Multi-axis interface CPX-CMXX
for electric drive units

FESTO

CPX goes E-Drives

The multi-axis interface CPX-CMXX. Ideal for standardised parameterisation and control of electric drive units from Festo. The only multi-axis interface in IP65 for decentralised peripherals also excels with its quick and easy installation as well as parameterisation. Moreover, its fault management system facilitates reliable operation.

For faster cycles
Easy parameterisation or teaching: for controlling electric drive units or for simple coordinated axis motions. This coordination significantly reduces cycle time, and the decentralised motion control in CPX-CMXX simultaneously relieves the higher-level PLC. Programming the logic program and telegram structure for individual axis coordination is no longer necessary.

Reliable – Pre-testing
Are the motion sequences of the multi-axis application correct?

A test using FCT software keeps you informed – without a PLC. Preset and parameterisable error management included.

In summary: Modular system solution
In fact, synergetic thanks to adaptation to PLC technology – including electric drive units and multi-axis control. All electrical and pneumatic CPX functions can be used in parallel. Also combinable with all fieldbus interfaces for CPX as well as Ethernet. CMXX may therefore be simple, but it is pioneering in "Motion Control".
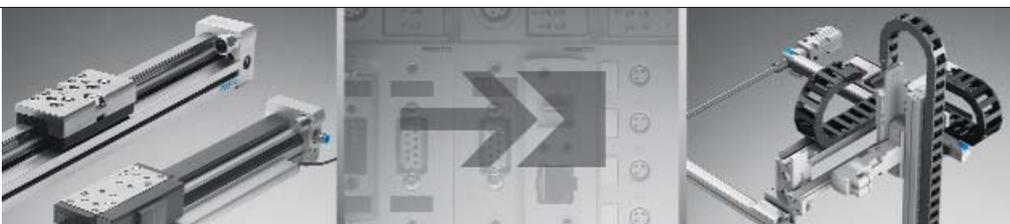
for electrical drive units   Festo plug and work®!   Less control effort

Multi-axis interface CPX-CMXX
for electrical drive units

Industrial Ethernet

Fieldbus

FCT
Festo Configuration Tool

CPX-CMXX

DriveBus

SFC-LAC   SFC-DC   MTR-DCI   CMMP-AS   CMMS-ST
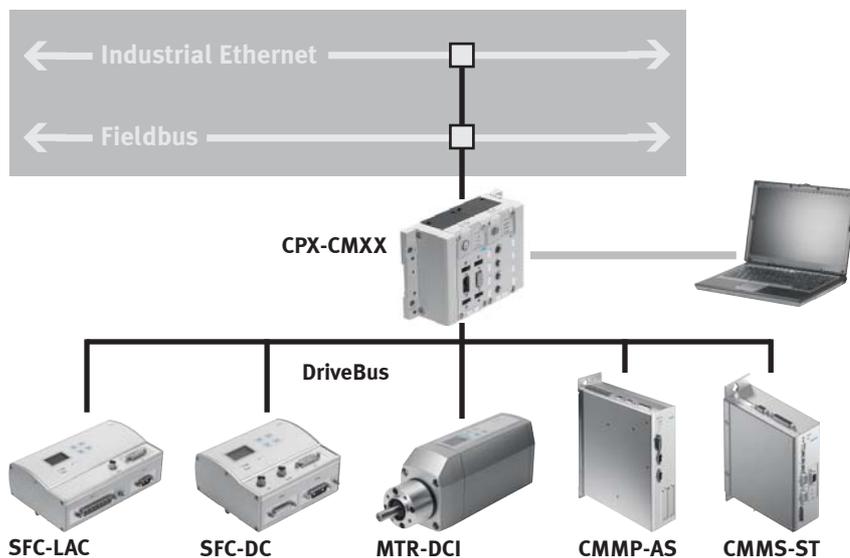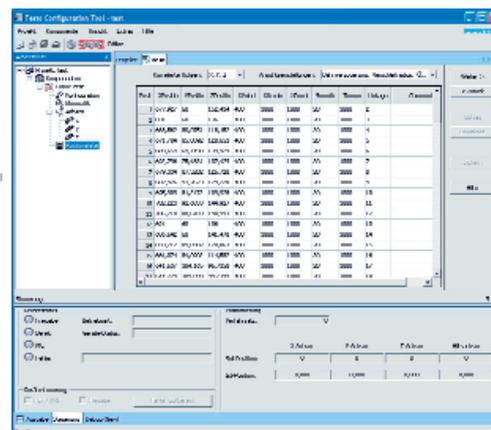
More options:
Multi-axis motions
CMXX is not programmed. Rather, it receives information via the parameterisation as to how the axis control sequence should be. The sentence structure that Festo successfully uses for individual axis controllers are expanded to multi-axis position records. Perfect for simple coordinated multi-axis motions. The CPX-CMXX multi-axis interface receives the spatial target positions in the form of input variables and automatically controls the speed and position of the subordinate individual axes. The result: A gripper mechanism arrives at the desired position for example.

Simple, yet efficient:
Control technology
Control technology enables the master PLC controller and the CPX-CMXX to form a harmonised synergy. The CMXX – an expert when it comes to multi-dimensional axis control – provides an interface suitable for a PLC within the CPX system. This is done physically using different fieldbus modules for easier adaptation to common PLC technology.

The position records can be easily parameterised or taught to the system.

Users benefit from:
- Faster and more successfulfully operational solutions for multi-axis applications
- Complete advance commissioning and parameterisation possible
- Complete pre-testing possible
- Reduced cycle times
- No need for programming of multi-axis motion
- Emergency stop behaviour for all axes
- Easy teach-in and storing of positions in the position records

- Coupling to additional fieldbuses and networks that are not available in the individual axis controllers, e.g.:
  - Ethernet/IP.
  - Ethernet TCP/IP.
  - EasyIP.
  - ProfiNet.
  - Interbus.
  - CC link.

Technical data CPX-CMXX

Protection class	IP65/IP67
Display component	4x LED (CPX specific), 4x LED (CMXX)
Control elements	DIL switch for operation modes and RUN/STOP
Interface/connection	CAN bus interface (Sub-D) for connecting the drive systems'
	Ethernet 10/100 BaseT (RJ45) for parameterisation
	Service interface (M12) for connecting the CPX-MMI handheld
Number of position records	1024
Configuration software	Festo Configuration Tool FCT