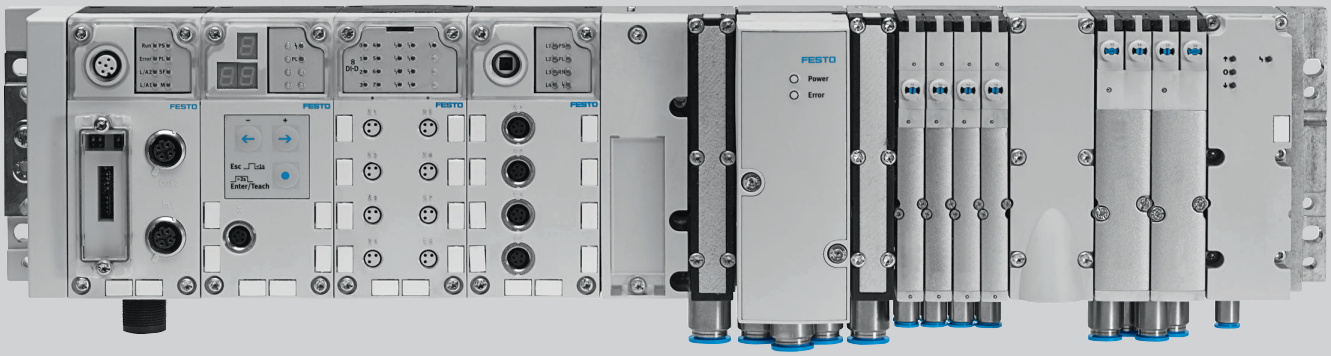
Integrating Rockwell Automation with Festo

Technology Partner

A ROCKWELL AUTOMATION PARTNER

FESTO



www.festo.com

Festo and Rockwell Automation

Festo has been a recognized partner of Rockwell Automation for nearly two decades, starting with the Pyramid Solutions Program in the early 90's to the Encompass program of today. We have a long history of integrating control technology into valve manifolds, with many "firsts" to our credit:

- Integrated valve manifold technology
- Embedded SLC PLC into valve manifold
- Custom serial bus embedded through-out valve manifold, pneumatics and I/O

This is trend setting technology and establishes Festo as an innovator among our competition. Combined with Rockwell Automation technology, we can provide customers with numerous benefits such as time savings, component reduction, and improved diagnostics and commissioning.

Please contact Festo when considering an automation supplier for valve interfaces, safety valves, valve controllers, vision devices or other related automation products, to interface with your Rockwell Automation control system.

You can review the samples of our Rockwell referenced products below, or browse our 30,000+ automation components on our website, www.festo.com.

Valve Interfaces - Pneumatic

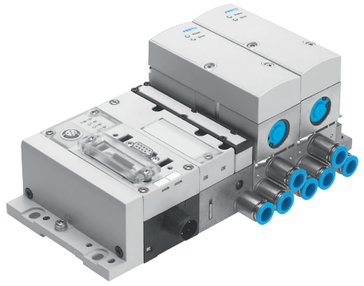
The Festo CPX/MPA pneumatic valve manifold provides the widest array of functionality of any manifold in the industry, including proportional and directional valves, analog and digital I/O, and hybrid motion solutions. Compatible with EtherNet/IP and DeviceNet.

Process Instruments

The SFAW measures and monitors the flow, volume and temperature of liquid media in piping or valve terminals.

Safety – Valves

The Festo MS6-SV is a safety dump valve (CAT4, pl "e", Sil 3) with an integrated soft-start function. Can be interfaced with any Rockwell safety output device.



Valve Controllers – Pneumatic

The Festo VPPM/MPA can provide up to 16 proportional pressure regulators on one network interface. Compatible with EtherNet/IP and DeviceNet.

Industry 4.0 – always a finger on the pulse thanks to complete networking and partnerships

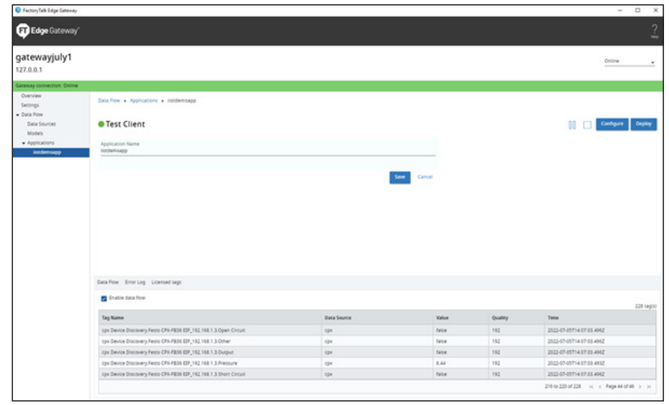
Many concepts from the past have been overtaken by the fourth industrial revolution: business models, partnerships, customer interfaces, value chains, and even the traditional automation pyramid – all are undergoing huge change. As an innovator and trendsetter in fieldbus technology, Festo will make a major contribution to reshaping the future with new concepts for Industry 4.0. This includes new products, cloud services, apps, as well as a new online shop with comprehensive, integrated engineering concepts. This will ensure that, in the medium term, data will be available seamlessly and globally on all user devices.

Integration into the IoT environment from Rockwell

Rockwell offers several approaches for networking the Internet of Things for industrial devices, machinery and systems, and for making effective use of the resulting data.

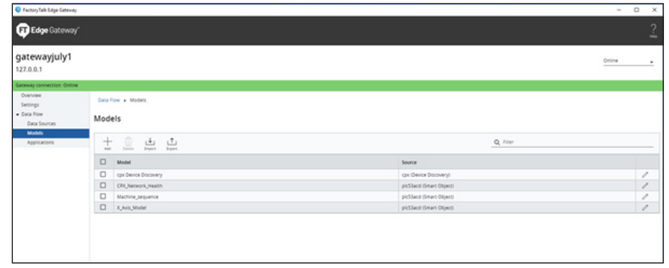
FactoryTalk® Edge Gateway™

FactoryTalk® Edge Gateway™ (FTEG) connects operational technology (OT) to informational technology (IT) destination systems. The Festo CPX-FB36 is recognized by FTEG when doing an auto-discovery for an information model. The model contains major and minor fault status from the device identity. It also has the CPX diagnostic bits. If the CPX-FB36 is connected to an E2M, it also provides FLOW, PRESSURE, CONSUMPTION values, as well as the valve and air saving status.



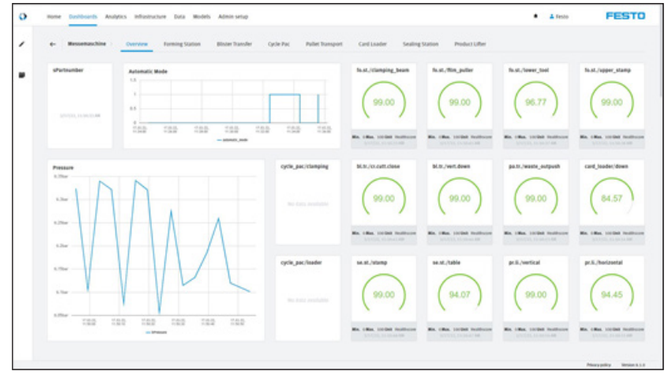
Smart Objects™

Smart Objects™ have emerged as a new, simplified way to organize data so it can easily be collected from the controller, and moved to and consumed by IoT systems. Festo provides AOIs to help get key IoT data from pneumatic systems, and when combined with Smart Objects™, data can be ingressed into FTEG to be ready to use for IoT purposes, such as analytics.



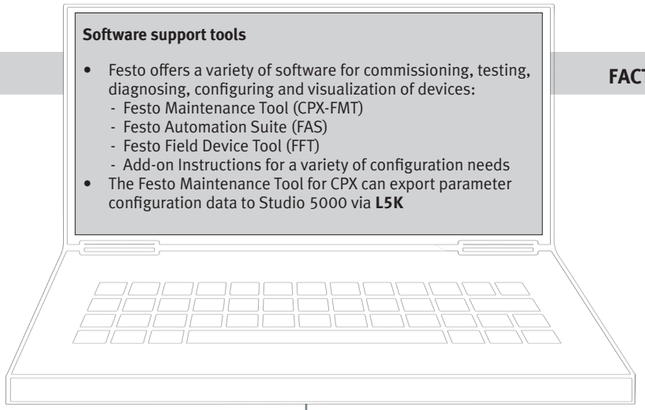
Festo AX

Festo Automation Experience (AX) is an industrial software solution intended to improve maintenance, increase product quality, and lower energy costs. It does this by leveraging technologies such as AI/ML, IoT, and Edge computing. Festo AX provides predictive analytics for these use cases. Data can come from multiple sources, including egress from FTEG via an MQTT broker. For example, pneumatic cylinder data controlled by a Festo Valve temrinal on EtherNet/IP can be collected from the controller via Smart Objects and FactoryTalk Edge Gateway. The data can be sent to Festo AX via MQTT. Analytics can then provide health status of key pneumatic actuators in a system, and anomolies can predict pending faults.



Software support tools

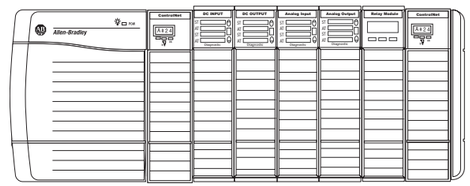
- Festo offers a variety of software for commissioning, testing, diagnosing, configuring and visualization of devices:
  - Festo Maintenance Tool (CPX-FMT)
  - Festo Automation Suite (FAS)
  - Festo Field Device Tool (FFT)
  - Add-on Instructions for a variety of configuration needs
- The Festo Maintenance Tool for CPX can export parameter configuration data to Studio 5000 via **L5K**



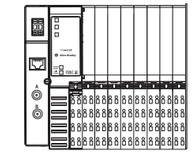
FACTORY ZONE

Complete automation systems with Rockwell integration

I/O	EtherNet/IP	Allen-Bradley Programmable Logic Controller
	EtherNet/IP	



EtherNet/IP	Allen-Bradley 1734	IO Link
EtherNet/IP		IO-Link



IO-Link

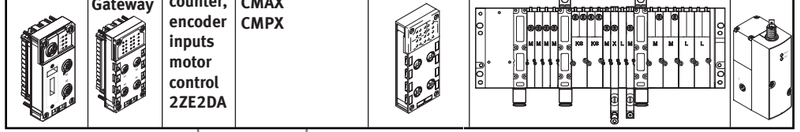
Ethernet UDP/TCP/IP

EtherNet/IP

EtherNet/IP

CPX/MPA valve terminal

CPX-FB36 w/DLR	CTEL-LK, IO-Link Gateway	High speed counter, encoder inputs motor control 2ZE2DA	Servo pneumatic controllers CMAX CMPX	Digital/ Analog I/O	Valve terminal MPA-S	VPPM



Onboard proportional pressure regulator

Only with CIP safety

Stratix switch

EtherNet/IP

Vision sensors **SBSA/X**

CIP safety

Bridge module

Valve terminal **VTSA/MPA-S**

Ex. Allen-Bradley ArmorBlock Guard Safety I/O

Safety outputs

Valve terminal **VTSA-F-CB**

Valve terminal **CPX-AP-A / VTSA-F MPA-S VTUX**

Ex. Encoder inputs and DC motors

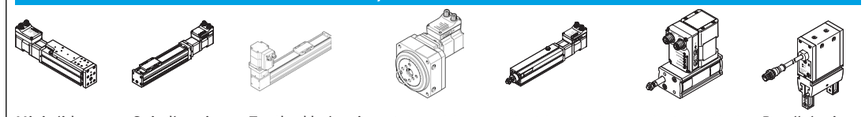
Proportional directional control valve **VPWP**

Rodless actuator **DGCI**

PneumaticEnergy saving module **MSE6-E2M/C2M**

Safety valve **MS6-SV**

Simplified Motion Series



Mini slide **EGSS**

Spindle axis **ELGS-BS**

Toothed belt axis **ELGS-TB**

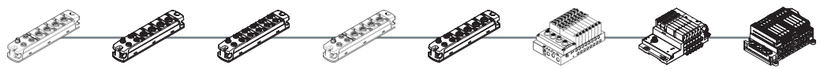
Rotary drive **ERMS**

Electric cylinder **EPCS**

Electric cylinder **EPCE**

Parallel gripper **EHPS**

CPX-AP-I... Modules



CPX-AP-I-EP-M12

CPX-AP-I-4DI4DO

CPX-AP-I-4AI

CPX-AP-I-8DI-M8

CPX-AP-I-8DI-M12

CPX-AP-I-4IOL

VAEM-...-AP

VMPAL-EPL-AP

VTUX

CTEU-EP

Valve terminals

VTUG

MPA-L

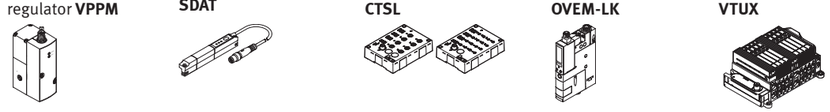
MPA-C

VTOC

Air solenoid valve **VTSA**

CAPC

Accessories



Proportional-pressure regulator **VPPM**

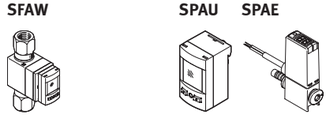
Position transmitter **SDAT**

16 input modules **CTSL**

Vacuum generator **OVEM-LK**

Air solenoid valve **VTUX**

Sensors

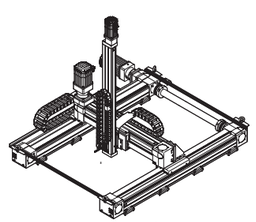


Flow sensor **SFAW**

Pressure sensors **SPAU** **SPAE**

Motor drive **CMMT-AS/ST**

Point to point applications



3-axis Cartesian robot

Valve Terminals

VTUG

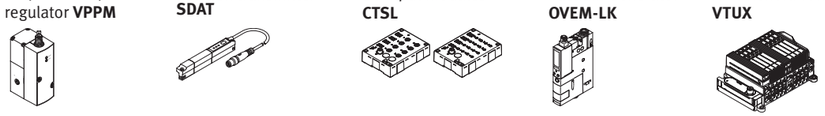
MPA-L

MPA-C

VTOC

VTSA

Accessories



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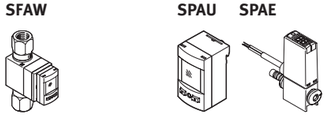
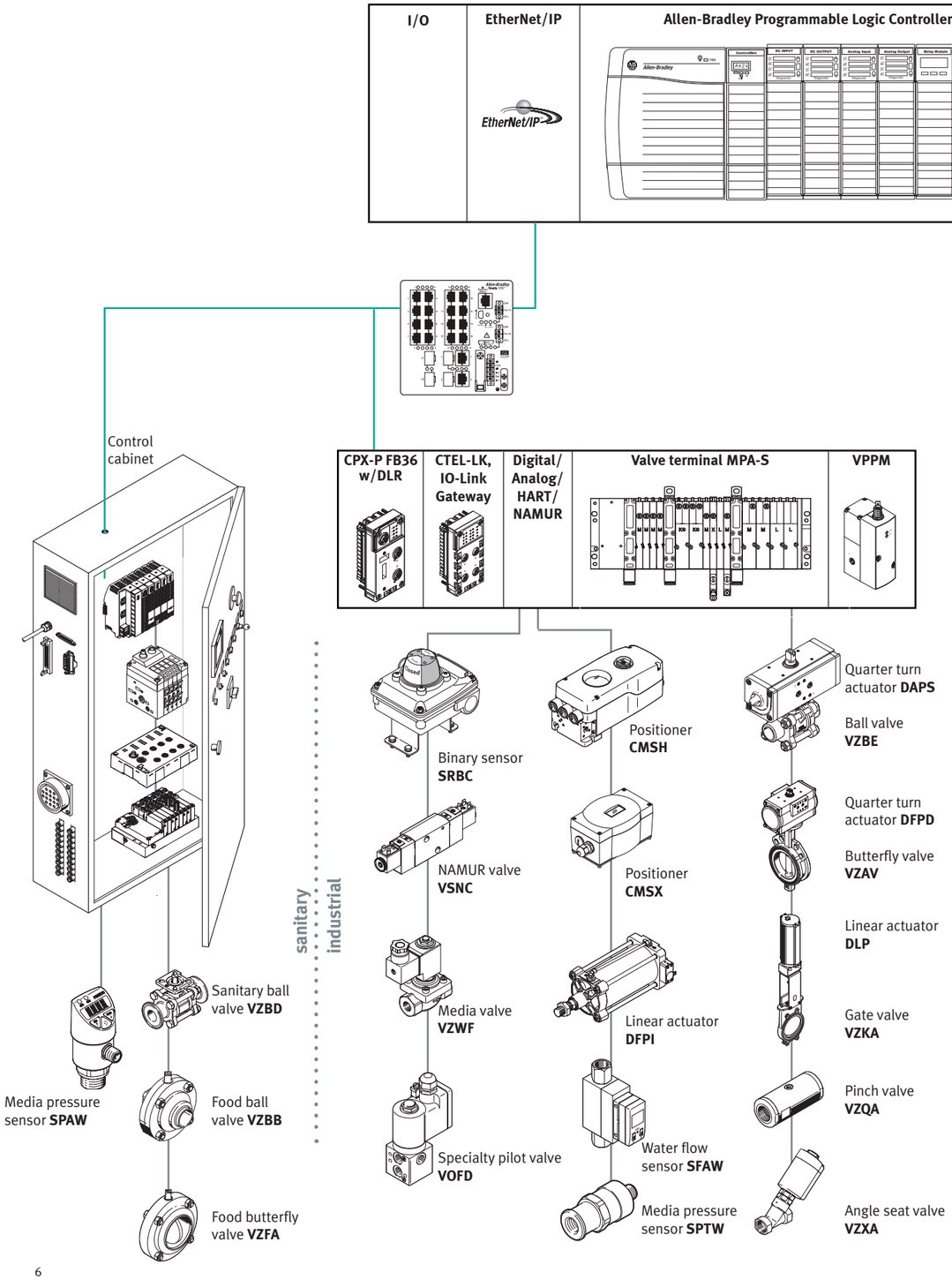


Flow sensor **SFAW**

Pressure sensors **SPAU** **SPAE**

PROCESS ZONE



CPX-FB36: Bus node EtherNet/IP valve terminal

Industry leading diagnostic capability

Error reporting including:

- Under voltage
- Short circuit
- Broken wire
- Out of range signal

Diagnostics available via:

- Integrated web server
- Festo Maintenance Tool software
- Status bits mapped as standard inputs
- Standard Rockwell CIP messages

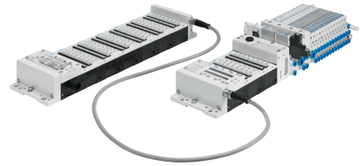
Industry leading range of supported I/O types

- 24 V DC inputs/outputs
- High speed counter with motor control modes
- Analog inputs/thermocouple/RTD/ outputs

CIP Safety Bridge Module

- Safely remove power of one zone of solenoid valves
- PLe, CAT4 and SIL3
- Bridges power from supply to solenoids

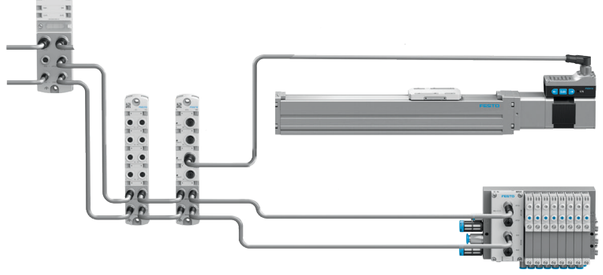
L5K/L5X support makes commissioning easy



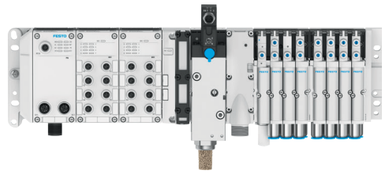
Industry leading flexibility

- DLR and QuickConnect support
- Up to 512 solenoids with one EtherNet/IP node
- On-board proportional pressure regulators
- On-board pressure transducers
- Flexible pressure and voltage zones allow you to support multiple safe machine zones
- Pressure regulators, flow controls, hot swap plates and individual supply plates available at each valve
- Integrated silencers save space and cost
- Long manifolds can be bisected by a flexible connector allowing large assemblies to fit in standard control cabinets
- Configurable parameters for I/O, valves and more

CPX-AP-I/A-EP: Bus node for EtherNet/IP I/O and pneumatics



Distributed I/O and pneumatics



Modular I/O and pneumatics

Industry leading flexibility

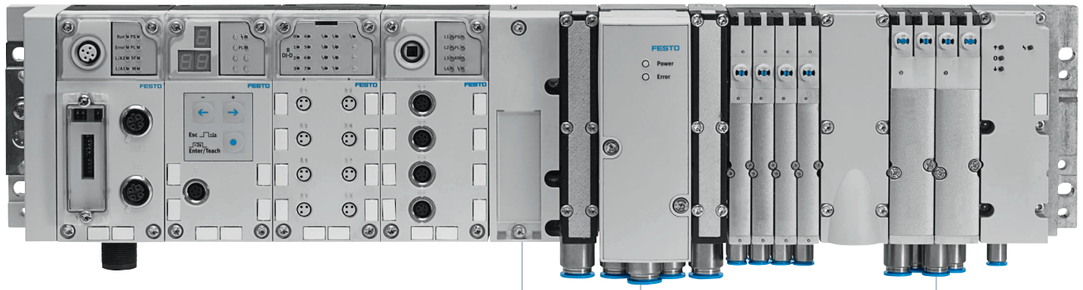
- Plug and Work. Bus node automatically recognizes configuration
- L5X export function automatically creates:
  - Generic Ethernet set-up
  - Configuration data for Forward-Open message
  - Meaningful Tag Names and data types to match function
  - Ladder logic to transfer data
  - Data-structure for diagnostics
- L5X facilitates disaster recovery situations, all data in PLC project
- Fixed I/O sizes possible to allow add-on modules without reconfiguration
- Web Server for easy parameterizing, diagnostics, firmware upgrade, L5X export

Industry leading platform for distributed pneumatics and I/O

- DLR and QuickConnect support
- Up to 15 I/O modules in chassis
- Up to 80 modules (500 theoretically), 2kbytes of I/O
- Modules for pneumatics, I/O, IO-Link
- Fast cycle time << 1ms (500us typ for many modules)
- Up to 15m between modules (50m capable)
- Detailed diagnostics
- Power distribution daisy chained, plus Isolated for multiple supplies
- Bring pneumatics closer to actuators for increased performance

CPX/MPA Valve terminal components overview

Electronics | Interface | Pneumatics



DeviceNet™ EtherNet/IP™

Advanced diagnostic capability including error logging.

Modular proportional pressure regulators

Seven valve types in two different sizes with flow rates from 360 l/min to 2,900 l/min

EtherNet/IP or DeviceNet

- Up to 9 I/O modules
- Digital I/O
- Analog I/O (0-10V & 4-20mA)
- Thermocouple
- RTD
- Pneumatic pressure transducers
- High speed counter
- Motion control interfaces
- IO-Link master modules for connection to remote valve terminals
- CIP Safety Bridge Module
- ODVA compliant
- UL recognized

Wide variety of pneumatic functions

- 3/2, 5/2, 5/3 valve functions.
- Sandwich pressure regulators
- Sandwich flow controls
- Hot swap plates
- Pressure zones
- Voltage zones
- Sensor valves
- Safety valves
- Soft start valves

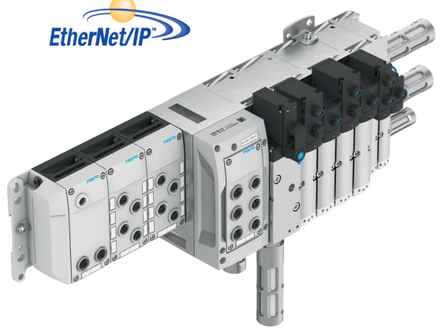
CPX-AP-A / VTUX Valve terminal components overview

EtherNet/IP™

- Industry 4.0 features
- Integrated sensors, inputs
- Safety ready
- Negative overlap valves for safety functions
- Integrated vacuum technology with energy savings
- All valve functions
- Up to 128 coils in one manifold
- Selectable sub-bases for higher flow
- Multiple valve sizes planned
- Compact, lightweight and high flow

CPX-AP-A / VTSA-F Valve terminal components overview

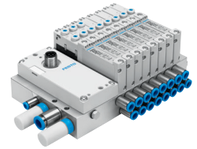
EtherNet/IP™

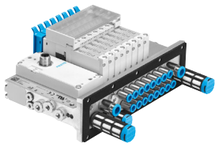


- Up to 15 I/O modules in chassis, 80 modules total
- Digital, analog, IO-Link
- Hybrid installation system
  - Includes distributed I/O with CPX-AP-I
  - Line / Tree / Star topology
- 200 Mbaud backplane
  - Ready for synchronization
  - Ready for safety
  - Ready for industry 4.0

Overview: selected valve terminals/IO-Link and peripheral products

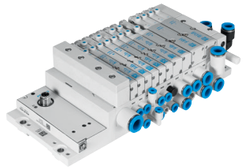
Valve terminal **VTUG**





- Low cost fixed grid valve manifold
- T profile option for cabinet installations
- Up to 24 valves and 48 solenoid coils
- Flow rate from 150-780 l/min.
- Special features for cabinet installation
- 3 valve sizes
- Options for hazardous locations
  - o Class 1, Division 2, Groups A, B, C, D
  - o Class 1, Zone 2, AEx ec IIC Gc
  - o Ex ec IIC Gc

Valve terminal **MPA-L**

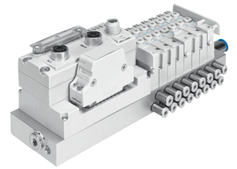


- Modular, low cost, light weight valve terminal
- Up to 32 valves and 32 solenoid coils
- 3 different sizes possible on a single manifold
- Flow rate from 150-900 l/min.
- Sandwich regulators and multiple pressure zones

Valve terminal **MPA-C**

- Modular, clean design valve terminal for food applications
- Up to 32 valves and 32 solenoid coils
- Flow rate from 150-680 l/min.
- Multiple pressure zones

Valve terminal **VTOC**



- Small, fixed grid valve terminal for pilot valve applications
- Up to 24 valves and 48 solenoid coils
- Flow rate 10 l/min.
- Multiple pressure zones

Safety valve **MS6-SV**

Performance Level E safety valve with integrated soft start.

- Inexpensive: PL c, maximum safety: PL e
- Integrated soft-start function
- Flow rate: up to 16,500 l/min.

Proportional-pressure regulator **VPPM**

The VPPM has the capacity to adapt precisely, for maximum flexibility with regard to electronic, pneumatic and mechanical components.

- Proportional pressure regulator available in three sizes and three pressure ranges.
- Flow rates from 1400—7000 l/min.

Position transmitter **SDAT**

Transmitter solutions for large and small drives.

- High repetition accuracy
- Programmable IO-Link/ switching output
- Five sensing ranges to match the most important standard strokes
- Analogue current output, switching output and IO-Link combined in a single unit

Overview: selected motion control devices

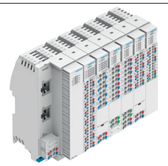
AC servo drive
CMMT-AS...MP...

- One of the most compact AC servo drives on the market
- Power from 350 W to 6000 W
- Control via EtherNet/IP, PROFINET, EtherCAT, Modbus TCP or digital I/O
- Record table including position, force and speed control with sophisticated sequencing
- AOI available

Low voltage servo drive
CMMT-ST

- Low-cost, compact servo drive
- Supports 24...48 V DC motors
- Control via EtherNet/IP, PROFINET, EtherCAT, Modbus TCP or digital I/O
- Record table including position, force and speed control with sophisticated sequencing
- AOI available

Remote I/O terminals
CPX-E



- Easily extend PLC functionality, including modules for IO-Link master, digital I/O, analog I/O and fast counters
- Control via EtherNet/IP, PROFINET, EtherCAT, Modbus TCP or PROFIBUS

Vision sensors
SBSA/X

- Detect part presence, orientation, length, position and more
- 1D/2D code reader, OCR
- Integrated lighting and lenses
- Powerful and fast software
- Robust housing with IP67 protection

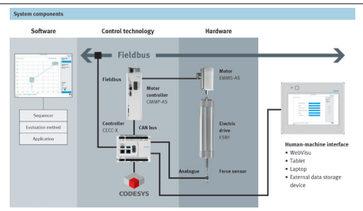
Simplified Motion Series
SMS

- End-to-end positioning
- Pressing
- Adjustable speed and force
- Control via digital I/O or IO-Link
- Easy wiring and configuration saves time
- Integrated motor reduces cabinet space requirements

Electric parallel gripper
EHPS

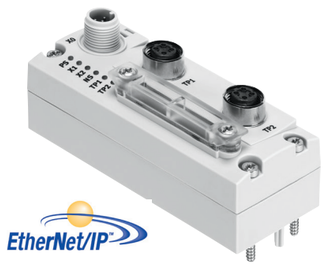
- Compact gripper with integrated motor and drive
- Adjustable speed and force
- Control via digital I/O or IO-Link
- Easy wiring and configuration saves time

Servo press kit
YJKP



- Modular system including servo press software, electric cylinder ESBF, servo motor and drive, force sensor, motion controller and required accessories
- Less expensive than conventional servo press systems
- Ideal for product assembly and quality assurance
- AOI available

CTEU-EP EtherNet/IP Gateway

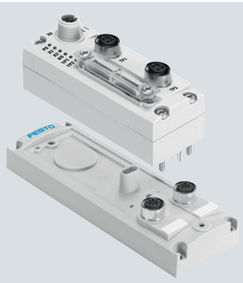


Features

- Two EtherNet/IP ports with DLR (device level ring)
- Up to 64 bytes in/64 bytes out
- Other protocols supported
- Options for hazardous locations:
  - o Class 1, Division 2, Groups A, B, C, D
  - o Class 1, Zone 2, AEx ec IIC Gc
  - o Ex ec IIC Gc

CAPC Splitter

Allows one CTEU to control two devices



Overview: selected media valves, actuators, sensors and positioners

Ball valve assemblies
KVZB

- Threaded, sanitary and flanged connections
- Assembled and tested with single or double acting actuator
- ISO/Namur/VDI/VDE interfaces for accessories
- Suitable for outdoor, hazardous locations and certain washdown environments
- Suitable for wide range of fluids and inert gases

Butterfly valve assemblies
KVZA

- Wafer and lug style according to ANSI standard B16.5
- Assembled and tested with single or double acting actuator
- ISO/NAMUR/VDI/VDE interface for accessories
- Bi-directional bubble-tight shut off
- Media pressure up to 230 psi
- Sizes: 1-1/2” to 12” DN40 to DN300

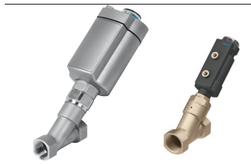
Positioner
CMSH/ CMSX

- Closed loop positioner for control of quarter turn actuators
- Auto-teaching speeds up commissioning
- Energy-efficient: no compressed air consumption when at rest
- Feedback signal as standard
- Configurable safety position in case of power failure
- Available with HART, UL and Hazarous locations

Controlled linear actuator
DFPI

- Actuator for all linear operated process valves
- Position sensing via built-in displacement encoder
- With optional integrated positioner and valve block
- Position feedback via analogue 4...20 mA for simple diagnostics

Angle seat valve
VZXA



- Modular design simplifies maintenance
- Unique interface allows actuator removal while valve is under pressure
- Optical position indicator clearly shows valve position
- Lifetime of at least 1 million cycles for standard media
- Available in normally closed, normally open and double acting

Pinch valve
VZQA

- Compact design makes it one of the smallest automated valves on the market
- Quick and easy replacement of seal cartridge
- Full bore with no dead space
- Lifetime of at least 500,000 cycles for standard media
- Available with FDA approved materials and sanitary connections

Solenoid media valves
VZWF

- No pneumatics needed
- No differential pressure required for operation
- Rated to 90 or 150 psi depending on size
- Lifetime of at least 2 million cycles for standard media
- Available with multiple diaphragm materials

Media pressure sensor
SPAW

- Monitor pressure of pneumatics, hydraulics, water, gases and cooling media
- Stainless body and measurement element
- High-quality display for free configuration of outputs
- Easy to operate: housing rotatable 320, display at 45 angle
- Accurate to 1% of full scale
- Repeatable to 0.1% of full scale

More information can be found on our website: **www.festo.com/paproducts**

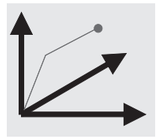
Applications for electric drives - connection to EtherNet/IP

Festo – your partner for every stage of the automation sequence

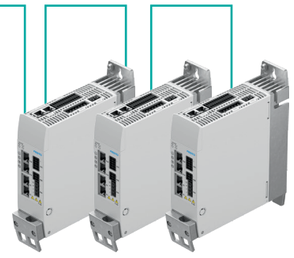
Your palletizing, clamping parts, pick & place or package sorting application determines the solution – that holds true for control technology, too. Festo's control architecture is designed to meet your needs in three ways:

- Tailored to your application
- Ideal for integration into your overall coordinating/control systems
- Optimally designed for drive activation systems, whether electric, servopneumatic or pneumatic

With EtherNet/IP fieldbus communication **only point-to-point motions are possible**

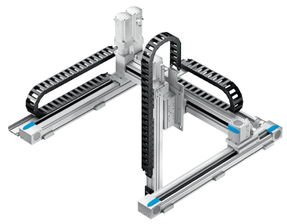


Automated format adjustments

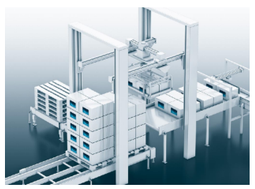


Motor drive **CMMT-AS...MP...**

Point to point applications



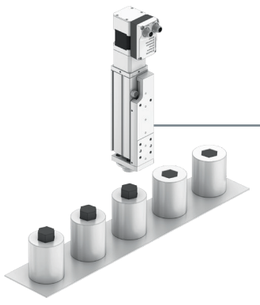
3-axis Cartesian robot



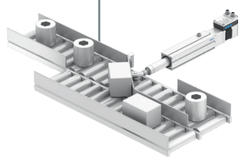
Material handling systems

IO-Link

Motor drive **CMMT-ST**
Pressing parts into assembly



EGSS end-to-end actuator
for pressing applications



SMS Axis - **EPCS**

Desktop automation - Fully electric or hybrid solutions

EtherNet/IP

Motion controller
CPX-E-CEC-M1-EP

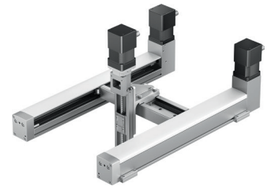
Life sciences – microplate handling solutions

- Dispensing
- Dosing
- Specimen sampling

Small parts assembly & manufacturing electronic module processing

- Fastening
- Bonding
- Screwing
- Coating
- Testing

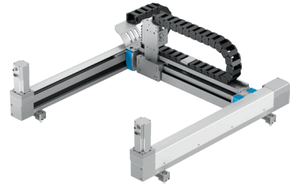
AOI available



Motor drive
CMMT-ST

Motor drive
CMMT-ST

Mini H-gantry **EXCM-30**



Mini H-gantry **EXCM-40**

Dispensing/engraving/surface inspection

EtherNet/IP

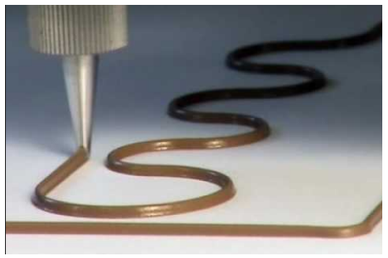
Motion controller
CPX-E-CEC-M1-EP

2D linear gantry **YXCL**

3D Gantry **YXCR**

T- gantry **EXCT**

Planar surface gantry **EXCH**

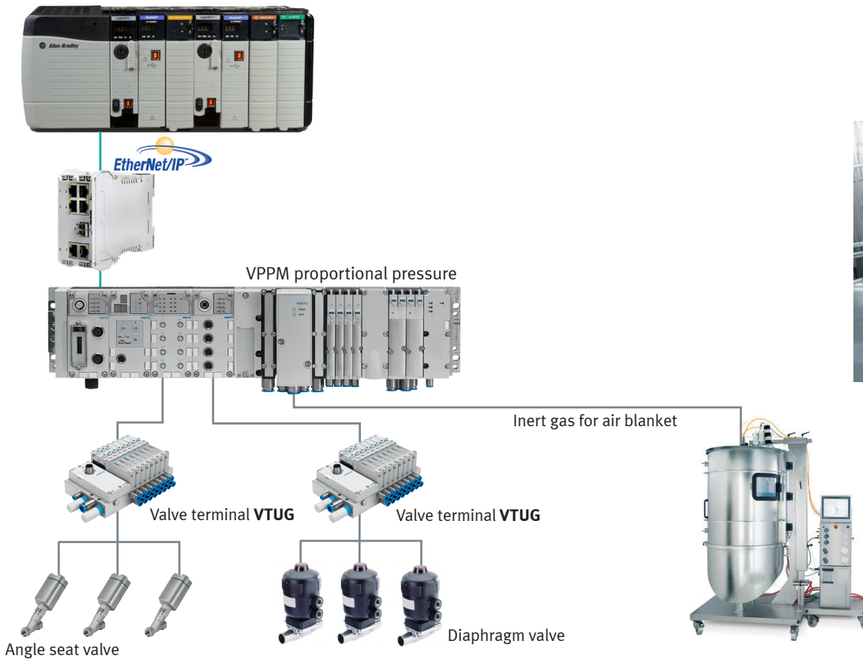


Interpolated 2D/3D motion using the Festo Motion Control Package (FMCP)

AOI available

Applications for process automation - connection to EtherNet/IP

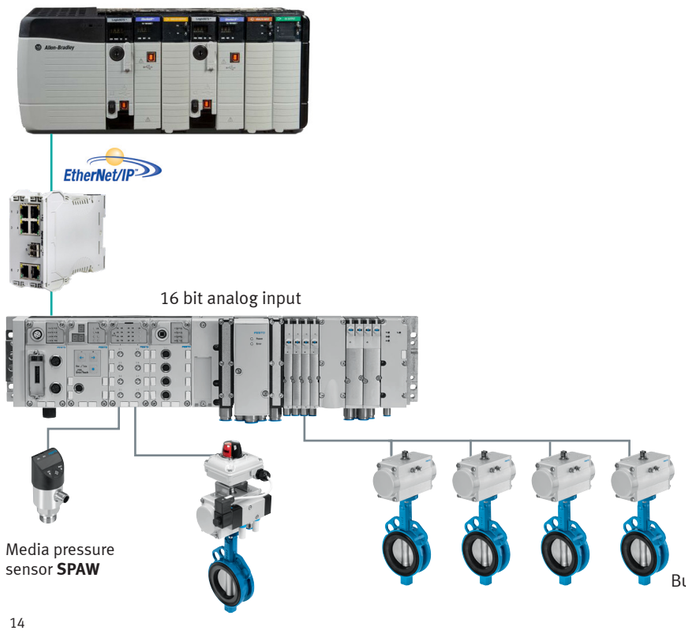
Decentralized process control



Biotech/pharmecutical solutions

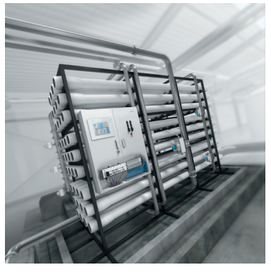
- Bioreactor
- CIP/SIP
- Mixing
- Sterilization
- Filtration

Skid based process control



Water treatment

- Membrane filtration
- Reverse osmosis
- Ultrafiltration
- UV filtration



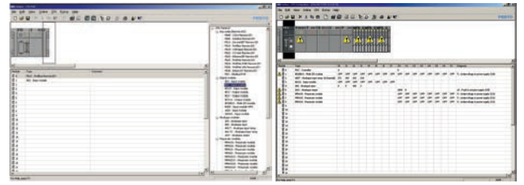
Service and support from Festo

Festo Support

We're there to offer support whenever you need us online or in person. This applies to all phases, from engineering to operation and beyond. We listen to you and we help you to keep your processes running optimally and without downtimes. When it matters most, we provide help quickly.

Festo online engineering tools allow you to confidently design solutions, regardless of your level of expertise. With these tools, you can quickly create a valid configuration, accurately select a component, generate required documentation, and perform essential calculations. Get more value from your industrial automation projects by leveraging Festo technology and expertise!

Festo Maintenance Tool CPX-FMT



The CPX-FMT is a helpful tool for commissioning, configuration and extended diagnosis of a CPX valve terminal. If Industrial Ethernet fieldbus nodes like EtherNet/IP, ProfiNet and Modbus/TCP are used, CPX-FMT can directly communicate with the CPX terminal via Ethernet connection. This tool can export an L5K file for Logix 5000. Parameters and tag descriptions can be stored in any Logix project.

→ **www.festo.com/support**

Festo Automation Suite

The PC-based Festo Automation Suite software combines the parameterization, programming and maintenance of Festo components in one program. It enables the entire drive package, from the mechanical system to the controller, to be commissioned. Perfect for making industrial automation simple and seamless.

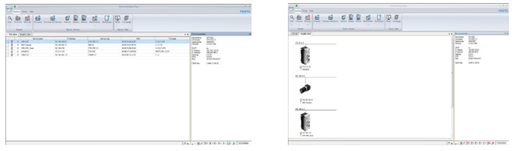
→ **www.festo.com/automationsuite**

Electric Motion Sizing

This sizing and simulation tool helps you to find the right electric or electromechanical servo drive for your application. The calculation is performed on the basis of a small number of parameters like mass, stroke/travel distance and cycle time, and promptly tells you which solution is the most economical for your requirements, whether servo drive and motor or servo drive, motor and mechanical system.

→ **www.festo.com/EMS**

Festo Field Device Tool FFT



The Festo Field Device Tool includes various services for all Ethernet-based Festo field devices. It supports, among other features, the update of firmware files to selected devices from Festo.

→ **www.festo.com/support**

Handling Guide Online HGO

HGO is an online configuration tool for sizing Cartesian robots. Easily size one, two and three-axis Cartesian robots in minutes. Benefits of using HGO include: receive quote in 48 hours, CAD model and complete bill of materials available immediately and order with a single part number.

→ **www.festo.com/HGO**

Quick Search Plus

When you know the part number or description of the parts you need this is the fastest way to access all the information you need including: CAD files, EPLAN data, product accessories, operating instructions, spare parts. Download the tool to your computer to get started today.

→ **www.festo.com/quicksearch**

Festo Didactic: Your Partner for Technical Skills Development

Drive Innovation and Stay Competitive Through Lifelong Learning

Through a remarkable interplay of automation and education, we provide the tools and support you need to boost productivity and employability.

Festo Didactic is a world-leading provider of comprehensive training solutions in educational institutions, training centers, and industrial companies.

As part of the Festo Group, Festo Didactic leverages close connections with industrial companies and educators worldwide to translate industry skills requirements into practical learning solutions.

We consistently offer comprehensive support from project definition to room planning and project implementation. Our expertise comes from extensive international experience in training and education projects of all scopes.

With our one-stop-shop approach and robust warranty, we prioritize convenience and efficiency. We continually invest in research and development to deliver innovative, world-class products and services. Moreover, our products are designed for longevity, scalability, and ease of repair.

Festo Didactic in brief
Family-owned, independent company
Founded in 1965 in Germany
Local offices in 60 countries
Over 36,000 educational customers
Annual turnover of more than 160 M Euros
Network of trusted resell partners across USA
Customer Solution Center in Eatontown, NJ and Learning Center in Mason, OH

Resources and Tools to Support Workforce Development Programs

Courses and Seminars from Industry – for Industry

We develop employee qualification through targeted training in three key areas: technology, organization, and people. Our courses range from basic technical skills to advanced competencies for modern workplaces, offering a blend of on-site or virtual sessions, courseware, and hands-on training with learning systems. This integrated approach boosts the effectiveness of learning and maximizes knowledge transfer. Pre- and post-training assessments measure improvement, empowering teams to master new technologies and drive productivity.

→ **Browse the course offering**

Personalized Learning Experiences, Anytime, Anywhere

The digital portal Festo LX offers a high degree of flexibility, customization, and hardware integration. It features an extensive library of courses across various technical fields, delivering expert content, clear learning outcomes, practical applications, real-world examples, evaluations, and more. Festo LX enables organizations to create their own training content and deliver scalable, efficient training while tracking learner progress.

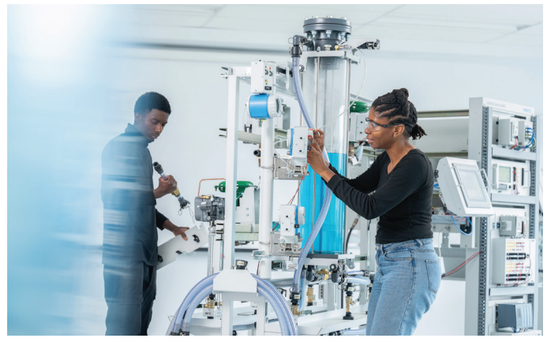
→ **Learn more and sign up for a demo account**

Driving Excellence with Industry-Recognized Certifications

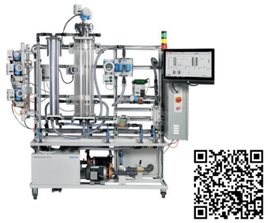
Certifications play a critical role in workforce development by equipping employees with the in-demand skills needed in today's rapidly evolving industrial landscape. Festo is actively developing programs such as the Festo Industry 4.0 Certification Program to address these needs. Incorporating certifications like Festo's into Rivian's training programs validates technical competencies and enhances job readiness, giving workers a competitive edge.

→ **Read about Rivian's collaboration with NC3**

Practical Training for Swift On-the-Job Application

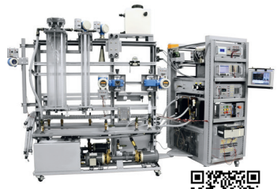


Our training systems incorporate technologies and components from leading manufacturers to ensure a realistic learning experience. Learners can safely experiment, make mistakes, and learn without impacting live operations. See systems that feature technologies from Rockwell Automation:



The **PlantPAx Distributed Control System** (DCS) simulates real-world process applications across various industries. It allows for experimenting with PID process control, industrial communication networks, and instrumentation that monitors and controls temperature, pressure, flow, and level variables. It demonstrates how the PlantPAx DCS integrates with critical components, such as transmitters, while seamlessly interfacing with Endress+Hauser instrumentation, fostering a deep understanding of modern process control. Originally developed at the request of Rockwell Automation for internal training, it is now available to all our customers.

→ **Watch a video overview**



The **Pressure, Flow, Level, and Temperature Process Learning Systems** allow large-scale process loops to be implemented for training purposes. They build universal skills in measurement, operation, control, optimization, and troubleshooting of industrial instrumentation and process control loops. Systems are fully customizable to meet various training requirements and supported by a collection of turnkey courses covering basic to advanced topics. Special configurations are available for specific industry segments. Smart devices are available to introduce the concept of the Industrial Internet of Things in the process industry.

→ **Watch a video overview**

The **Variable-Frequency Drive (VFD) Learning System** features the Allen-Bradley PowerFlex 525 and introduces the basic principles of variable-frequency drives (VFDs), motor drives, VFD operation with basic and advanced control functions, load types, control methods, and troubleshooting.
→ **More information**

The **Advanced PLC Training System** features a CompactLogix 5370 controller, a PanelView Plus 7 terminal, and a Stratix 2000 Ethernet switch. Learners will establish communication, program, and transfer projects to a PLC and a touchscreen through a series of practical, real-world exercises.
→ **More information**

Festo - Your partner in automation

1 **Festo Inc.**

5300 Explorer Drive
Mississauga, ON L4W 5G4
Canada

Festo Customer Interaction Center
Tel: 1 877 463 3786
Fax: 1 877 393 3786
Email: customer.service.ca@festo.com

2 **Festo Pneumatic**

Av. Ceylán 3,
Col. Tequesquináhuac
54020 Tlalnepantla,
Estado de México

Multinational Contact Center
01 800 337 8669

ventas.mexico@festo.com

3 **Festo Corporation**

1377 Motor Parkway
Suite 310
Islandia, NY 11749

4 **Regional Service Center**

7777 Columbia Road
Mason, OH 45040

Festo Customer Interaction Center
1 800 993 3786
1 800 963 3786
customer.service.us@festo.com

Connect with us

www.festo.com

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