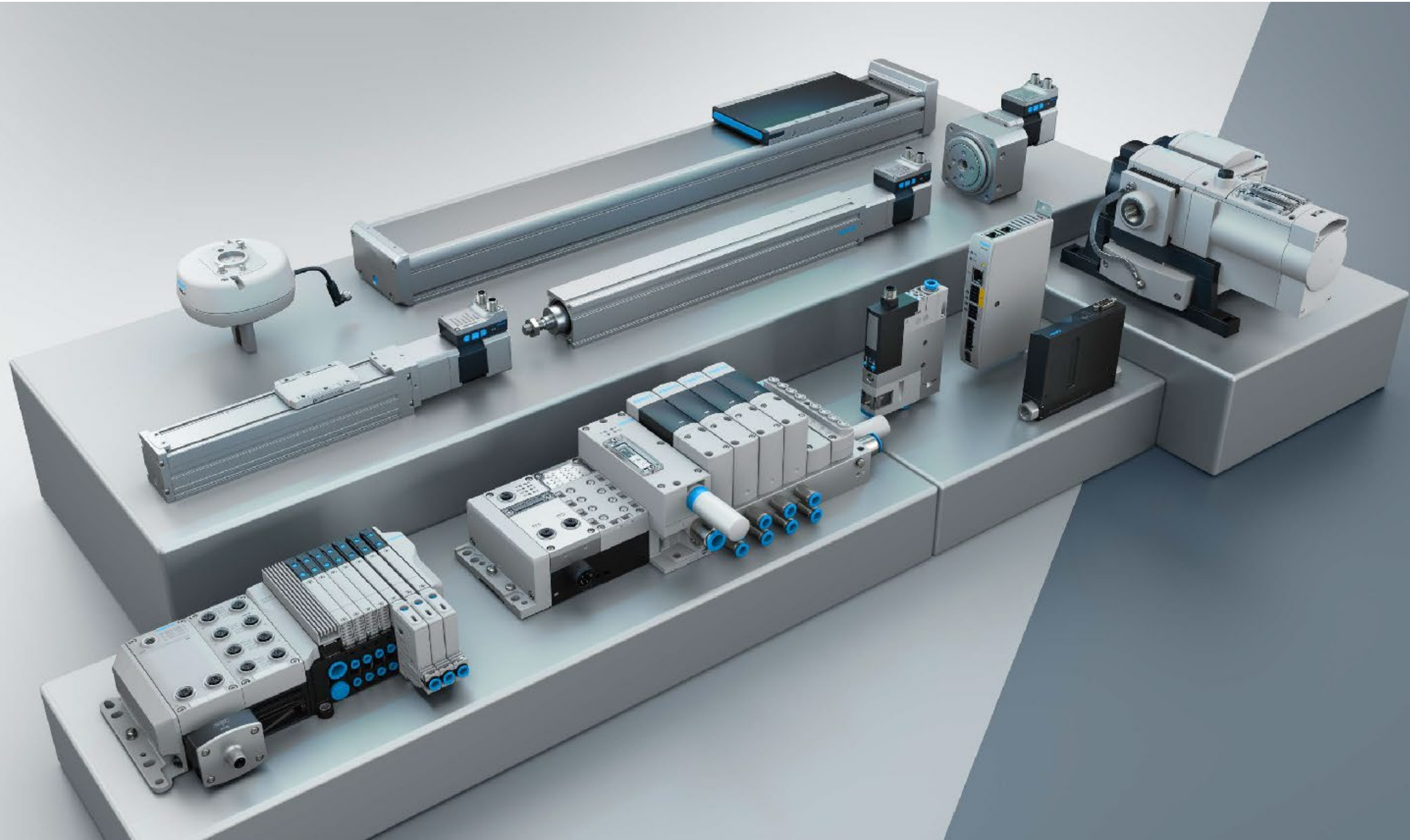


Sustainable Automation with Top Products from Festo

Products, Services, and Tools for a Future-Proof Industry



Sustainability is more than a single product.
It is a system.

Sustainable automation is all about resource-efficient manufacturing, energy-efficient operation, repair, and the circular economy. It impacts every phase of the product lifecycle, such as component selection, controls, monitoring, and services.

In this document, you can find out how solutions from Festo can help you use resources and energy more efficiently and contribute to more sustainable automation. It presents a selection of our top products, services, and tools. More products from our broad portfolio of pneumatic and electric automation, digital solutions and services, can be found in our shopping cart.

View sustainable products in the shopping cart
→ <https://www.festo.com/products-sustainability>

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1. Sustainable Automation: A Comprehensive Approach

Increase efficiency, reduce CO₂ emissions, and use resources effectively

1 During manufacturing

We reduce material usage and CO₂ emissions in product manufacturing by:

Optimizing materials

Using materials with a reduced CO₂ footprint, such as recycled aluminum, and saving material wherever technically possible.

Designing innovative concepts

Applying lightweight design concepts in product development.

Using new materials

Such as plastics made from renewable raw materials.

Optimizing production processes

Continuous improvements to reduce the CO₂ footprint.

The benefit to you: A product with a lower product carbon footprint (PCF).

2 During operation

Reduce energy consumption and operating costs during operation through:

Intelligent control

Adjusting compressed air consumption to demand and efficiently controlling actuators.

Leak management

Identifying and reducing leaks to save energy.

Energy management

Monitoring energy consumption, AI-based optimization, and energy recovery.

Highly efficient control of process gases or liquids

Resource-efficient use of media in semiconductor manufacturing or laboratory settings.

The benefit to you: Lower operating costs, energy consumption, and CO₂ emissions.

3 Throughout the product life cycle

Together, we extend the service life of products and equipment and keep resources in use longer thanks to:

Reuse of products and materials

Recycling materials and reusing product parts and entire products.

On-site repair support

Repairs extend the life of product. Repair kits, videos, and information materials provide support for customers. Less transportation also helps reduce CO₂ emissions.

Circular product concepts

R-strategies such as repair, remanufacturing, and refurbishment extend the useful life of products and materials.

The benefit to you: Lower costs and less waste.

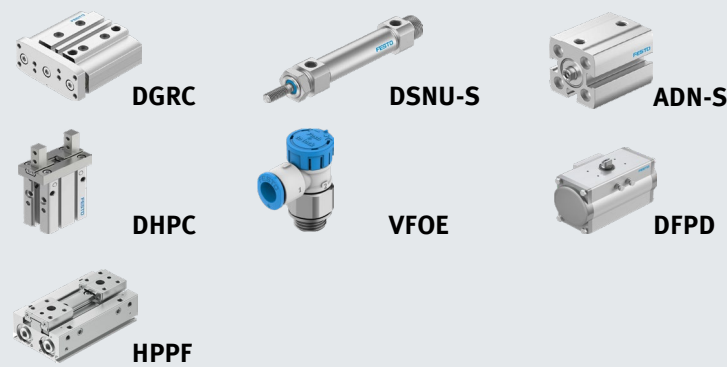
1. Sustainable Automation: A comprehensive Approach

The right products for sustainable automation throughout the product life cycle

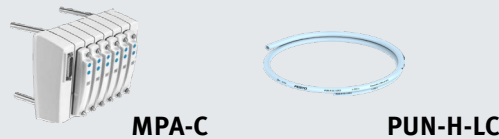
1 During manufacturing

A selection of our top products for **material & resource efficiency**

Reduce and optimize the use of materials



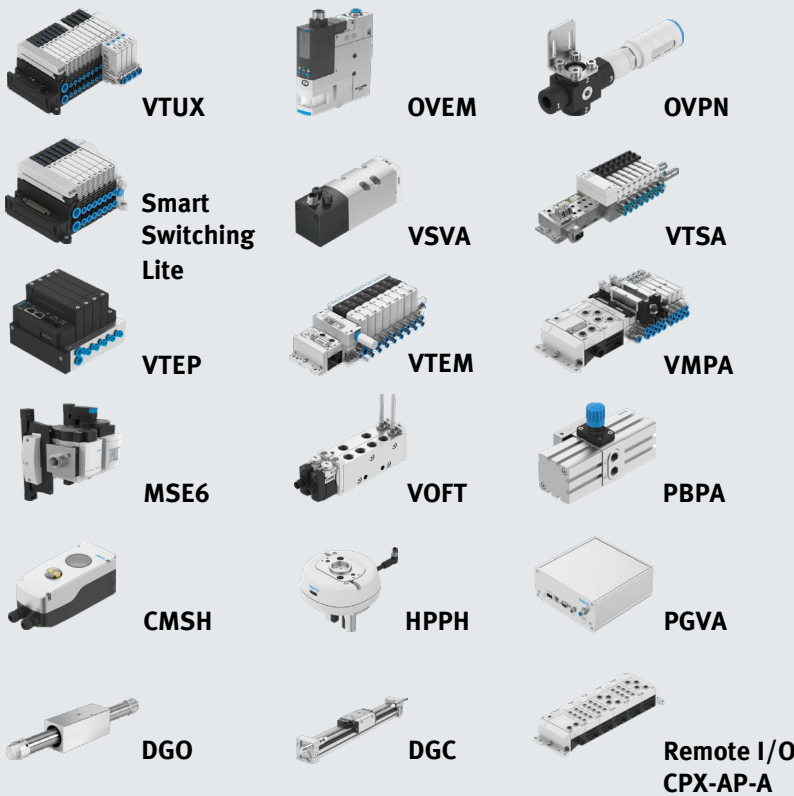
Use sustainable materials



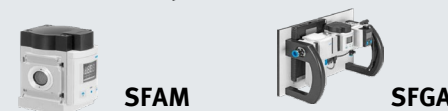
2 During operation

A selection of our top products for **energy efficiency**

Use compressed air and vacuum efficiently



Make compressed air consumption visible



Efficient actuator technology



3 Throughout the product life cycle

A selection of our top products for **the circular economy**

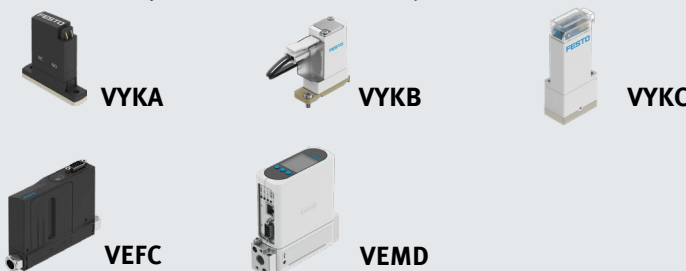
Long-lasting products



Repairable and reusable



Precisely control and dispense gases and fluids



1.1 Sustainability in manufacturing

Top products for material and resource efficiency

Reduce and optimize the use of materials

Reduce weight, material usage, and the product carbon footprint



Guided cylinder DGRC

The guided cylinder DGRC is up to 60% lighter and 30% smaller than comparable models. Its optimized design reduces its carbon footprint, shortens cycle times, and lowers energy consumption. Copper-, zinc-, and nickel-free components make it ideal for battery production or any application that requires precise guidance and maximum sustainability.

→ www.festo.com/DGRC

Up to 60 % material savings



Standards-based cylinder DSNU-S

The DSNU-S reimagines the classic standards-based cylinder using an improved design that saves valuable space and minimizes material use. Its self-adjusting pneumatic end-position cushioning automatically adapts to different loads, making it ideal for tight installation spaces.

→ www.festo.com/DSNU-S

Up to 50 % material savings



Compact cylinder AND-S

The ADN-S features significantly smaller dimensions and an innovative design with a more compact, one-piece housing. Its substantial weight reduction conserves resources and reduces environmental impact during manufacturing, while its performance remains unchanged. These benefits make it perfect for tight installation spaces and lithium-ion battery production systems.

→ www.festo.com/ADN-S

Up to 43 % material savings

Technology key

 Pneumatic

 Electric

[Back to product overview](#)

1.1 Sustainability in manufacturing

Top products for material and resource efficiency

Reduce and optimize material use

Reduce weight, material usage, and the product carbon footprint



Parallel gripper DHPC

As the most compact parallel gripper on the market, the DHPC sets new standards with exceptional gripping force and precision. Its thoughtful design reduces material use while maximizing efficiency. Precise ball guidance and excellent repeatability ensure a long service life. Available in double- or single-acting versions, and with numerous mounting options for different applications.

→ www.festo.com/DHPC

Up to 29 % material savings

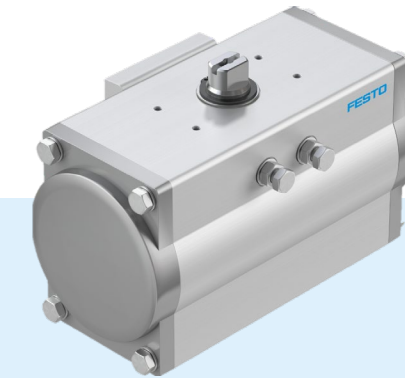


One-way flow control valve VFOE

The one-way flow control valve VFOE features a compact design and uses alternative materials, reducing the total weight by 50%. Precise flow adjustment also matches compressed air control to demand, supporting sustainable operation.

→ www.festo.com/VFOE

Up to 50 % weight reduction



Quarter-turn actuator DFPD

The quarter-turn actuator DFPD combines high performance with a weight-optimized design. Reduced material use significantly lowers weight and resource consumption during manufacturing. Its robust construction also ensures a long service life and reliable operation, supporting sustainability in both production and operation.

→ www.festo.com/DFPD

Up to 16 % weight reduction

Technology key

 Pneumatic

 Electric

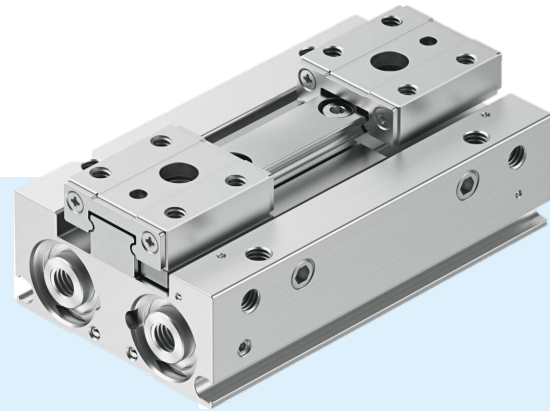
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1.1 Sustainability in manufacturing

Top products for material and resource efficiency

Reduce and optimize material use

Reduce weight, material use, and the product carbon footprint



Parallel gripper HPPF

The parallel gripper HPPF features a compact, low-profile design and offers excellent repeatability. Reduced material use lowers its weight by up to 10%. The integrated, maintenance-free guide supports a long service life. Lower copper, zinc, and nickel content also makes it suitable for sensitive applications such as electronics and battery production.

→ www.festo.com/HPPF

Up to 10 % weight reduction

Technology key

- Pneumatic
- Electric

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1.1 Sustainability in manufacturing

Top products for material and resource efficiency

Use sustainable materials

Conserve resources

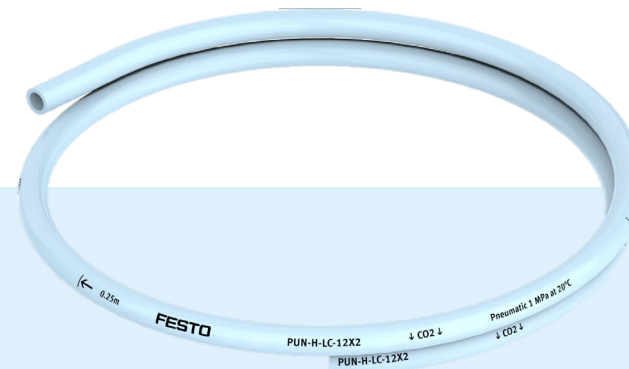


Valve manifold MPA-C

More than 50% of the valve manifold MPA-C consists of bio-based plastic that have a reduced CO₂ footprint. Its compact shape minimizes cleaning, while its modular design with flow rates of up to 780 L/min offers great flexibility. Replaceable valves and high corrosion resistance ensure a particularly long service life with minimal environmental impact.

→ www.festo.com/MPC-VI

More than **50 % sustainable materials**



Tubing PUN-H-LC PU with reduced CO₂ footprint

The PUN-H-LC joins the main PUN-H series as its smaller sibling. The use of resin means the carbon footprint is reduced and it cuts CO₂ emissions during manufacturing by up to 63%, without changing its technical properties. The significantly lower PCF also helps make your footprint more sustainable.

→ www.festo.com/PUN-H-LC

CO₂ reduction of up to **63 %**

Technology key

 Pneumatic

 Electric

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1.2 Sustainability during operation

Top products for energy efficiency

Use compressed air and vacuum efficiently

Reduce energy consumption and operating costs



Valve manifold VTUX with vacuum functions

The compact design saves weight, installation space, and resources. With no potting or adhesive bonding, the valve manifolds are highly recyclable. In addition, the intelligent air-saving circuit reduces air consumption in vacuum applications, as continuous vacuum generation is often unnecessary to hold workpieces securely.

→ www.festo.com/VTUX

Energy savings up to 90 %

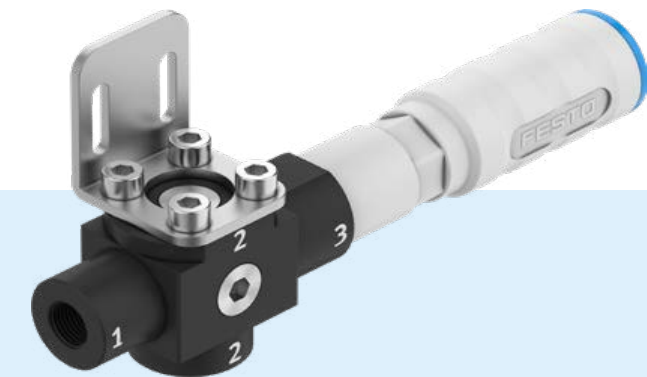


Vacuum generator OVEM

The innovative air-saving circuit activates vacuum only when needed, minimizing compressed air consumption. Integrated sensors with an IO-Link interface enable quick, easy monitoring of the operating status, support predictive maintenance, and improve the sustainability of your production processes.

→ www.festo.com/OVEM

Energy savings up to 90 %



Vacuum generator OVPN

The pneumatic vacuum generator OVPN is particularly suited for applications that need high flow rates at lower vacuum levels. Multistage vacuum generation is significantly more efficient than single-stage generators. It can be used for centralized or decentralized vacuum generation and is ideal for porous materials.

→ www.festo.com/OVPN

Energy savings up to 25 %

Technology key

■ Pneumatic

■ Electric

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1.2 Sustainability during operation

Top products for energy efficiency

Use compressed air and vacuum efficiently

Reduce energy consumption and operating costs

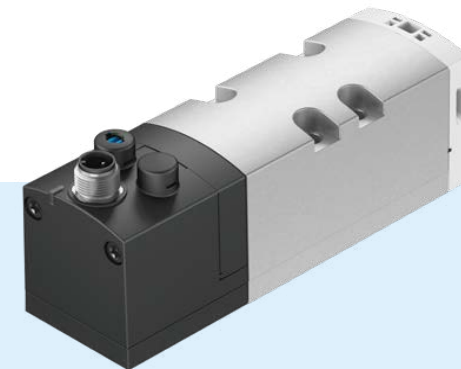


Smart Switching Lite with the new multi-efficiency valve

The 5/4-way multi-efficiency valve, available for all VTUX versions, shuts off the air supply during motion. The actuated cylinder thus reaches its end position using expansion energy alone, which greatly reduces the air consumption during travel. An easily integrated PLC function block provides control for maximum efficiency with minimal effort. Higher cycle times are also possible.

→ Contact us directly for more information

Energy savings up to 60 %

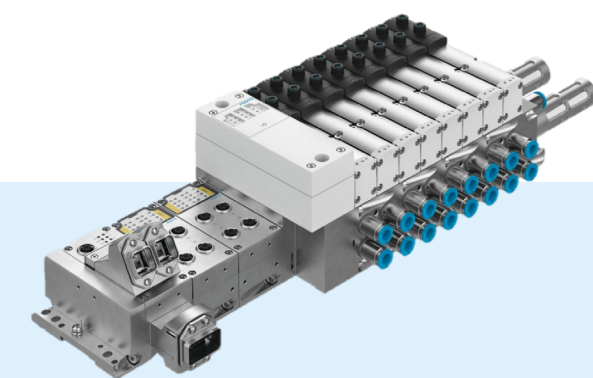


Pulse valve VSVA

The valve's integrated pulse function automatically reduces energy consumption in blow-off applications. This results in substantial savings on compressed air during pauses. Another benefit: the air pulse is more powerful than a continuous airflow.

→ www.festo.com/VSVA

Energy savings up to 80 %



Valve manifold VTSA

The valve manifold VTSA controls compressed air efficiently thanks to its optimized internal airflow and low energy consumption. It combines several solenoid valves in one manifold for compact, flexible, efficient control of cylinders, grippers, and other pneumatic actuators. It reduces compressed air consumption while the integrated communication and diagnostic functions enable monitoring.

→ www.festo.com/VTSA

Energy savings up to 60 %

Technology key

 Pneumatic

 Electric

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1.2 Sustainability during operation

Top products for energy efficiency

Use compressed air and vacuum efficiently

Reduce energy consumption and operating costs

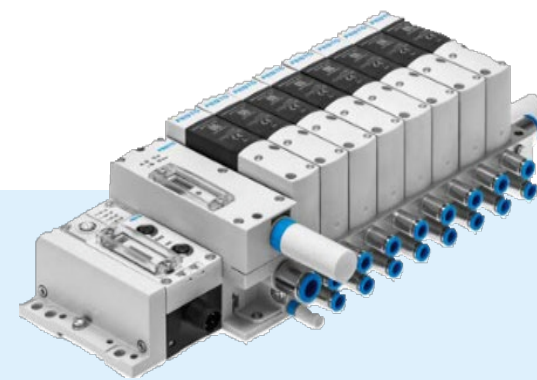


Valve manifold VTEP

The valve manifold VTEP provides precise, demand-based control of pneumatic applications. With the integrated regulation, the pressure is matched exactly to demand, avoiding unnecessary compressed air consumption. This sustainably reduces energy use and delivers savings of up to 29%, especially in dynamic applications with changing loads.

→ www.festo.com/VTEP

Energy savings up to 29 %



Motion Terminal VTEM

Piezo technology enables the valves to provide stepless control of compressed air. Apps define the valve's exact function, whether force control, speed control, or motion with defined ramps or travel times. These features offer highly efficient motion and help actively manage energy consumption during operation.

→ www.festo.com/VTEM

Energy savings up to 70 %

Technology key

 Pneumatic

 Electric

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1.2 Sustainability during operation

Top products for energy efficiency

Use compressed air and vacuum efficiently

Reduce energy consumption and operating costs

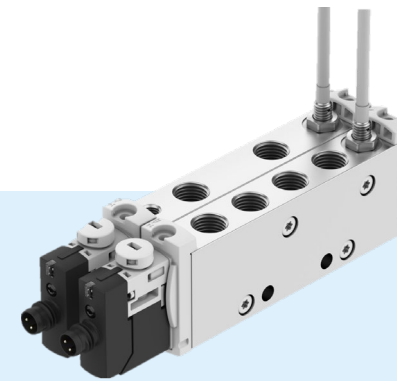


Energy efficiency module MSE6

This intelligent energy efficiency module automatically detects machine downtime and leaks. The MSE6 continuously monitors compressed air consumption and shuts off the air supply after a defined delay during production breaks. The MSE6-C2M and MSE6-D2M precisely regulate system pressure to an optimal energy level, eliminating unnecessary compressed air consumption.

→ www.festo.com/MSE6

Energy savings up to 70 %

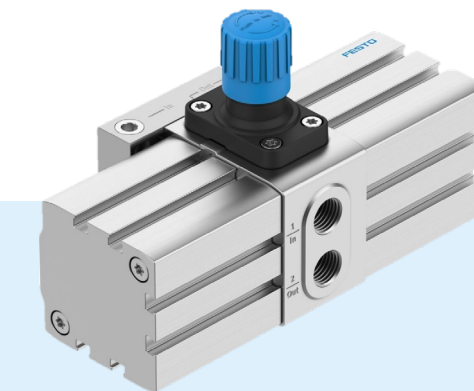


Control block VOFT

The control block VOFT selectively shuts off pressure to different system sections, reducing overall consumption. The 6/2-way valve with switching-position sensing supports safety functions as per DIN 13849 and is available in single- or dual-channel versions. It is suitable for safety upgrades and is therefore especially appropriate when modernizing existing machines.

→ www.festo.com/VOFT

Energy savings up to 80 %



Pressure booster PBPA

The pressure booster PBPA raises the pressure only when it is needed. Other system zones can still operate at a lower pressure. This matches the pressure supply to demand and reduces energy consumption in the application. Its compact design, long service life, and easy maintenance and repair support reliable, resource-efficient operation.

→ www.festo.com/PBPA

Energy savings up to 23 %

Technology key

 Pneumatic

 Electric

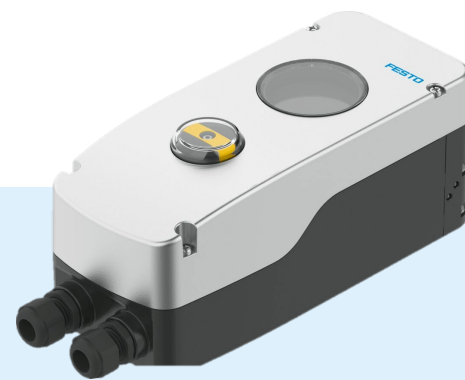
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1.2 Sustainability during operation

Top products for energy efficiency

Use compressed air and vacuum efficiently

Reduce energy consumption and operating costs



Positioner CSMH

The positioner CSMH controls pneumatic quarter-turn and linear actuators quickly and precisely. Its low intrinsic air consumption and efficient control support energy-efficient operation. HART communication and integrated diagnostics simplify commissioning, maintenance, and condition monitoring.

→ www.festo.com/CSMH



Parallel gripper/valve combination HPPH

The HPPH combination integrates a gripper, valve, and sensors in a compact unit for collaborative robotics. This integration significantly reduces material requirements while increasing functionality. TÜV-certified to ISO 15066, the HPPH combination suits various cobots. Integrated force retention ensures safe handling, while digital I/O or IO-Link control enables a wide range of applications.

→ www.festo.com/HPPH

Energy savings up to 75 %



Pressure and vacuum generator PGVA

The decentralized pressure and vacuum generator PGVA needs only a 24 V power supply to provide pneumatic power for your pressure- or vacuum-controlled solution. By generating pressure locally at the point of use and in line with demand, unnecessary line losses are avoided, and energy consumption is significantly reduced. Proportional control also provides precise adjustment to actual demand.

→ www.festo.com/PGVA

Energy savings up to 90 %

Technology key

 Pneumatic

 Electric

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1.2 Sustainability during operation

Top products for energy efficiency

Use compressed air and vacuum efficiently

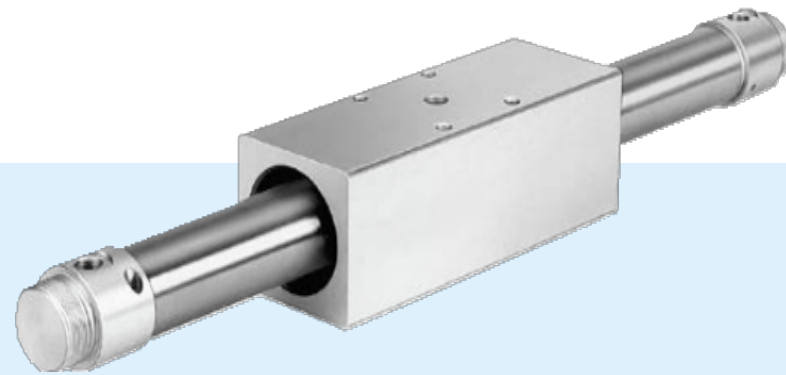
Reduce energy consumption and operating costs

Technology key

 Pneumatic

 Electric

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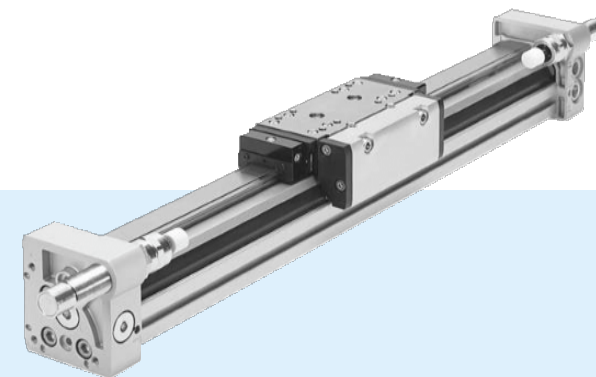


Rodless linear actuator DGO

The actuator transfers force magnetically, without any mechanical connection. Its cylinder chamber is hermetically sealed from the external slide, eliminating leakage losses.

→ www.festo.com/DGO

Energy savings up to 15 %

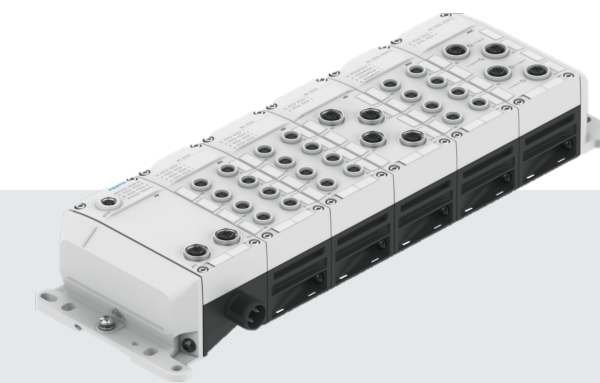


Pneumatic linear actuator DGC

The patented sealing strip in the rodless actuator's sealing system is especially advantageous for long strokes. Virtually leak-free, it systematically reduces compressed air consumption.

→ www.festo.com/DGC

Energy savings up to 10 %



Remote I/O system CPX-AP-A

The remote I/O system CPX-AP-A offers efficient, decentralized control of pneumatic applications. Fast communication and flexible connectivity allow precise process monitoring and demand-based control. This optimizes energy use, avoids unnecessary consumption, and thus achieves energy savings across the system.

→ www.festo.com/CPX-AP-A

Energy savings up to 10 %

1.2 Sustainability during operation

Top products for energy efficiency

Make compressed air consumption visible

Measure consumption and optimize it effectively

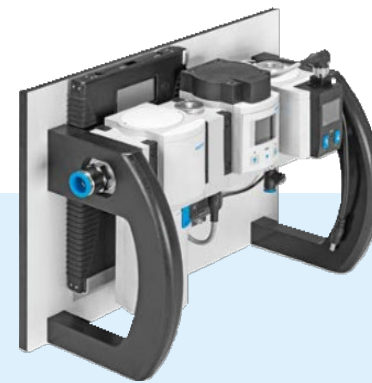


Flow sensor SFAM

Install the flow sensor SFAM on its own or with an MS series air preparation unit. The latest generation has IO-Link connectivity so precise flow measurements can be combined with intelligent energy monitoring functions.

→ www.festo.com/SFAM

Energy savings up to 20 %



Flow measurement box SFGA

Measure actual flow and pressure values anytime, anywhere, and compare them with historical data using the mobile measuring device SFGA. Flow measurements quickly reveal deviations, such as leaks, unexpected pressure fluctuations, or pressure losses, from optimal conditions. This provides a reliable basis for choosing the right energy-saving measures.

→ [Contact us directly for more information](#)

Energy savings up to 20 %

Technology key

 Pneumatic

 Electric

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1.2 Sustainability during operation

Top products for energy efficiency

Efficient drive technology

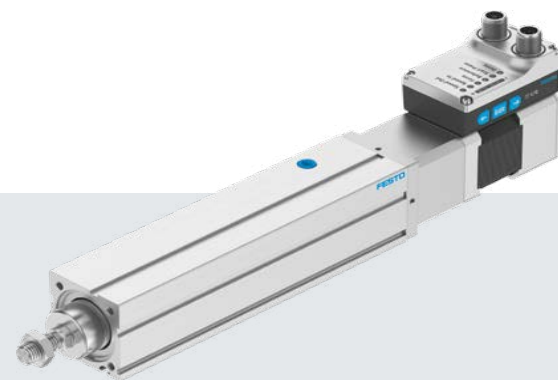
Energy-efficient motion and precise force transmission

Technology key

 Pneumatic

 Electric

[Back to product overview](#)



Simplified Motion Series

Electric actuators that combine the compact form typical of pneumatic cylinders with control via IO-Link and that have no need for a control cabinet space: These are the hallmarks of our Simplified Motion Series. Commissioning is also exceptionally easy.

[→ www.festo.com/SMS](https://www.festo.com/SMS)

Energy savings up to 50 %



Servo drive CMMT-AS/ST

High-performance servo motors (CMMT-AS) can be flexibly combined with compact, energy-saving stepper motors (CMMT-ST), including in motion applications. The result is excellent energy efficiency in a small space, further improved by energy recovery during braking. The one-cable solution (OCP) also optimizes the CO₂ footprint and simplifies installation.

[→ www.festo.com/CMMT](https://www.festo.com/CMMT)

Energy savings up to 25 %



Electric cylinder EPCC

The electric cylinder EPCC combines compact dimensions with a weight-optimized design, thus reducing material use and installation space. Low internal friction supports efficient operation. Flexible mounting options simplify integration into different machine designs.

[→ www.festo.com/EPCC](https://www.festo.com/EPCC)

Energy savings up to 20 %

1.2 Sustainability during operation

Top products for energy efficiency

Precisely control and dispense gases and fluids

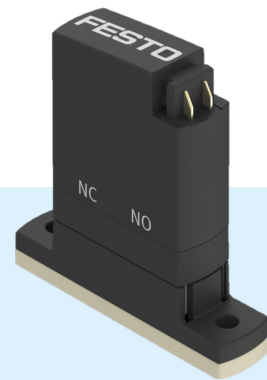
Control and optimize energy use based on demand

Technology key

 Pneumatic

 Electric

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Media-separated solenoid valve VYKA

The VYKA precisely dispenses extremely small quantities of liquids and gases in tight spaces, helping conserve process media. Reduced holding current cuts energy consumption by up to 75%. Its media-separated design ensures high process reliability, excellent reproducibility, and suitability for laboratory, diagnostic, and medical applications.

→ www.festo.com/VYKA

Energy savings up to 75 %



Media-separated solenoid valve VYKB

The VYKB is a media-separated solenoid valve for precisely controlling and dispensing liquids and gases. Its compact design, high flow capacity, and reliable separation of the medium from the valve actuator also suit aggressive or sensitive media. Reducing the holding current cuts energy consumption by up to 40%.

→ www.festo.com/VYKB

Energy savings up to 40 %



Media-separated solenoid valve VYKC

The VYKC is a media-separated solenoid valve for the precise control of liquids and gases in dispensing, filling, mixing, cleaning, and distribution processes. Reliable separation of the medium from the valve mechanism also makes it suitable for aggressive or sensitive media. It provides high switching precision with low energy consumption.

→ www.festo.com/VYKC

Energy savings up to 50 %

1.2 Sustainability during operation

Top products for energy efficiency

Precisely control and dispense gases and fluids

Control and optimize energy use based on demand



Mass flow controller VEFC

The VEFC combines highly efficient piezo technology with stepless precision and low power consumption. Its compact 24 mm design saves space, while stable flow control reduces inert gas consumption by up to 75%. Ideal for nitrogen and specialty gas applications with demanding efficiency and process stability requirements.

→ www.festo.com/VEFC

Energy savings up to 75 %



Mass flow controller VEMD

The mass flow controller VEMD precisely controls gases such as compressed air, oxygen, nitrogen, argon, and CO₂. Integrated sensors and control electronics ensure constant gas flow, high process reliability, and efficient operation, including in medical, laboratory, and biotechnology applications.

→ www.festo.com/VEMD

Energy savings up to 25 %

Technology key

 Pneumatic

 Electric

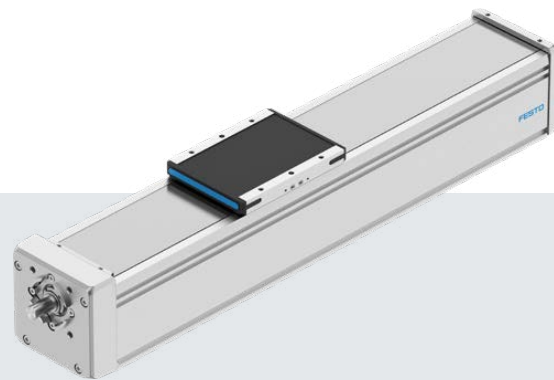
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1.3 Sustainability in the product life cycle

Top products for the circular economy

Long-lasting products

Extend service life and reduce operating costs



Ball screw axis ELGD-BS

The ball screw axis ELGD-BS combines performance with sustainability. Its optimized design allows for a smaller size to be used in 60% of cases while delivering the same performance, saving significant material and space. The WD (wide) version weighs 30% less with the same guide load capacity. Local production minimizes transportation distances and CO₂ emissions. Excellent repairability, repair kits, and service offerings significantly extend its life cycle.

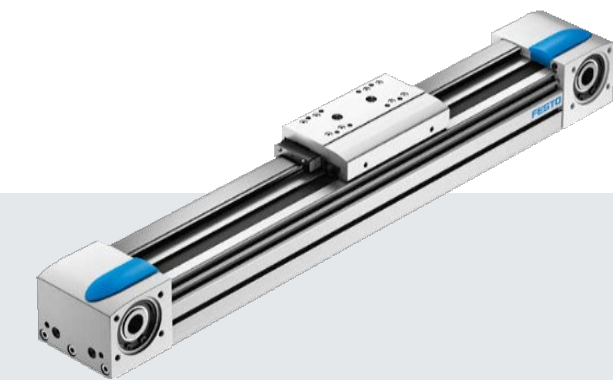
→ www.festo.com/ELGD-BS



Electric cylinder ESBF

The electric cylinder ESBF consists mainly of readily recyclable materials such as aluminum and steel, and is easy to disassemble at the end of its life cycle. It is also easy to repair thanks to available repair instructions and spare parts. The optimally sized complete functional unit, comprising the actuator (ESBF), motor (EMMT-AS or EMMT-ST), and servo drive (CMMT-AS or CMMT-ST), can be operated using smaller, lighter motors or motion profiles optimized for the movement cycle.

→ www.festo.com/ESBF



Toothed belt axis EGC-TB

With strokes up to 8.5 m, the EGC-TB features an optimized cross section offering outstanding stability and load capacity. This dynamic linear actuator handles high speeds even with heavy loads. Its excellent design often allows a smaller size to be used. The intelligent construction simplifies maintenance and extends service life sustainably.

→ www.festo.com/EGC-TB

Technology key

 Pneumatic

 Electric

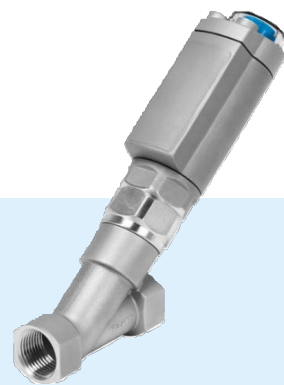
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1.3 Sustainability in the product life cycle

Top products for the circular economy

Repairable and reusable

Simplify maintenance and extend life cycles



Angle seat valve VZXA

The VZXA combines exceptionally high flow capacity with a circular economy concept. Its modular design, with freely combinable valve bodies and actuators, significantly extends its service life. Easy, tool-free repairs reduce resource consumption and waste, while Ecobrass provides a sustainable material alternative that minimizes the environmental impact. Its hygienic design and high resistance make the VZXA ideal for demanding media up to 600 mm²/s.

→ www.festo.com/VZXA



Guided cylinder DFM

The guided cylinder DFM is designed for long service life and easy maintenance. Its robust construction and replaceable individual wear parts can significantly extend its useful life. This reduces the need for complete replacement and supports resource-efficient use over multiple life cycles.

→ www.festo.com/DFM



Pinch valve VZQA

The simple design of the pinch valve VZQA makes it quick and easy to replace specific wear components. In particular, the flexible sealing element can be replaced as needed without having to replace the entire valve. This reduces downtime and uses resources more efficiently, contributing to the circular economy.

→ www.festo.com/VZQA

Technology key

 Pneumatic

 Electric

[Back to product overview](#)

1.3 Sustainability in the product life cycle

Top products for the circular economy

Repairable and reusable

Simplify maintenance and extend life cycles



Soft gripper HPSX

The soft gripper HPSX handles delicate objects of different shapes gently and flexibly. It is easy to repair, thus extending the product life cycle and ensuring components can be used longer. Its clean design and easy mounting also reduce maintenance and cleaning. Different sizes and gripper fingers allow flexible adaptation to various applications.

→ www.festo.com/HPSX

Technology key

 Pneumatic

 Electric

[Back to product overview](#)

2. Digital Solutions & Services for More Sustainable Automation

Improve visibility, identify opportunities, and increase efficiency

Alongside our products, our digital solutions, engineering tools, and services help make energy consumption visible, identify savings opportunities, and plan and operate automation more efficiently.

Engineering Tools

Plan and size efficiently

- Size solutions
- Compare alternatives
- Select suitable components

Size and compare automation solutions for your application. Our engineering tools help you size components efficiently and make informed decisions.

Festo Energy Saving Services

Identify and realize savings opportunities

- Make energy losses visible
- Identify optimization opportunities
- Prioritize measures

Make energy losses in your compressed air system visible and identify specific optimization opportunities. Festo Energy Saving Services support you from the initial analysis through the assessment of suitable measures.

Festo AX

From AI solutions to specific applications

Industrial Intelligence

Analyze production data and identify specific optimization opportunities for maintenance, quality, and energy.

Industrial Apps

Preconfigured AI applications for specific tasks such as actuator monitoring or energy monitoring.

Energy Insights

Make machine and system energy consumption visible, monitor it, and optimize it effectively.

2. Digital Solutions & Services for More Sustainable Automation

Engineering tools: efficient planning, sizing, and comparison

Engineering Tools

Use the engineering tools to select and size automation solutions specifically for your application. Compare alternatives first and size components to match your needs.

Pneumatic Automation

- Handling Guide Online
- Vacuum sizing
- Gripper sizing
- Pneumatic sizing
- Flow calculation
- Air preparation unit calculation
- Cylinder air consumption calculation
- Spare parts catalog
- Festo Maintenance Tool

Electric Automation

- Electric Motion Sizing
- Simplified Motion Series – Solution Finder

Explore engineering tools

→ www.festo.com/engineering-tools

Comparing CO₂ and TCO solutions

Compare automation solutions based on costs, energy consumption, and CO₂ emissions.

Create alternative solutions with the sizing tools and save them to a MyFesto project with one click. Compare them directly in the “Saved solutions” section.

Gain clear insights into costs, energy consumption, and CO₂ emissions as a sound basis for your decision.

Try the solution comparison

→ www.festo.com/my-account/projects

Technology key

- Pneumatic
- Electric



2. Digital Solutions & Services For More Sustainable Automation

Festo Energy Saving Services: Identify energy losses and optimize compressed air systems

Festo Energy Saving Services help you identify energy losses in compressed air systems, assess savings opportunities, and determine suitable measures.

Depending on your needs, start with an analysis by Festo or record the leaks yourself.

Compressed air energy efficiency audit

Festo analyzes your entire compressed air system, from generation to application. Leaks, pressure losses, and energy consumption are identified and assessed, resulting in specific recommendations to improve efficiency.

Pneumatics sustainability check

The check focuses on the efficiency of pneumatic components and applications. It identifies where valve technology, control, or sizing can save energy and extend system service life.

FESS Portal

The FESS Portal centrally records, documents, and evaluates energy-saving measures. It consolidates on-site analysis data, records leaks, calculates savings opportunities, and prioritizes measures.

Leakage Detection Starter Kit

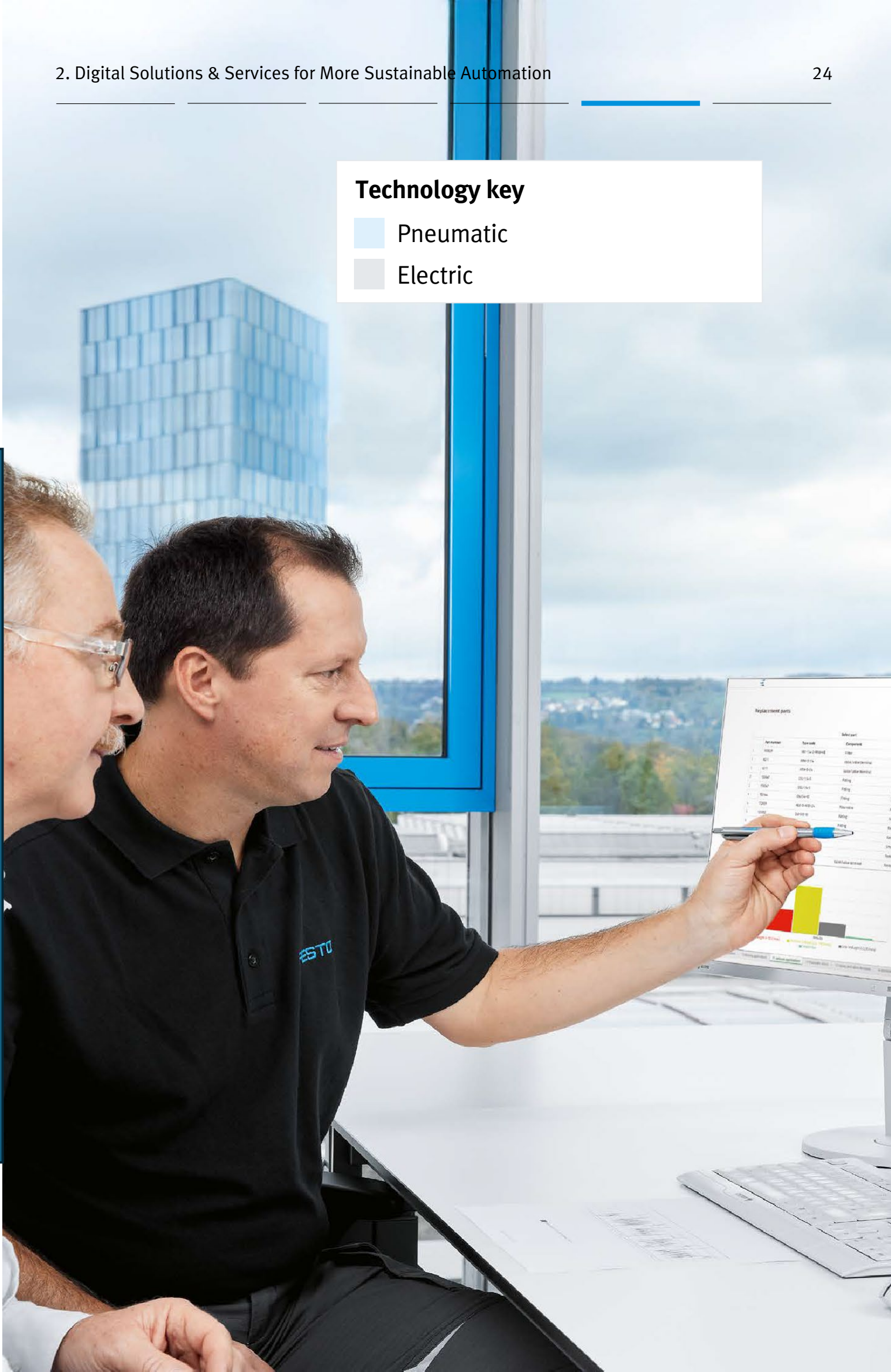
Want to start finding leaks yourself? The Leakage Detection Starter Kit lets your maintenance team record and label leaks. Manage the results centrally in the FESS Portal.

Explore Festo Energy Saving Services

→ www.festo.com/ESS

Technology key

- Pneumatic
- Electric



2. Digital Solutions & Services For More Sustainable Automation

Festo AX Industrial Intelligence: intelligent use of production data

Festo AX Industrial Intelligence turns production data into useful insights. Using artificial intelligence, it detects deviations at an early stage and helps optimize maintenance, quality, and energy consumption more precisely. It also identifies specific ways to make processes more stable, efficient, and resource-efficient.

Predictive Maintenance

Detect faults and wear early, before they cause unplanned downtime. This supports more specific maintenance planning and higher equipment availability.

Predictive Quality

Identify quality deviations and their causes early. This reduces scrap and rework and makes processes more stable.

Predictive Energy

Analyze energy consumption and reveal anomalies. This helps identify savings opportunities and detect leaks early.

With Festo AX, you can

- Reduce downtime by up to 25 %
- Reduce scrap by up to 20 %
- Reduce leaks by up to 65 %

Request a consultation

→ www.festo.com/AX



2. Digital Solutions & Services For More Sustainable Automation

Festo AX Industrial Apps: AI applications for specific optimization tasks

Preconfigured Industrial Apps bring AI into existing production systems. Use them for specific tasks, such as analyzing energy consumption or monitoring drives.

Analyze energy consumption with Festo AX Energy Insights

- Make the energy consumption of pneumatic and electric equipment visible
- Detect anomalies and leaks early
- Identify and assess savings opportunities

Monitor actuators with Festo AX Motion Insights

- Monitor the condition of pneumatic and electric actuators
- Detect wear and anomalies early
- Plan maintenance more precisely and reduce unplanned downtime

Discover savings opportunities in just a few minutes

→ www.festo.com/ax_industrial_apps



2. Digital Solutions & Services For More Sustainable Automation

Festo AX Energy Insights: Understand, monitor, and optimize energy consumption

Festo AX Energy Insights helps make the energy consumption of pneumatic and electric equipment visible and identify savings opportunities. Three solutions are available, depending on the depth of analysis you need.

1. Energy Insights Guide: Understand

A quick start to energy analysis

The mobile app provides an initial overview of pneumatic components and potential savings. Specific guidance helps you identify your first steps.

Perfect for: A quick overview and initial optimization steps

2. Energy Insights Lite: Monitor

Keep track of energy consumption

Energy Insights Lite makes key energy parameters visible and supports continuous monitoring and analysis. Track consumption and trends over time.

Perfect for: Continuous monitoring and greater visibility during operation

3. Energy Insights: Optimize

Analyze and optimize energy consumption with AI

Energy Insights monitors energy and compressed air consumption in real time. AI-based analyses automatically detect leaks and anomalies and reveal optimization opportunities.

Perfect for: Comprehensive, data-driven energy optimization

Discover savings opportunities in just a few minutes

→ www.festo.com/ax_industrial_apps



3. Automating Sustainably Together

Build knowledge, assess impact, and take the next step

Want to go further after reviewing the products?

Explore more content on sustainable automation, from available websites and blog articles to guides, checklists and white papers. Register once to download and access all available gated content.

Explore now

Websites

- **Sustainability in automation**
- **Sustainable pneumatic automation**
- **Sustainable electric automation**

Blog articles

- **5 key initiatives for greater sustainability**
- **Sustainability in machine and system building**
- **Sustainable action and planning**

Learn more



Make your procurement more sustainable!

A checklist covering legal requirements, company-specific goals, and more sustainable procurement.

→ **Download the checklist**



Sustainability in machine and system building

A white paper on planning, sizing, and automation technology for greater energy and resource efficiency.

→ **Download the white paper**



Pneumatic vs. electric actuators

A guide to selecting the right actuator technology for your application.

→ **Download the guide**



Practical tips for sustainable automation

Specific ways to identify and realize savings opportunities in your system.

→ **Download the tips**

Assess the impact



Request a free PCF for your Festo product

Need product-specific CO₂ data for your sustainability reporting? Request available product carbon footprint values for Festo components

and reduce your data collection effort.

→ **Request a free PCF**

3. Automating Sustainably Together

Build knowledge, assess impact, and take the next step

Sustainability at Festo

As a family-owned company, Festo takes a comprehensive approach to sustainability, including environmental, social and governance factors. Learn more about the sustainability goals at Festo, as well as our initiatives, and progress.

View the latest sustainability report

→ www.festo.com/sustainability



Would you like to review your application with us?

Our experts help you identify suitable opportunities and solutions for your automation and determine the next steps.

→ www.festo.com/kontakt

