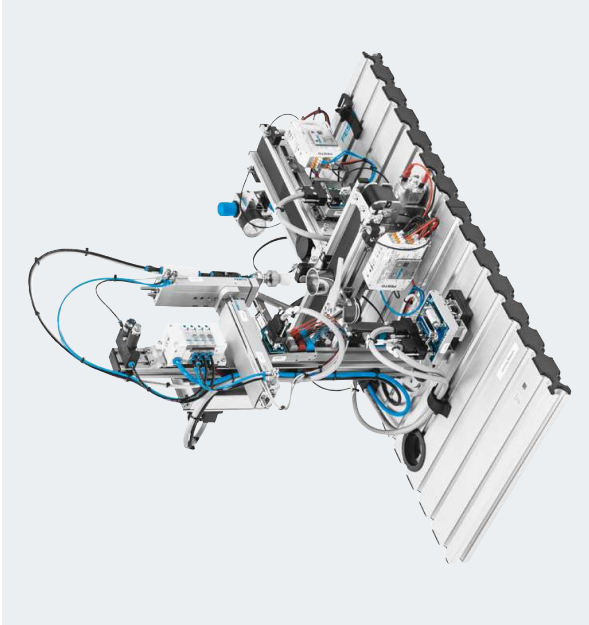


Joining station

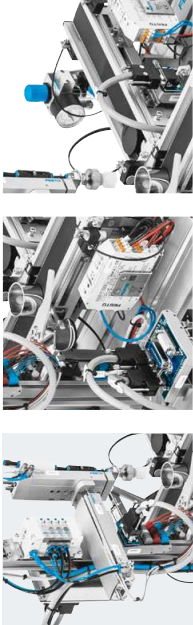
Industrial Ethernet and IO Link communication

New



The MPS joining station D covers a number of topics, including checking the orientation of workpieces using sensors, automated assembly and monitoring downstream transport.

The station checks the orientation of the workpiece and, if it is positioned correctly, affixes a cover/ top part to it. A conveyor belt transports the workpieces to the depth measurement point. There, an analog diffuse sensor checks the position of the workpiece. Workpieces with an opening at the top are stopped in the assembly position by an electric stopper with a quarter-turn actuator and given a cover/top section by the pick & place module. The workpiece is then transported to the end of the belt. Workpieces that are not positioned correctly are transported straight to the end of the conveyor belt without stopping, and the PLC can generate an error message for them. Fiber-optic through beam sensors with Opto sensors monitor the material flow on the belts. The joining station can be supplemented with other stations from three different directions. The conveyor belts can transport workpieces in both directions.



Joining station	8063910
Additional equipment, also order:	
1x MPS trolley 700 x 350	8033248
Control console, SysLink	195764
EduTrainer Universal AX Rack with SIMATIC S7-1512C-PM	8065452
2x I/O data cable with SysLink connectors IEEE 488	34031
Recommended accessories:	
Simulation box, digital	170643
PA workpiece set	554301
Fieldbus, rose, CTEU	8039079
VP/PA conversion kit	8045882
EasyPort USB – interface for measuring, open/closed loop control	Page 164

The most important components at a glance:

- 1x Aluminum profile plate, 700 x 350 mm, with cable guide
- 2x Conveyor module, 300 x 40 mm, DC motor
- 1x Pick&Place module
- 1x IO Link DA-interface
- 1x Start-up valve with filter control valve
- 1x Cable holder with hook-and-loop fastener (pack of 10)
- 1x C interface
- 1x Quick-Fix clamping adapter

Technical data

- Operating pressure: 600 kPa (6 bar)
- Power supply: 24 V Dc, 4.5 A
- Workpiece dimensions: 40 mm (round)
- 6 (5) digital input signals
- 6 digital output signals
- 1 analog input (alternative)

- IO Link with 2x 4DI/4DO/2AI/1AO interface (in use: 4DI/4DO)
- Dimensions (W x D x H): 350 x 700 x approx. 450 mm

Training content

- You will understand how the joining station and its various components work

- You will have acquired basic PLC programming skills
- You will be familiar with optical, digital sensors, actuators and distance sensors
- You will be able to prepare and commission a mechatronic system
- You will understand the basics of IO Link, pneumatic control systems, analog signal processing and gripper technology

Benefits

- The highly modular nature of the station makes it suitable for use in various types of project work.
- The station can be used in systems either on its own or combination with other stations at various stages of the process.
- The station covers the following topics: vacuum technology, digital and analog sensors, and network-based communication protocols.

Recommended training media

- Courseware**
 - Complete overview → page 270
- For example:
- eLearning course**
 - PLC Programming
 - GRAFECET
- elab course**
 - Basics of Pneumatics



- CIROS – Basics of 3D Simulation

- Workbook**
 - MPS joining station D



Evaluation

- Basics of Pneumatics
- Basics of GRAFECET Programming

User Guides

- CIROS – Installation Instructions



Joining station with additional equipment