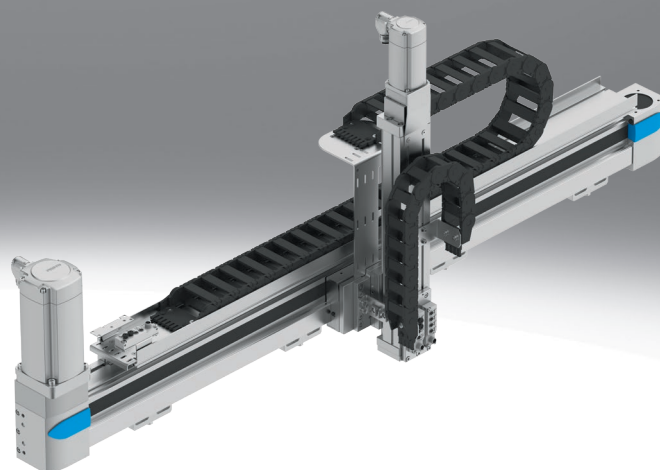


Linear gantries

FESTO



Key features

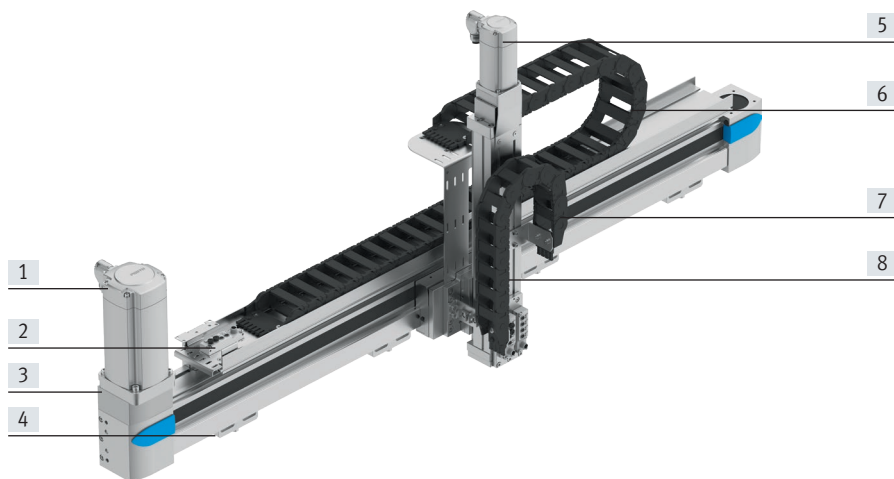
At a glance

A linear gantry (YXCL) is an assembly of several axis modules (EHM.../DHMZ) to produce a movement in 2D space.

The linear gantry facilitates movement in 2D space.

Depending on the requirements, the gantry is either composed of several axis modules (YXCL) or using the linear gantry EXCT (YXML). These are all tried-and-tested components from Festo.

- Very demanding requirements for precision and/or very heavy workpieces combined with long strokes (YXCL)
- Cost-effective handling unit in a compact format for small parts handling and simple tasks (YXCL)
- Frequently used in feeding or loading applications
- Use of tried-and-tested drives/axes from Festo



- [1] Servo motor for the Y-module
- [2] Multi-pin plug distributor which transfers all the electrical signals such as for end-position sensing
- [3] Y-axis
- [4] Profile mounting/adjusting kit
- [5] Servo motor for the Z-module
- [6] Energy chain for the Y-module
- [7] Energy chain for the Z-module
- [8] Z-axis

Description of the modules

Y-module

Setup:

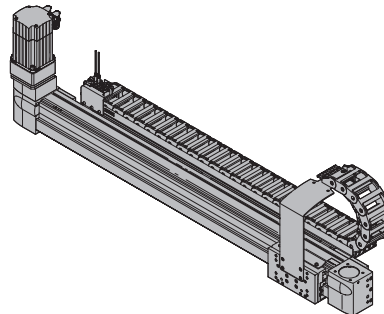
The Y-module EHY consists of a linear axis which is powered by a servo or step motor.

Adapters are mounted on the slides of the Y-axis to connect the Z-module.

The following components are located on the motor side:

- Energy chain (optional)
- Multi-pin plug distributor for proximity switch (if a sensor package has been selected)

Sample image:

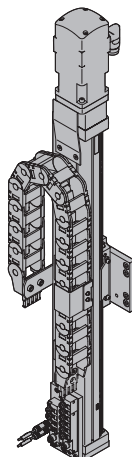


Z-module

Setup:

The Z-module EHZ comprises an electric drive, the DHMZ comprises a pneumatic drive. Based on the configuration, an energy chain is optionally installed as a cable guide depending on the axis type and stroke. The Z-module can be selected using the configurator, depending on the application.

Sample image:



Key features

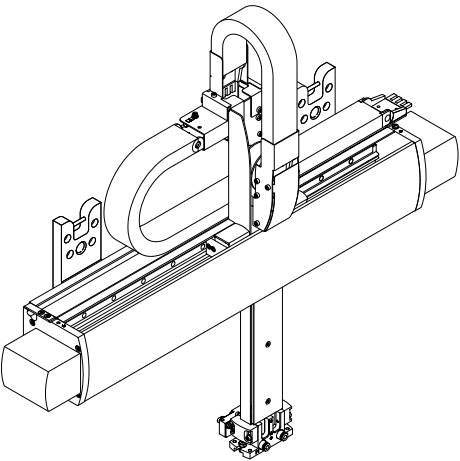
Description of the modules

YZ-module (EXCT)

Setup:

Two fixed servo motors drive a toothed belt arranged in a T-shape.
 The toothed belt moves the slide of the Y-axis and the interface located on the Z-axis in a two-dimensional space.
 A controller calculates the position of the interface. The controlled interaction of the motors results in the movement of the interface.
 Other components can be attached so that additional processes to be carried out.

Sample image:



Dispatch options

Fully assembled:

The linear gantry is fully assembled. All cables and tubing are installed and connected.

Partially assembled:

The linear gantry is delivered partially assembled. This means that both axis modules (Y-/Z-axis) are assembled, each with the optional motors. The partially assembled system must be completed by the customer. Help can be found in the assembly instructions provided.
 Optional accessories (→ page 11) are enclosed.
 Note flatness → table below.

System overview¹⁾

Size	YXCL-1	YXCL-2	YXCL-3	YXCL-4	YXML-1	YXML-2	YXML-3
Max. working stroke	Y: 1900 mm Z: 50 mm	Y: 3000 mm Z: 1000 mm	Y: 3000 mm Z: 1200 mm	Y: 3000 mm Z: 1200 mm	Y: 1000 mm Z: 200 mm	Y: 1500 mm Z: 500 mm	Y: 2000 mm Z: 800 mm
Max. payload	Dependent on the selected dynamic response						
Mounting position	Horizontal						

Size	YXCL-1-B	YXCL-2-B
Max. working stroke	Y: 800 mm Z: 150 mm	Y: 1200 mm Z: 200 mm
Max. payload	Dependent on the selected dynamic response	
Mounting position	Horizontal	

Size	YXCL-1-D	YXCL-2-D
Max. working stroke	Y: 3000 mm Z: 1000 mm	Y: 3000 mm Z: 1000 mm
Max. payload	Dependent on the selected dynamic response	
Mounting position	Horizontal	

1) Drive package depends on the configuration selected.

Key features

Configurator: Handling Guide Online (HGO)

Selecting a handling system

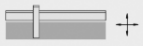
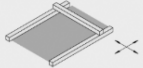
Planning complex handling systems takes a lot of time. You can use the configurator "Handling Guide Online" (HGO) to design a customised handling system for your application in just a few steps.

You can choose from the following systems:

- 2D linear gantry
- 2D planar surface gantry
- 2D cantilever system
- Three-dimensional gantry
- 3D cantilever system

Advantages:

- Automatic selection of all relevant components
- Automatic design and calculation of the workload
- Quote created automatically
- CAD model available immediately
- Configuration-specific parameters for servo drives available immediately
- Complete Eplan project can be ordered according to the individual configuration
- Fully automated processing
- You can order fully or partially assembled systems through the Online Shop
- Lots of possible options

☐ 2D linear gantry		Movements in 2D in the vertical working space: Linear gantries as complete systems. Electric and pneumatic axes can be combined ☐ Animation
☐ 2D gantry		Movements in 2D in the horizontal working space: Planar surface gantries as complete systems. Combining electric axes. Easy to connect to your own Z unit. ☐ Animation
☐ 2D cantilever system		Movements in 2D in the horizontal working space: Cantilever system as complete system. Combining electric axes.
☐ 3D gantry		Movements in 3D: Three-dimensional gantries as complete systems. Electric and pneumatic axes can be combined ☐ Animation
☐ 3D cantilever system		Movements in 3D: Cantilever system as complete system. Electric and pneumatic axes can be combined

Entering the application data

- Payload
- Drive system of the axis
- Distance from the centre of the load
- Working stroke
- Reference cycle

Axis definition and payload

Axis definition

Drive system of the axis

Y Electric: several positions
Z Please select

Required working stroke

Working stroke in Z direction

Take the stroke reserve into account in your specification

Payload

Sum of the weight of the front unit and the workplace

Distance from the centre of the load

X mm
Y mm
Z mm

Definition of payload
(1) Your front unit
(2) Centre of gravity
(3) Your workplace

Add to Cart
2D/3D CAD
Documentation
Technical data
Commissioning file
Send request
Handling solution:
Standard system
Selected: system # 0

Key features

Configurator: Handling Guide Online (HGO)
Result of calculation

You will be offered a selection of systems that have been calculated based on the application data you entered.

The following are available immediately:

- CAD model
- Datasheet of the selected system
- Price information

Result of calculation

Select the appropriate system and continue with the configuration:

Selection Filter

No.	System series	System workload i	Repetition accuracy (+/-)	Your price
☒	1 YXML-1	11 %	0.1 mm	
☐	5 YXCL-1	44 %	0.08 mm	
☐	7 YXCL-3	95 %	0.08 mm	
☐	9 YXCL-2	34 %	0.08 mm	
☐	11 YXCL-2	25 %	0.08 mm	

☐ Requires additional motion controller for interpolation (e.g. CPX-E-CEC-M1- ...)

2D linear gantry YXML-1: #1

Drive module	YZ module: Linear gantry EXCT-15
Kinematics type	Parallel kinematics
Stroke	200 mm/100 mm
Repetition accuracy (+/-)	-
Gear unit	Without
Type of motor	Servo motor EMMS-AS
Motor position	Rear/Rear
Motor controller	EMMS-AS-MD
Data protection	

BackContinue

System overview

You will be given an overview of the complete system.

You will also have the following options:

- Request price
- Send request
- Add to basket

Your handling solution

Your selected system overview:

Exemplary representation

©2022 powered by CADENAS

Update CAD Preview

Your system ID:

C2534095

Your next step:

Show price

Send request

Add to Cart

Key features

Standard components within the handling system

The handling system comprises a number of tried-and-tested standard components from Festo. Different components are used depending on the configuration. The single axes installed will be displayed in the configurator HGO on the "Result of calculation" page.

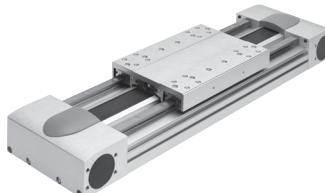
Y-axis

Toothed belt axis EGC-TB-KF



- Electrical
- Rigid, closed profile
- Recirculating ball bearing guide for high loads and torques
- High dynamic response and minimum vibration

Toothed belt axis EGC-HD-TB



- Electrical
- Flat drive unit with rigid, closed profile
- Duo guide rail
- For maximum loads and torques, high feed forces and speeds and long service life

Ball screw axis ELGC-BS



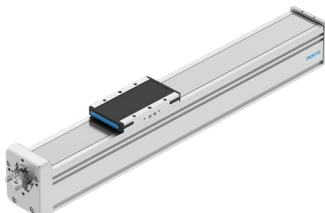
- Electrical
- Optimal installation space to working space ratio
- Protected against external influences by internal guide
- Various screw pitches

Toothed belt axis ELGC-TB



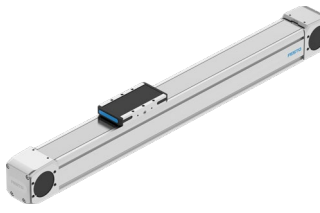
- Electrical
- Optimal installation space to working space ratio
- Protected against external influences by internal guide
- High dynamic response

Ball screw axis ELGD-BS



- Electrical
- Profile with a square cross section and sturdy drive elements for high feed forces
- Abrasion-free and clean surface protects workpieces from particles
- Various screw pitches

Toothed belt axis ELGD-TB



- Electrical
- Profile with a square cross section and sturdy drive elements for high feed forces
- Abrasion-free and clean surface protects workpieces from particles
- High dynamic response

Key features

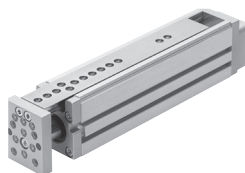
Z-axis

Mini slide EGSC



- Electrical
- Compact design
- High load capacity
- Precision guide and ball screw
- Easy adjustment of end positions

Mini slide EGSL



- Electrical
- Compact design
- High load capacity
- High dynamic response
- Easy adjustment of end positions

Mini slides DGST



- Pneumatic system
- Precise and resilient roller bearing guide
- Slide and yoke plate as a single component
- High dynamic response

Mini slides DGSL



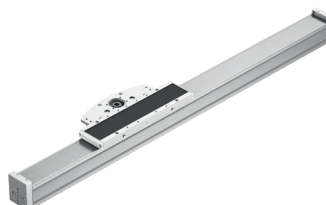
- Pneumatic system
- Flat design
- High load capacity
- High dynamic response
- Easy adjustment of end positions

Ball screw axis EGC-BS-KF



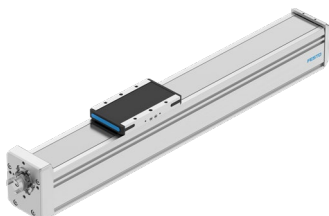
- Electrical
- Rigid, closed profile
- Recirculating ball bearing guide for high loads and torques
- High dynamic response and minimum vibration
- Various screw pitches

Cantilever axis ELCC



- Stationary drive head
- Toothed belt drive with recirculating ball bearing guide
- High rigidity thanks to the innovative design principle
- Very low moving mass

Ball screw axis ELGD-BS



- Electrical
- Profile with a square cross section and sturdy drive elements for high feed forces
- Abrasion-free and clean surface protects workpieces from particles
- Various screw pitches

Key features

Possible axis combinations ¹⁾		
Size	Y-module	Z-module
YXCL-1	• Toothed belt axis EGC-50-TB-KF	• Mini slide Pneumatic: DGSL-6 Electric: EGSL-35
YXCL-1-B	• Toothed belt axis ELGC-TB-60 • Ball screw axis ELGC-BS-60	• Mini slide pneumatic: DGST-12/16 electric: EGSC-45
YXCL-1-D	• Toothed belt axis ELGD-TB-60 • Ball screw axis ELGD-BS-60	• Mini slide Pneumatic: DGST-12/16 Electric: EGSC-45 Electric: EGSC-60 • Ball screw axis ELGD-BS-60
YXCL-2	• Toothed belt axis EGC-80-TB-KF • Toothed belt axis with heavy-duty guide EGC-HD-125-TB	• Mini slide Pneumatic: DGSL-12/16 Electric: EGSL-45/55 • Cantilever axis ELCC-60 • Ball screw axis EGC-70-BS-KF
YXCL-2-B	• Toothed belt axis ELGC-TB-80 • Ball screw axis ELGC-BS-80	• Mini slide Pneumatic: DGST-16/20 Electric: EGSC-60
YXCL-2-D	• Toothed belt axis ELGD-TB-80 ELGD-TB-WD-120 • Ball screw axis ELGD-BS-80 ELGD-BS-WD-120	• Mini slide Pneumatic: DGST-16/20/25 Electric: EGSC-60 • Cantilever axis ELCC-60 ELCC-70 • Ball screw axis ELGD-BS-80
YXCL-3	• Toothed belt axis EGC-120-TB-KF • Toothed belt axis with heavy-duty guide EGC-HD-160-TB	• Mini slide Pneumatic: DGSL-20/25 Electric: EGSL-75 • Cantilever axis ELCC-70 • Ball screw axis EGC-80-BS-KF
YXCL-4	• Toothed belt axis EGC-185-TB-KF • Toothed belt axis with heavy-duty guide EGC-HD-220-TB	• Cantilever axis ELCC-90 • Ball screw axis EGC-120-BS-KF
YXML-1	• Linear gantry EXCT-15	• Linear gantry EXCT-15
YXML-2	• Linear gantry EXCT-30	• Linear gantry EXCT-30
YXML-3	• Linear gantry EXCT-100	• Linear gantry EXCT-100

1) Drive package depends on the configuration selected.

Key features

Standard components within the handling system

The handling system comprises a number of tried-and-tested standard components from Festo. Different components are used depending on the configuration. You can alter the scope and design of the drive package in the configurator HGO on the "System configuration" page.

Motors and controllers

Servo motors EMMT-AS



- Dynamic, brushless, permanently excited servo motor
- Digital absolute displacement encoder in single-turn or multi-turn version
- Simple connection technology (OCP: one cable plug) – hybrid cable: motor cable and connecting cable for supply and encoder in one
- Plug can be rotated 310°
- With optional brake

Servo motors EMMB-AS



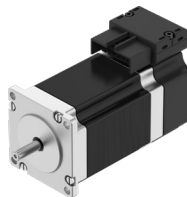
- Dynamic, brushless, permanently excited servo motor
- Digital absolute displacement encoder in single-turn or multi-turn version
- Optimised connection technology
- With optional brake

Stepper motors EMMT-ST



- Two-phase hybrid technology
- Digital absolute displacement encoder in single-turn or multi-turn version
- Simple connection technology (OCP: one cable plug) – hybrid cable: motor cable and connecting cable for supply and encoder in one
- Plug can be rotated 310°
- With optional brake

Stepper motors EMMB-ST



- Two-phase hybrid technology
- Digital absolute displacement encoder in single-turn or multi-turn version
- Simple connection technology (OCP: one cable plug) – hybrid cable: motor cable and connecting cable for supply and encoder in one
- Can be positioned facing to the front or back
- With optional brake

Gear unit EMGA



- Low-backlash planetary gear
- Gear ratio
 $i = 3$ and 5
- Life-time lubrication

Key features

Standard components within the handling system

The handling system comprises a number of tried-and-tested standard components from Festo. Different components are used depending on the configuration. You can alter the scope and design of the drive package in the configurator HGO on the "System configuration" page.

Servo drive CMMT-AS, for servo motor



- Universal servo drive
- For synchronous servo motors
- Integrated EMC filters
- Integrated brake chopper
- Integrated braking resistor
- Position controller
- Speed controller
- Force controller
- Range of control functions

Options:

- Safety function: safe torque off (STO)/category 4, Performance Level e
- Safe stop 1 (SS1)
- Safe brake control (SBC) up to SIL3/ category 3, Performance Level e

- Bus protocols
 - EtherCAT®
 - PROFINET RT/IRT
 - EtherNet/IP
 - Modbus TCP

Servo drive CMMT-ST, for stepper motor



- Servo drive for operating stepper motors and brushless direct current motors
- Point-to-point and interpolating motion and precise positioning are possible
- Primary voltage from 24 ... 48 V DC
- Position controller
- Speed controller
- Force controller
- Range of control functions

Options:

- Safety function: safe torque off (STO)/category 3, Performance Level e
- Safe stop 1 time controlled (SS1-t)

- Bus protocols
 - EtherCAT®
 - PROFINET RT/IRT
 - EtherNet/IP
 - Modbus TCP

Ordering data – Accessories

Module/motor combinations

We recommend that the linear gantry is operated with the proposed motors from Festo. These precisely match the mechanical system. When using third-party motors, it is essential that the technical limits are observed.

Module	Motor		Stepper motor	
	Servo motor			
Y-module				
EHMY-...-EGC-50-TB-KF	EMMT-AS-40-S-LS-...	–	EMMT-ST-57-L-...	EMMB-ST-57-L-...
EHMY-...-EGC-80-TB-KF	EMMT-AS-60-S-LS-...	–	EMMT-ST-57-M-...	EMMB-ST-57-M-...
EHMY-...-EGC-120-TB-KF	EMMT-AS-80-L-LS-...	–	EMMT-ST-87-S-...	EMMB-ST-87-S-...
	EMMT-AS-80-L-HS-...	–	–	–
EHMY-...-EGC-125-TB-HD	EMMT-AS-60-L-LS-...	–	EMMT-ST-57-M-...	EMMB-ST-57-M-...
EHMY-...-EGC-160-TB-HD	EMMT-AS-80-M-LS-...	–	EMMT-ST-87-S-...	EMMB-ST-87-S-...
	EMMT-AS-80-L-HS-...	–	–	–
EHMY-...-EGC-185-TB-KF	EMMT-AS-100-L-HS-...	–	–	–
	EMMT-AS-100-H-HS-...	–	–	–
	EMMT-AS-150-M-HV-R3...	–	–	–
EHMY-...-EGC-220-TB-HD	EMMT-AS-100-L-HS-...	–	–	–
	EMMT-AS-100-H-HS-...	–	–	–
	EMMT-AS-150-M-HV-R3...	–	–	–
EHMY-LP-ELGC-60-BS	–	EMMB-AS-60-04	EMMT-ST-57-L-...	EMMB-ST-57-L-...
EHMY-LP-ELGC-80-BS	–	EMMB-AS-60-04	EMMT-ST-87-M-...	EMMB-ST-87-M-...
EHMY-LP-ELGC-60-TB	–	EMMB-AS-80-07	EMMT-ST-87-M-...	EMMB-ST-87-M-...
EHMY-LP-ELGC-80-TB	–	EMMB-AS-80-07	EMMT-ST-87-L-...	EMMB-ST-87-M-...
EHMY-LP-ELGD-60-BS-KF	EMMT-AS-60-M-LS-...	EMMB-AS-60-04-	EMMT-ST-57-M-...	EMMB-ST-57-M-...
	EMMT-AS-60-M-HS-...			
EHMY-LP-ELGD-60-TB-KF	EMMT-AS-60-M-LS-...	EMMB-AS-60-04	EMMT-ST-57-M-...	EMMB-ST-57-M-...
	EMMT-AS-60-M-HS-...	–	–	–
EHMY-LP-ELGD-80-BS-KF	EMMT-AS-60-L-LS-...	EMMB-AS-60-04-	EMMT-ST-87-S-...	EMMB-ST-87-S-...
	EMMT-AS-60-L-HS-...	–	–	–
	EMMT-AS-80-M-LS-...	–	–	–
	EMMT-AS-80-M-HS-...	–	–	–
EHMY-LP-ELGD-80-TB-KF	EMMT-AS-60-L-LS-...	EMMB-AS-60-04	EMMT-ST-87-S-...	EMMB-ST-87-S-...
	EMMT-AS-60-L-HS-...	–	–	–
EHMY-LP-ELGD-120-BS-KF-WD	EMMT-AS-60-L-LS-...	EMMB-AS-60-04	EMMT-ST-87-S-...	EMMB-ST-87-S-...
	EMMT-AS-60-L-HS-...	–	–	–
EHMY-LP-ELGD-120-TB-KF-WD	EMMT-AS-80-L-LS-...	EMMB-AS-80-07	EMMT-ST-87-S-...	EMMB-ST-87-S-...
	EMMT-AS-80-L-HS-...	–	EMMT-ST-87-M-...	EMMB-ST-87-M-...

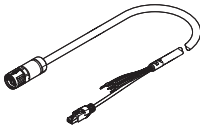
Ordering data – Accessories

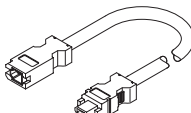
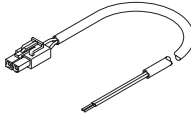
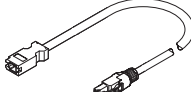
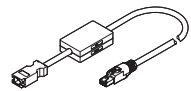
Module/motor combinations

We recommend that the linear gantry is operated with the proposed motors from Festo. These precisely match the mechanical system. When using third-party motors, it is essential that the technical limits are observed.

Module	Motor		Stepper motor	
	Servo motor			
Z-module				
EHMZ-ELCC-60-TB-KF	EMMT-AS-60-M-LS-...	EMMB-AS-60-04	–	–
	EMMT-AS-60-M-HS-...	EMMB-AS-80-07		
	EMMT-AS-80-L-LS-...	–	–	–
	EMMT-AS-80-L-HS-...	–		
	EMMT-AS-100-S-HS-...	–	–	–
EHMZ-ELCC-70-TB-KF	EMMT-AS-80-M-LS-...	EMMB-AS-80-07	–	–
	EMMT-AS-80-M-HS-...	–		
	EMMT-AS-80-L-LS-...	–		
	EMMT-AS-80-L-HS-...	–	–	–
EHMZ-ELCC-90-TB-KF	EMMT-AS-80-L-HS-...	–	–	–
	EMMT-AS-100-L-HS-...	–	–	–
	EMMT-AS-100-H-HS-...	–	–	–
EHMZ-EGC-70-BS-KF	EMMT-AS-60-S-LS-...	–	EMMT-ST-57-M-...	EMMB-ST-57-M-...
EHMZ-EGC-80-BS-KF	EMMT-AS-60-M-LS-...	–	EMMT-ST-57-M-...	EMMB-ST-57-M-...
EHMZ-EGC-120-BS-KF	EMMT-AS-80-S-LS-...	–	–	–
	EMMT-AS-80-M-LS-...	–	–	–
	EMMT-AS-80-S-HS-...	–	–	–
	EMMT-AS-80-L-HS-...	–	–	–
EHMZ-ELGD-60-BS	EMMT-AS-60-M-LS-...	EMMB-AS-60-04	EMMT-ST-57-M-...	EMMB-ST-57-M-...
	EMMT-AS-60-M-HS-...	–	EMMT-ST-57-L-...	EMMB-ST-57-L-...
EHMZ-ELGD-80-BS	EMMT-AS-60-L-LS-...	EMMB-AS-60-04	EMMT-ST-87-S-...	EMMB-ST-87-S-...
	EMMT-AS-60-L-HS-...	EMMB-AS-80-07	–	–
	EMMT-AS-80-M-LS-...	–	–	–
	EMMT-AS-80-M-HS-...	–	–	–
EHMZ-EGSL-35-BS-KF	EMMT-AS-40-S-LS-...	–	EMMT-ST-42-S-...	EMMB-ST-42-S-...
EHMZ-EGSL-45-BS-KF	EMMT-AS-40-S-LS-...	–	EMMT-ST-57-M-...	EMMB-ST-57-M-...
	EMMT-AS-60-S-LS-...	–	–	–
EHMZ-EGSL-55-BS-KF	EMMT-AS-60-S-LS-...	–	EMMT-ST-57-M-...	EMMB-ST-57-M-...
EHMZ-EGSL-75-BS-KF	EMMT-AS-80-S-LS-...	–	EMMT-ST-87-S-...	EMMB-ST-87-S-...
EHMZ-EGSC-45	EMMT-AS-40-M-LS-...	EMMB-AS-40-01	EMMT-ST-42-L-...	EMMB-ST-42-L-...
EHMZ-EGSC-60	EMMT-AS-60-M-LS-...	EMMB-AS-60-02	EMMT-ST-57-M-...	EMMB-ST-57-M-...
	EMMT-AS-60-M-HS-...	–	–	–
YZ-module (EXCT)				
EXCT-15	EMMT-AS-80-M-LS-...	–	–	–
EXCT-30	EMMT-AS-100-M-HS-...	–	–	–
EXCT-100	EMMT-AS-100-M-HS-...	–	–	–
	EMMT-AS-100-H-HS-...	–	–	–

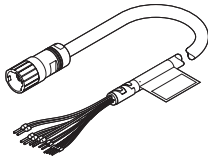
Ordering data – Accessories

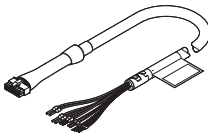
Ordering data	Description	Cable length [m]	Part no.	Type
For servo motor EMMT-AS				
Motor cable				
	• For EMMT-AS-40/60/80-...-R2... with CMMT-AS	2.5	5251374	NEBM-M23G15-EH-2.5-Q7N-R3LEG14
		5	5251375	NEBM-M23G15-EH-5-Q7N-R3LEG14
		7.5	5251376	NEBM-M23G15-EH-7.5-Q7N-R3LEG14
		10	5251377	NEBM-M23G15-EH-10-Q7N-R3LEG14
		15	5251378	NEBM-M23G15-EH-15-Q7N-R3LEG14
		20	5251379	NEBM-M23G15-EH-20-Q7N-R3LEG14
	• For EMMT-AS-60/80/100-...-R2... with CMMT-AS	2.5	5251381	NEBM-M23G15-EH-2.5-Q9N-R3LEG14
		5	5251382	NEBM-M23G15-EH-5-Q9N-R3LEG14
		7.5	5251383	NEBM-M23G15-EH-7.5-Q9N-R3LEG14
		10	5251384	NEBM-M23G15-EH-10-Q9N-R3LEG14
		15	5251385	NEBM-M23G15-EH-15-Q9N-R3LEG14
		20	5251386	NEBM-M23G15-EH-20-Q9N-R3LEG14
	• For EMMT-AS-150-...-R3... with CMMT-AS	2.5	5251395	NEBM-M40G15-EH-2.5-Q11N-R3LEG14
		5	5251396	NEBM-M40G15-EH-5-Q11N-R3LEG14
		7.5	5251397	NEBM-M40G15-EH-7.5-Q11N-R3LEG14
		10	5251398	NEBM-M40G15-EH-10-Q11N-R3LEG14
		15	5251399	NEBM-M40G15-EH-15-Q11N-R3LEG14
		20	5251400	NEBM-M40G15-EH-20-Q11N-R3LEG14

Ordering data		Cable length [m]	Part no.	Type
For servo motor EMMB-AS				
Motor cable				
	• For EMMB-AS-40/60/80 with CMMT-AS	2.5	5219197	NEBM-H6G4-E-2.5-Q13N-LE4
		5	5219198	NEBM-H6G4-E-5-Q13N-LE4
		7.5	5219199	NEBM-H6G4-E-7.5-Q13N-LE4
		10	5219200	NEBM-H6G4-E-10-Q13N-LE4
		15	8097203	NEBM-H6G4-E-15-Q13N-LE4
		20	8097204	NEBM-H6G4-E-20-Q13N-LE4
Encoder cable				
	• For EMMB-AS-40/60/80 with CMMT-AS	2.5	5219213	NEBM-REG6-E-2.5-Q14N-REG6
		5	5219214	NEBM-REG6-E-5-Q14N-REG6
		7.5	5219215	NEBM-REG6-E-7.5-Q14N-REG6
		10	5219216	NEBM-REG6-E-10-Q14N-REG6
		15	8097200	NEBM-REG6-E-15-Q14N-REG6
		20	8097201	NEBM-REG6-E-20-Q14N-REG6
Connecting cable for brake				
	• For EMMB-AS-40/60/80 with CMMT-AS	2.5	5219205	NEBM-H7G2-E-2.5-Q14N-LE2
		5	5219206	NEBM-H7G2-E-5-Q14N-LE2
		7.5	5219207	NEBM-H7G2-E-7.5-Q14N-LE2
		10	5219208	NEBM-H7G2-E-10-Q14N-LE2
		15	8097206	NEBM-H7G2-E-15-Q14N-LE2
		20	8097207	NEBM-H7G2-E-20-Q14N-LE2
Adapter for encoder cable (absolutely essential)				
	• For EMMB-AS-40/60/80 with CMMT-AS	For single-turn version with CMMT-AS		
		0.5	8097197	NEFM-REG6-K-0.5-R3G8
	• For EMMB-AS-40/60/80 with CMMT-AS	For multi-turn version with CMMT-AS1)		
		0.5	8097195	NEFM-REG6-K-0.5-B-R3G8
		For multi-turn version with CMMB-AS1)		
		0.5	8097196	NEFM-REG6-K-0.5-B-REG6

1) The required battery is not included in the scope of delivery

Ordering data – Accessories

Designation	Description	Cable length [m]	Part no.	Type
For stepper motor EMMT-ST				
Motor cable				
	• For EMMT-ST-42-... with CMMT-ST	2.5	8181670	NEBM-M17G12-EH-2.5-Q6N-LE12
		5	8181668	NEBM-M17G12-EH-5-Q6N-LE12
		7	8190096	NEBM-M17G12-EH-7.5-Q6N-LE12
		10	8195457	NEBM-M17G12-EH-10-Q6N-LE12
		15	8214679	NEBM-M17G12-EH-15-Q7N-LE12
		20	8214680	NEBM-M17G12-EH-20-Q7N-LE12
	• For EMMT-ST-57-... with CMMT-ST	2.5	8181670	NEBM-M17G12-EH-2.5-Q6N-LE12
		5	8181668	NEBM-M17G12-EH-5-Q6N-LE12
		7	8195460	NEBM-M17G12-EH-7.5-Q7N-LE12
		10	8195461	NEBM-M17G12-EH-10-Q7N-LE12
		15	8214683	NEBM-M17G12-EH-15-Q9N-LE12
		20	8214684	NEBM-M17G12-EH-20-Q9N-LE12
	• For EMMT-ST-87-... with CMMT-ST	2.5	8195458	NEBM-M17G12-EH-2.5-Q7N-LE12
		5	8195459	NEBM-M17G12-EH-5-Q7N-LE12
		7	8214681	NEBM-M17G12-EH-7.5-Q9N-LE12
		10	8214682	NEBM-M17G12-EH-10-Q9N-LE12
		15	8214683	NEBM-M17G12-EH-15-Q9N-LE12
		20	8214684	NEBM-M17G12-EH-20-Q9N-LE12

Designation	Description	Cable length [m]	Part no.	Type
For stepper motor EMMB-ST				
Motor cable				
	• For EMMB-ST-42-... with CMMT-ST	2.5	8181675	NEBM-L5G14-EH-2.5-Q6N-LE12
		5	8181664	NEBM-L5G14-EH-5-Q6N-LE12
		7	8181676	NEBM-L5G14-EH-7.5-Q6N-LE12
		10	8181672	NEBM-L5G14-EH-10-Q6N-LE12
		15	8214685	NEBM-L5G14-EH-15-Q6N-LE12
		20	8214686	NEBM-L5G14-EH-20-Q6N-LE12
	• For EMMB-ST-57-... with CMMT-ST	2.5	8181677	NEBM-L10G14-EH-2.5-Q6N-LE12
		5	8181667	NEBM-L10G14-EH-5-Q6N-LE12
		7	8181674	NEBM-L10G14-EH-7.5-Q7N-LE12
		10	8181673	NEBM-L10G14-EH-10-Q7N-LE12
		15	8214689	NEBM-L10G14-EH-15-Q9N-LE12
		20	8214690	NEBM-L10G14-EH-20-Q9N-LE12
	• For EMMB-ST-87-... with CMMT-ST	2.5	8181666	NEBM-L10G14-EH-2.5-Q7N-LE12
		5	8181671	NEBM-L10G14-EH-5-Q7N-LE12
		7	8214687	NEBM-L10G14-EH-7.5-Q9N-LE12
		10	8214688	NEBM-L10G14-EH-10-Q9N-LE12
		15	8214689	NEBM-L10G14-EH-15-Q9N-LE12
		20	8214690	NEBM-L10G14-EH-20-Q9N-LE12

Possible cable and tube lengths

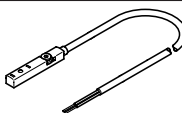
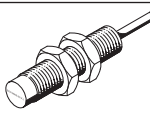
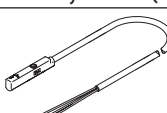
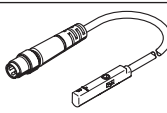
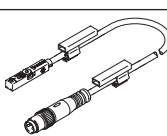
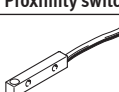
- Cables and tubing are selected so that the length specified when ordering will be the minimum connection length from the energy chain output.
- Cables and tubing are only available in fixed lengths as stated in the table below. This can mean that the cable plugs of the different cables do not end at the same point.

Length	1 m	2 m	5 m	7 m	10 m
Motor cable	–	■	■	■	■
Encoder cable	–	■	■	■	■
Multi-pin plug connecting cable	–	■	■	■	■
Tubing (for DHMZ only)	■	■	■	–	–

Ordering data – Accessories

Standard components within the handling system

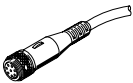
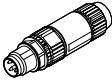
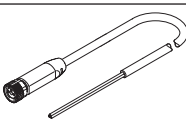
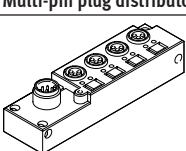
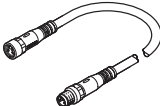
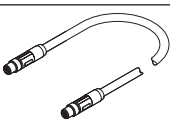
The handling system comprises a number of tried-and-tested standard components from Festo. Different components are used depending on the configuration. You can alter the type and scope of the accessories in the configurator HGO on the "System configuration" page.

Designation	Description	Cable length [m]	Part no.	Type	
Proximity switch (inductive) for sensing the position of the slide on the Y-/Z-axis					
	Cable with open end - For toothed belt axis ELGD-TB - ELGD-TB-WD - For toothed belt axis EGC-TB, EGC-HD-TB - For toothed belt axis ELGC-TB - For ball screw axis ELGD-BS, ELGD-BS-WD - For ball screw axis ELGC-BS - For ball screw axis EGC-BS - For mini slide EGSL - For mini slide EGSC - For DC voltage Included if the "Festo sensor package" is selected: - For EGC: 2 pieces - For EGSL, EGSC: 1 piece	PNP, N/C contact	7.5	551391	SIES-8M-PO-24V-K-7.5-OE
		PNP, N/O contact	7.5	551386	SIES-8M-PS-24V-K-7.5-OE
		NPN, N/C contact	7.5	551401	SIES-8M-NO-24V-K-7.5-OE
		NPN, N/O contact	7.5	551396	SIES-8M-NS-24V-K-7.5-OE
Proximity switch (inductive) for sensing the position of the slide on the Z-axis					
	Cable with open end - For cantilever axis ELCC - For DC voltage Included if the "Festo sensor package" is selected: 2 pieces	PNP, N/C contact	2.5	150398	SIEN-M8NB-PO-K-L
		PNP, N/O contact	2.5	150394	SIEN-M8NB-PS-K-L
		NPN, N/C contact	2.5	150396	SIEN-M8NB-NO-K-L
		NPN, N/O contact	2.5	150392	SIEN-M8NB-NS-K-L
Proximity switches (magneto-resistive) for sensing the position of the slide on the Z-axis					
	Cable with open end - For mini slide DGSL - For DC voltage Included if the "Festo sensor package" is selected: 2 pieces	PNP, N/O contact	2.5	551373	SMT-10M-PS-24V-E-2.5-L-OE
		NPN, N/O contact	2.5	551377	SMT-10M-NS-24V-E-2.5-L-OE
Proximity switches (magneto-resistive) for sensing the position of the slide on the Z-axis					
	- For mini slide DGST-8/-12 - For DC voltage Included if the "Festo sensor package" is selected: 2 pieces	PNP, N/O contact	2.5	551375	SMT-10M-PS-24V-E-0.3-L-M8D
		NPN, N/O contact	2.5	551379	SMT-10M-NS-24V-E-0.3-L-M8D
	- For mini slide DGST-16/-20/-25 - For DC voltage Included if the "Festo sensor package" is selected: 2 pieces	PNP, N/O contact	2.5	574334	SMT-8M-A-PS-24V-E-0.3-M8D
		NPN, N/O contact	2.5	574339	SMT-8M-A-NS-24V-E-0.3-M8D
Proximity switch for sensing the position of the slide on the Y-/Z-axis					
	- For EXCT - For DC voltage - For sensing kit EAPR-E17	PNP, N/C contact	2.5	174552	SIES-Q8B-PO-K-L
		PNP, N/O contact	2.5	178294	SIES-Q8B-PS-K-L
		NPN, N/C contact	2.5	174550	SIES-Q8B-NO-K-L
		NPN, N/O contact	2.5	178292	SIES-Q8B-NS-K-L

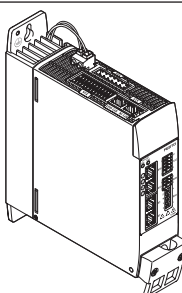
Ordering data – Accessories

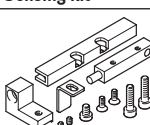
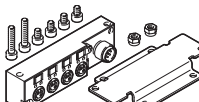
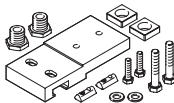
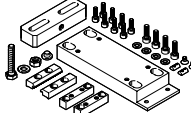
Standard components within the handling system

The handling system comprises a number of tried-and-tested standard components from Festo. Different components are used depending on the configuration. You can alter the type and scope of the accessories in the configurator HGO on the "System configuration" page.

Designation	Description	Cable length [m]	Part no.	Type
Plug socket with cable				
	Connection between multi-pin plug distributor NEDU and control cabinet	5	525618	SIM-M12-8GD-5-PU
		10	570008	SIM-M12-8GD-10-PU
		20	5105632	SIM-M12-8GD-20-PU
Plug socket with cable				
	- For EXCT - For multi-pin SET EADH	15	8048086	NEBU-M12W8-K-15-N-LE8
Plug				
	For connection to the multi-pin plug distributor NEDU / distributor NEDY	–	562024	NECU-S-M8G3-HX
Connecting cable				
	Connection between distributor NEDY and control cabinet	2.5	8078227	NEBA-M8G4-U-2.5-N-LE4
		5	8078228	NEBA-M8G4-U-5-N-LE4
		7.5	8215486	NEBA-M8G4-U-7.5-N-LE4
		10	8078229	NEBA-M8G4-U-10-N-LE4
		15	8215487	NEBA-M8G4-U-15-N-LE4
Multi-pin plug distributor				
	- With the help of the multi-pin plug distributor, all electrical signals such as for end-position sensing can be transferred Options: – 4 individual connections – 6 individual connections	–	574586	NEDU-L4R1-M8G3L-M12G8
			574587	NEDU-L6R1-M8G3L-M12G8
	- With the help of the distributor, all electrical signals such as for end-position sensing can be transferred – 2 individual connections	–	8005312	NEDY-L2R1-V1-M8G3-N-M8G4
Digital input module				
	Digital input module with 4/8 inputs	–	8086605	CPX-AP-I-4DI-M8-3P
			8086601	CPX-AP-I-4DI4DO-M8-3P
			8086600	CPX-AP-I-8DI-M8-3P
Connecting cable				
	For input module	5	8065108	NEBL-M8G4-E-5-N-M8G4
		10	8065115	NEBL-M8G4-E-10-N-M8G4
		15	8065119	NEBL-M8G4-E-15-N-M8G4
		5	8065129	NEBC-D8G4-ES-5-N-S-D8G4-ET
		10	8065133	NEBC-D8G4-ES-10-N-S-D8G4-ET
		15	8065135	NEBC-D8G4-ES-15-N-S-D8G4-ET
		20	8146031	NEBC-D8G4-ES-20-N-S-D8G4-ET

Ordering data – Accessories

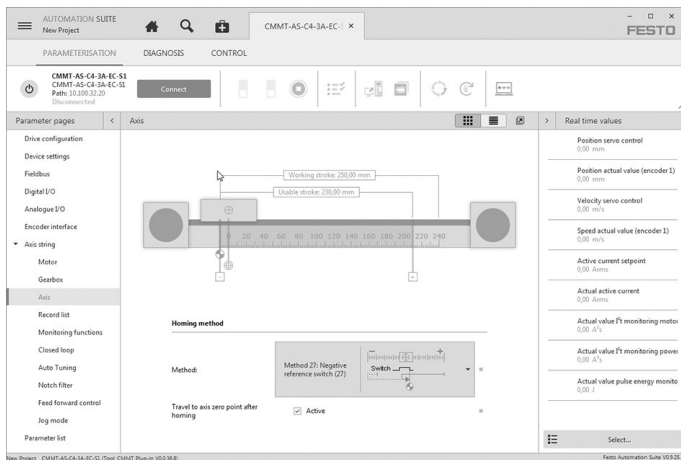
Designation	Description			
Motor controller/servo drive				
	The accessories for the relevant motor controllers/servo drives can be found at:			
	• www.festo.com/catalogue/cmmt			

Designation	Description	Part no.	Type	
Sensing kit				
	• For EXCT • Included in the scope of delivery: proximity switch SIES-Q8B, sensor bracket, switch lug, mounting bracket and screws	PNP, N/C contact	8092368	EAPR-E17-S1
		PNP, N/O contact	2478427	EAPR-E17-S
		NPN, N/C contact	8092369	EAPR-E17-S3
		NPN, N/O contact	8092370	EAPR-E17-S4
Multi-pin set				
	• For EXCT • For connecting up to 4 inputs/outputs	2972137	EADH-E17-MP1	
Mounting kit				
	• For EXCT • For mounting and aligning on a supporting surface • The kit is height-adjustable	EXCT-15	3838164	EAHM-E17-K2-15
		EXCT-30	3838337	EAHM-E17-K2-30
		EXCT-100	3838404	EAHM-E17-K2-100
Adjusting kit				
	• Used to mount the handling system on a vertical surface • Once mounted, the axis can be aligned horizontally	EHMY-...-EGC-50-TB-KF	8047576	EADC-E16-50-E7
		EHMY-...-EGC-80-TB-KF	8047577	EADC-E16-80-E7
		EHMY-...-EGC-120-TB-KF	8047578	EADC-E16-120-E7
		EHMY-...-EGC-185-TB-KF	8047579	EADC-E16-185-E7
		EHMY-...-EGC-125-TB-HD	8047580	EADC-E16-125-E14
		EHMY-...-EGC-160-TB-HD	8047581	EADC-E16-160-E14
		EHMY-...-EGC-220-TB-HD	8047582	EADC-E16-220-E14
		EHMY-...-ELGC-60-BS	8142654	EADC-E16-60-E22
		EHMY-...-ELGC-80-BS	8142655	EADC-E16-80-E22
		EHMY-...-ELGD-60-BS	8234412	EADC-E16-60-E24
		EHMY-...-ELGD-80-BS	8234413	EADC-E16-80-E24
		EHMY-...-ELGD-120-BS	8234414	EADC-E16-120-E24

Programming aid

Festo Automation Suite

Parameterisation and programming software for electronic devices from Festo



- Parameterisation, programming and commissioning in a clear and user-friendly interface
- Optimum support for complex processes thanks to guided wizards (e.g. for commissioning, drive configuration, etc.)
- Fast access to the required documents and additional information
- Easy integration of electric drives in the controller programming