



- Modular
- Simple and time-saving project engineering
- Fast system assembly

Multi-axis modular system

Key features



The concept







The multi-axis modular system for handling and assembly technology includes basic, connection and installation components for assembling multi-axis systems. These standardised axis combinations are the product of over ten years experience in the designing

of handling systems. The concept of the multi-axis modular system is based on a modular design with axis modules along the X-, Y- and Z-axes. These modules all have the same interfaces, which means they can be combined together.

Standard solutions with specifications on stroke, working load and intermediate positions offer practical module combinations. The advantages of this modularity are as follows:

- Simple and time-saving project engineering
- Fast system assembly
- Availability of CAD data for standard designs

Selection matrix

Pick & place	Linear gantries	3-Dimensional gantries
Pneumatic		Pneumatic/electrical
 <p>→ 5 / 3.3-132</p>	 <p>→ 5 / 3.3-144</p>	 <p>→ 5 / 3.3-158</p>
Pneumatic with end position controller SPC11 (Soft Stop)		
	 <p>→ 5 / 3.3-144</p>	
Electrical with spindle or toothed belt axis		
	 <p>→ 5 / 3.3-144</p>	 <p>→ 5 / 3.3-158</p>

Multi-axis modular system

Key features

Pick & place



Linear gantries



3-Dimensional gantries

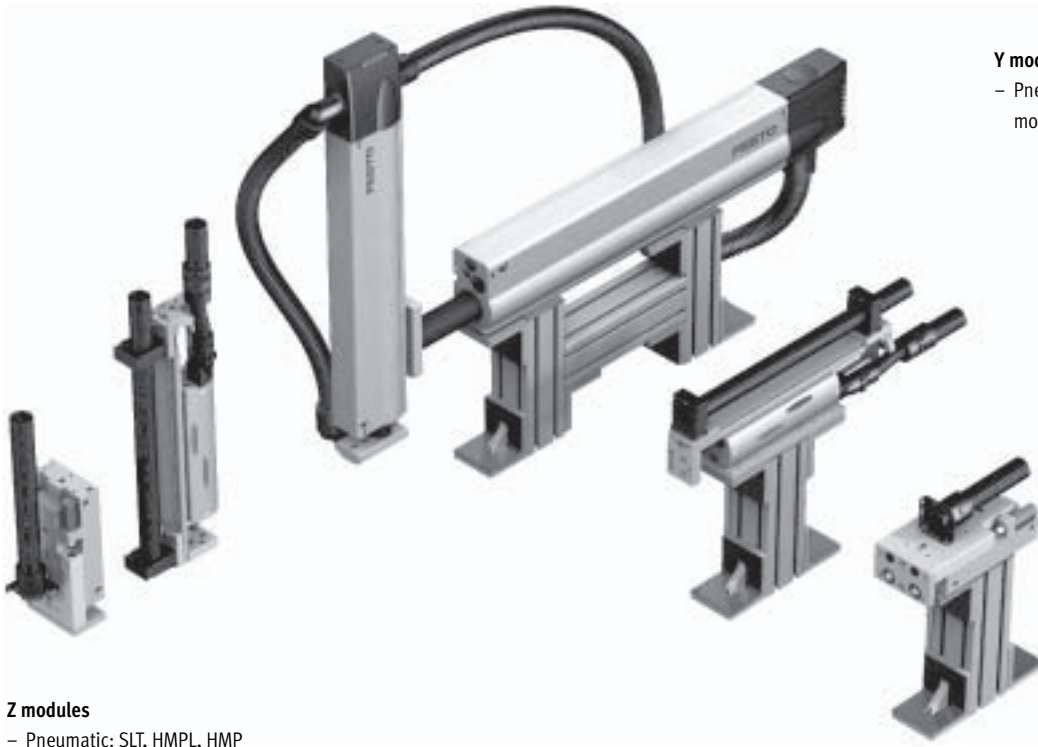


Pick & place

Key features

FESTO

Y and Z modules



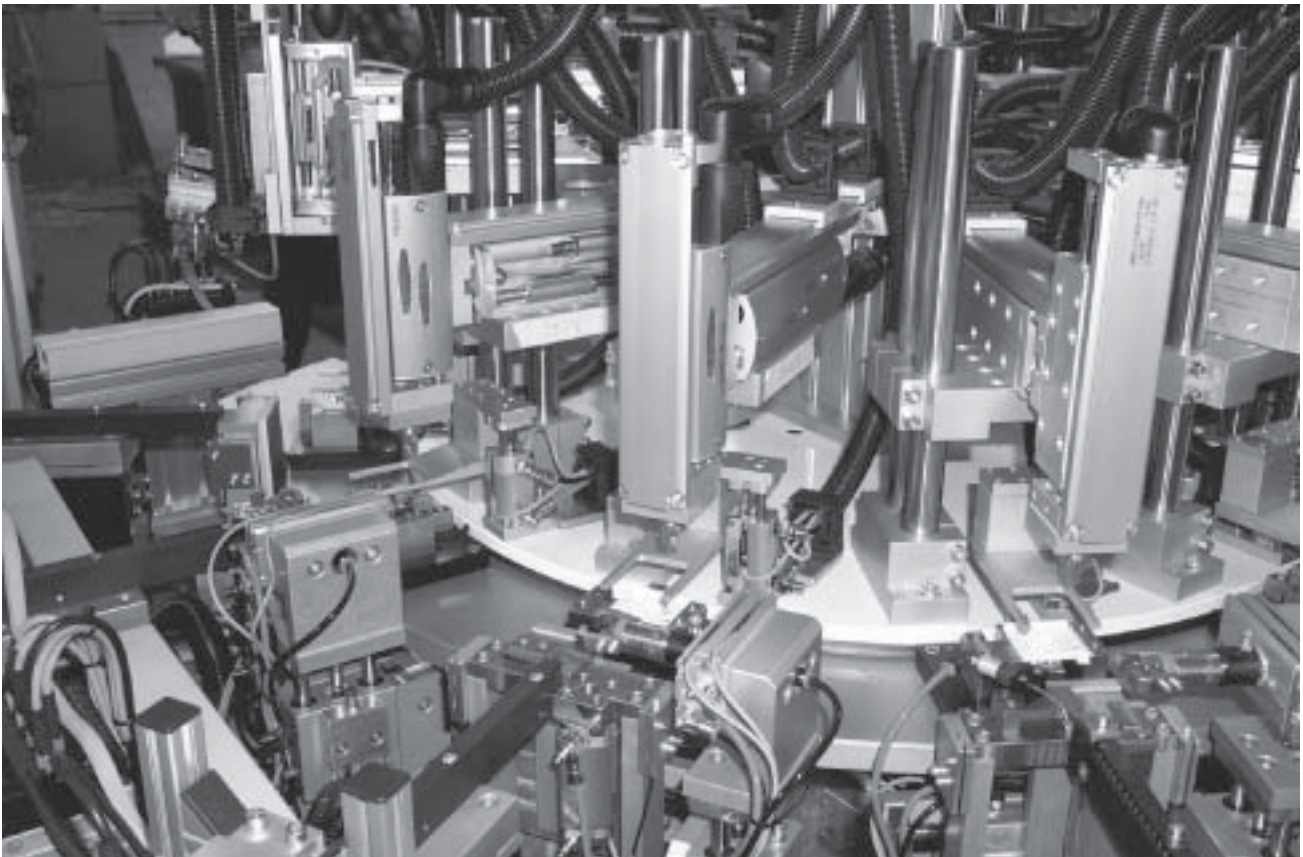
Y modules

- Pneumatic: SLT, HMPL, HMP mounted on basic components

Z modules

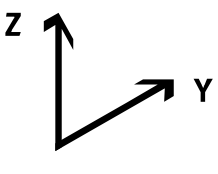





- Pneumatic: SLT, HMPL, HMP

Application



Pick & place

Product range overview

Selection aid					
Function	SLT/SLT	HMPL/HMPL	HMP/SLT	HMP/HMPL	HMP/HMP
					
Y-axis	SLT	HMPL	HMP	HMP	HMP
Drive function	Pneumatic				
Options	Shock absorber, adjustable/non-adjustable cushioning	Intermediate position, clamping cartridge	Intermediate position		
Z-axis	SLT	HMPL	SLT	HMPL	HMP
Drive function	Pneumatic				
Options	Shock absorber, adjustable/non-adjustable cushioning	Intermediate position, clamping cartridge	Shock absorber, adjustable/non-adjustable cushioning	Intermediate position, clamping cartridge	
Working load [kg]					
1	■	■	■	■	■
2	■	■	■	■	■
3	■	■	■	■	■
4	-	-	■	■	■
6	-	-	■	■	■
10	-	-	-	-	■
→ Page	5 / 3.3-134				

- Note
 Applicable stroke ranges:
 → Volume 1

Pick & place

Selection aid for basic, connection and installation components

Y-axis		SLT/SLT	HMPL/HMPL	HMP/SLT	HMP/HMPL	HMP/HMP
Pneumatic drives	Stroke [mm]	Type				
SLT-16	30 ... 150	HMBSY-SLT-1 5 / 3.3-136	-	-	-	-
SLT-20	30 ... 100	HMBSY-SLT-2 5 / 3.3-136	-	-	-	-
	125 ... 200	HMBSY-SLT-3 5 / 3.3-136	-	-	-	-
SLT-25	30 ... 100	HMBSY-SLT-4 5 / 3.3-136	-	-	-	-
	125 ... 200	HMBSY-SLT-5 5 / 3.3-136	-	-	-	-
HMPL-16	50 ... 160	-	HMBSY-HMPL-1 HMBSY-HMPL-2 5 / 3.3-137	-	-	-
HMPL-20	50 ... 200	-	HMBSY-HMPL-3 HMBSY-HMPL-4 5 / 3.3-137	-	-	-
HMP-16	150 ... 250	-	-	HMBSY-HMP-1 5 / 3.3-138	HMBSY-HMP-1 5 / 3.3-138	-
	320	-	-	HMBSY-HMP-2 5 / 3.3-138	HMBSY-HMP-2 5 / 3.3-138	-
HMP-20	100 ... 250	-	-	HMBSY-HMP-3 5 / 3.3-138	HMBSY-HMP-3 5 / 3.3-138	HMBSY-HMP-3 5 / 3.3-138
	320 ... 400	-	-	HMBSY-HMP-4 5 / 3.3-138	HMBSY-HMP-4 5 / 3.3-138	HMBSY-HMP-4 5 / 3.3-138
HMP-25	100 ... 200	-	-	HMBSY-HMP-5 5 / 3.3-139	-	HMBSY-HMP-5 5 / 3.3-139
	250 ... 400	-	-	HMBSY-HMP-6 5 / 3.3-139	-	HMBSY-HMP-6 5 / 3.3-139
HMP-32	100 ... 200	-	-	-	-	HMBSY-HMP-7 5 / 3.3-139
	250 ... 400	-	-	-	-	HMBSY-HMP-8 5 / 3.3-139

Selection example

Project engineering produced the following drive combination:

Y-axis: HMP-16,
200 mm stroke
Z-axis: HMPL-16,
with intermediate position

Step 1
Define the drive type in the selection aids for the Y- or Z-axis. The associated bill of materials can be found on the specified page.

Y-axis: HMBSY-HMP-1
→ 5 / 3.3-138
Z-axis: HMBSZ-HMPL-3 or 4
→ 5 / 3.3-142







Step 2
The necessary basic, connection and installation components can be found in the bill of materials on the specified page.

Y-axis: HMBSY-HMP-1
Z-axis: HMBSZ-HMPL-4

Step 3
Technical data on the basic, connection and installation components can be found on the specified pages. Further accessories for the selected drives, for example proximity sensors, centring sleeves, etc. are documented with the drives.

Pick & place

Selection aid for basic, connection and installation components

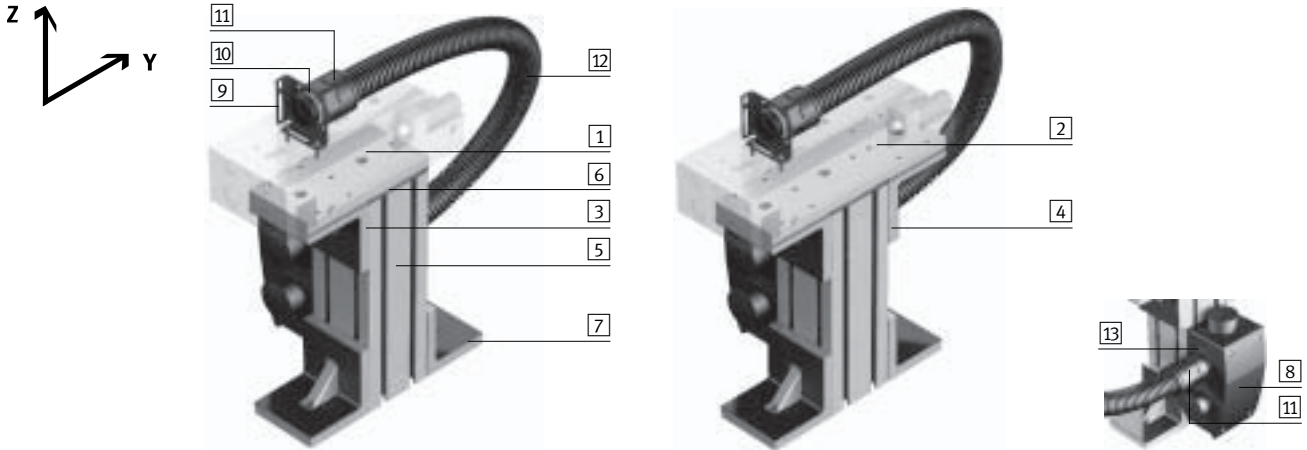
Z-axis					
Function	SLT/SLT	HMPL/HMPL	HMP/SLT	HMP/HMPL	HMP/HMP
					
Pneumatic drives	Type				
SLT-10	HMBSZ-SLT-1 5 / 3.3-140	-	-	-	-
SLT-16	HMBSZ-SLT-2 5 / 3.3-140	-	HMBSZ-SLT-4 5 / 3.3-141	-	-
SLT-20	HMBSZ-SLT-3 5 / 3.3-140	-	HMBSZ-SLT-5 5 / 3.3-141	-	-
SLT-25	-	-	HMBSZ-SLT-6 5 / 3.3-141	-	-
HMPL-12	-	HMBSZ-HMPL-1 HMBSZ-HMPL-2 5 / 3.3-142	-	-	-
HMPL-16	-		-	HMBSZ-HMPL-3 HMBSZ-HMPL-4 5 / 3.3-142	-
HMPL-20	-		-		-
HMP-16	-	-	-	-	HMBSZ-HMP-1 5 / 3.3-143
HMP-20	-	-	-	-	HMBSZ-HMP-2 5 / 3.3-143
HMP-25	-	-	-	-	HMBSZ-HMP-3 5 / 3.3-143

Pick & place

Y modules



Mini slides SLT



Bill of materials												
Type		HMBSY-SLT-1	HMBSY-SLT-2	HMBSY-SLT-3	HMBSY-SLT-4	HMBSY-SLT-5						
For drives		SLT-16		SLT-20		SLT-25						
Stroke [mm]		30 ... 150		30 ... 100		125 ... 200		30 ... 100		125 ... 200		
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type	Part No.	Type	Part No.	Type	→ Page
[1]	1	539 968	HMVY-1	539 969	HMVY-2	–	–	539 969	HMVY-2	–	–	5 / 3.3-192
[2]	1	–	–	–	–	539 970	HMVY-3	–	–	539 970	HMVY-3	
[3]	1	175 967	HMBV-ND	175 967	HMBV-ND	–	–	175 967	HMBV-ND	–	–	5 / 3.3-177
[4]	2	–	–	–	–	175 967	HMBV-ND	–	–	175 967	HMBV-ND	
[5]	1 ¹⁾	175 958	HMBS-80/80	175 958	HMBS-80/80	175 958	HMBS-80/80	175 958	HMBS-80/80	175 958	HMBS-80/80	5 / 3.3-174
[6]	1	175 965	HMBSA-80/80	175 965	HMBSA-80/80	175 965	HMBSA-80/80	175 965	HMBSA-80/80	175 965	HMBSA-80/80	5 / 3.3-174
[7]	2	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	5 / 3.3-176
[8]	1	175 126	HMZV	175 126	HMZV	175 126	HMZV	175 126	HMZV	175 126	HMZV	5 / 3.3-211
[9]	1	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	5 / 3.3-218
[10]	1	177 599	MKM-PG-21	177 599	MKM-PG-21	177 599	MKM-PG-21	177 599	MKM-PG-21	177 599	MKM-PG-21	5 / 3.3-217
[11]	2	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	5 / 3.3-212
[12]	1 ²⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	5 / 3.3-210
[13]	1	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21	5 / 3.3-215

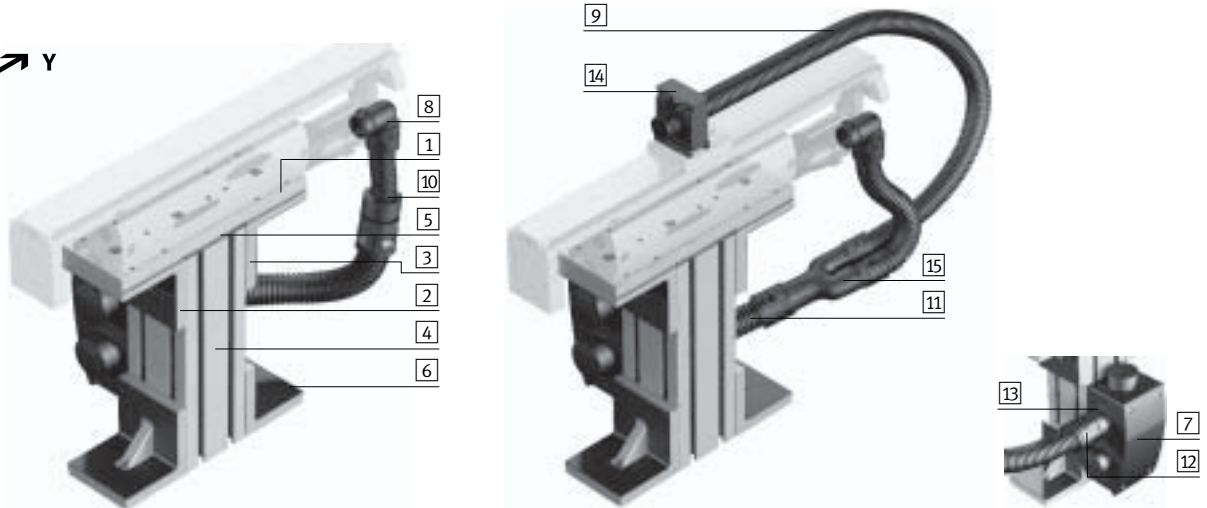
1) Height max. 500 mm

2) Length depends on the stroke of the drive

Pick & place

Y modules

Linear modules HMPL



Bill of materials								→ Page	
Type	HMBSY-HMPL-1		HMBSY-HMPL-2		HMBSY-HMPL-3		HMBSY-HMPL-4		
For drives	HMPL-16		HMPL-20		HMPL-20				
		without intermediate position	with intermediate position	without intermediate position	with intermediate position	without intermediate position	with intermediate position		
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type	Part No.	Type
1	1	539 968	HMVY-1	539 968	HMVY-1	539 970	HMVY-3	539 970	HMVY-3
2	1	175 967	HMBV-ND	175 967	HMBV-ND	-	-	-	-
3	2	-	-	-	-	175 967	HMBV-ND	175 967	HMBV-ND
4	1 ¹⁾	175 958	HMBS-80/80	175 958	HMBS-80/80	175 958	HMBS-80/80	175 958	HMBS-80/80
5	1	175 965	HMBSA-80/80	175 965	HMBSA-80/80	175 965	HMBSA-80/80	175 965	HMBSA-80/80
6	2	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB
7	1	175 126	HMZV	175 126	HMZV	175 126	HMZV	175 126	HMZV
8	1	177 576	MKRL-16,5-PG-16	177 576	MKRL-16,5-PG-16	177 576	MKRL-16,5-PG-16	177 576	MKRL-16,5-PG-16
9	1 ²⁾	177 566	MKR-16,5-PG-16	177 566	MKR-16,5-PG-16	177 566	MKR-16,5-PG-16	177 566	MKR-16,5-PG-16
10	1	194 321	MKRT-23-16,5	-	-	194 321	MKRT-23-16,5	-	-
11	1 ²⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21
12	1	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21
13	1	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21
14	1 ³⁾	-	-	192 289	MKRS-16,5-B	-	-	192 289	MKRS-16,5-B
15	1	-	-	193 946	MKY-PG-21-2PG-16	-	-	193 946	MKY-PG-21-2PG-16

1) Height max. 500 mm

2) Length depends on the stroke of the drive, 2 conduits are required with an intermediate position.

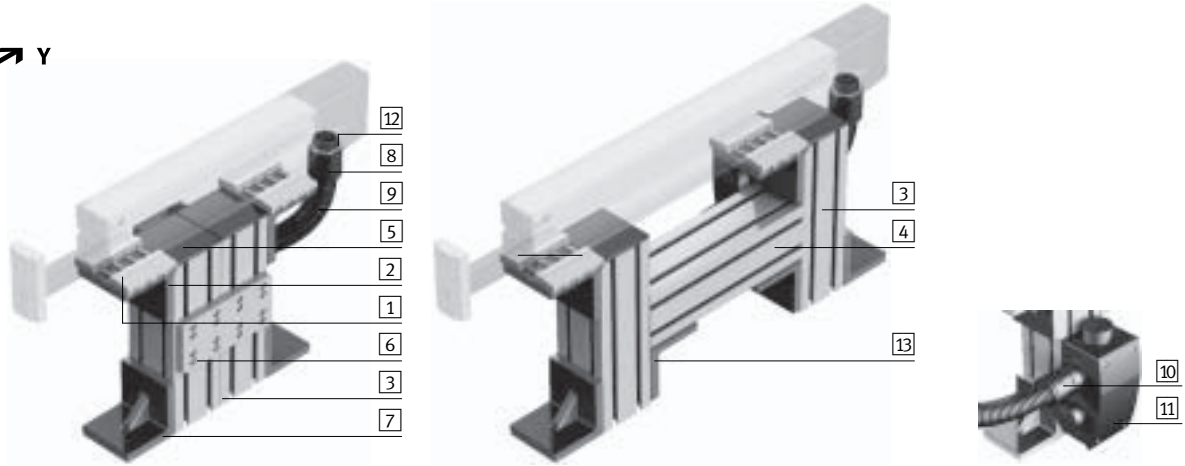
3) In order to be able to mount the retaining clip MKRS, a clamping component (1x code I) must be selected as an accessory in the order for the linear module HMPL.

Pick & place

Y modules



Linear modules HMP



Bill of materials

Type		HMBSY-HMP-1	HMBSY-HMP-2	HMBSY-HMP-3	HMBSY-HMP-4	→ Page	
For drives		HMP-16		HMP-20			
Stroke [mm]		150 ... 250		100 ... 250			
		320		320 ... 400			
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type
[1]	2	175 975	HMBK-WS	175 975	HMBK-WS	175 975	HMBK-WS
[2]	2	175 967	HMBV-ND	175 967	HMBV-ND	175 967	HMBV-ND
[3]	2 ¹⁾	175 958	HMBS-80/80	175 958	HMBS-80/80	175 958	HMBS-80/80
[4]	1 ²⁾	–		175 958	HMBS-80/80	–	175 958 HMBS-80/80
[5]	2	175 965	HMBSA-80/80	175 965	HMBSA-80/80	175 965	HMBSA-80/80
[6]	1	175 972	HMBSV	–		175 972	HMBSV
[7]	2	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB
[8]	2	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 573	MKRV-29-PG-29
[9]	1 ³⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 568	MKR-29-PG-29
[10]	1	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21	–	–
[11]	1	175 126	HMZV	175 126	HMZV	175 126	HMZV
[12]	1	177 599	MKM-PG-21	177 599	MKM-PG-21	177 600	MKM-PG-29
[13]	2	–		178 228	HMBSW	–	178 228 HMBSW

1) Height max. 500 mm

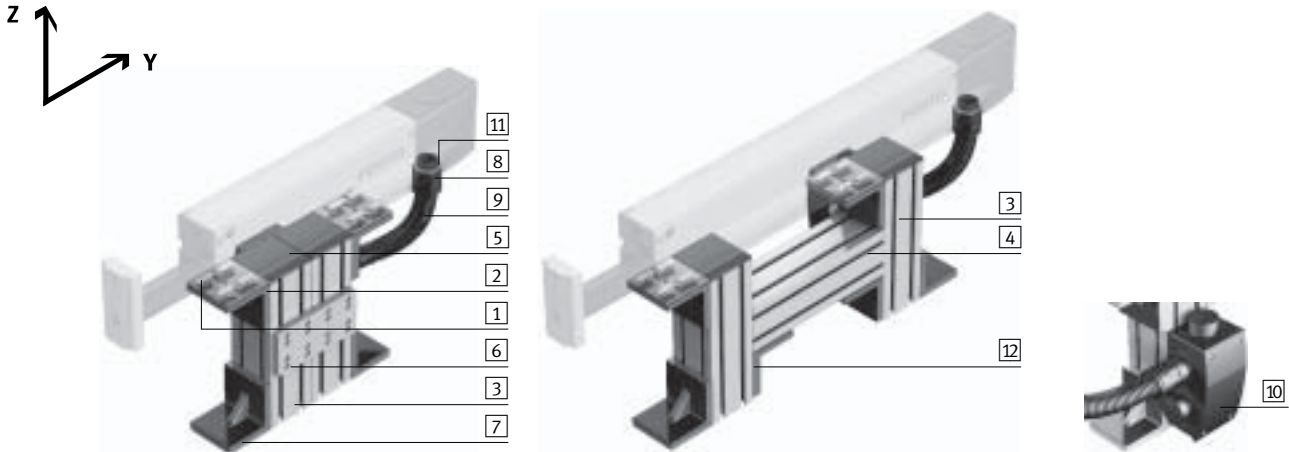
2) Length 250 mm

3) Length depends on the stroke of the drive

Pick & place

Y modules

Linear modules HMP



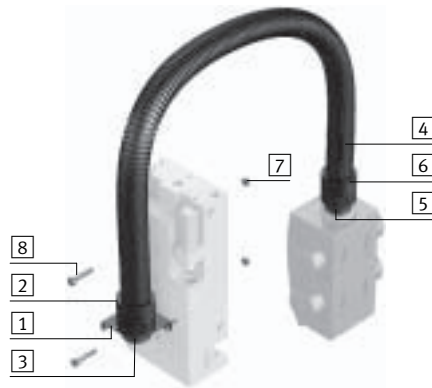
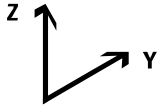
Bill of materials								→ Page	
Type	HMBSY-HMP-5		HMBSY-HMP-6		HMBSY-HMP-7		HMBSY-HMP-8		
For drives	HMP-25			HMP-32					
Stroke [mm]	100 ... 200		250 ... 400		100 ... 200		250 ... 400		
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type		
1	2	175 970	HMBK-ND	175 970	HMBK-ND	175 970	HMBK-ND	5 / 3.3-190	
2	2	175 967	HMBV-ND	175 967	HMBV-ND	175 967	HMBV-ND	5 / 3.3-177	
3	2 ¹⁾	175 958	HMBS-80/80	175 958	HMBS-80/80	175 958	HMBS-80/80	5 / 3.3-174	
4	1 ²⁾	-		175 958	HMBS-80/80	-	175 958 HMBS-80/80		
5	2	175 965	HMBSA-80/80	175 965	HMBSA-80/80	175 965	HMBSA-80/80	5 / 3.3-174	
6	1	175 972	HMBSV	-		175 972	HMBSV	5 / 3.3-175	
7	2	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	5 / 3.3-176	
8	2	177 573	MKRV-29-PG-29	177 573	MKRV-29-PG-29	177 573	MKRV-29-PG-29	5 / 3.3-212	
9	1 ³⁾	177 568	MKR-29-PG-29	177 568	MKR-29-PG-29	177 568	MKR-29-PG-29	5 / 3.3-210	
10	1	175 126	HMZV	175 126	HMZV	175 126	HMZV	5 / 3.3-211	
11	1	177 600	MKM-PG-29	177 600	MKM-PG-29	177 600	MKM-PG-29	5 / 3.3-217	
12	2	-		178 228	HMBSW	-	178 228 HMBSW	5 / 3.3-175	

- 1) Height max. 500 mm
- 2) Length 350 mm
- 3) Length depends on the stroke of the drive

Pick & place

Z modules

Mini slides SLT



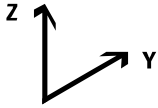
Bill of materials						
Type		HMBSZ-SLT-1	HMBSZ-SLT-2	HMBSZ-SLT-3		
For drives		SLT-10	SLT-16	SLT-20		
Item	Quantity	Part No.	Type	Part No.	Type	→ Page
[1]	1	192 289	MKRS-16,5-PG-9	193 124	HMZAS-PG-21	5 / 3.3-218
[2]	1	-		177 572	MKRV-23-PG-21	5 / 3.3-212
[3]	1	-		177 599	MKM-PG-21	5 / 3.3-217
[4]	1 ¹⁾	177 566	MKR-16,5-PG-16	177 567	MKR-23-PG-21	5 / 3.3-210
[5]	1	193 949	MKA-PG-29-PG-16-KU	177 595	MKA-PG-29-PG-21	5 / 3.3-215
[6]	1	177 571	MKRV-16,5-PG-16	177 572	MKRV-23-PG-21	5 / 3.3-212
[7]	- ²⁾	186 717	ZBH-7	150 927	ZBH-9	-
[8]	2	M4x25 DIN 912		M5x30 DIN 912		-

1) Length depends on the stroke of the drive
 2) Centring sleeves are included in the scope of delivery of the mini slide SLT.

Pick & place

Z modules

Mini slides SLT



Bill of materials						
Type		HMBSZ-SLT-4		HMBSZ-SLT-5		HMBSZ-SLT-6
For drives		SLT-16		SLT-20		SLT-25
Item	Quantity	Part No.	Type	Part No.	Type	Part No. Type
						→ Page
1	1	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	193 124 HMZAS-PG-21
2	2	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 572 MKRV-23-PG-21
3	1	177 599	MKM-PG-21	177 599	MKM-PG-21	177 599 MKM-PG-21
4	1 ¹⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567 MKR-23-PG-21
5	1	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21	177 595 MKA-PG-29-PG-21
6	1	178 331	HMSV-36	178 332	HMSV-37	178 332 HMSV-37

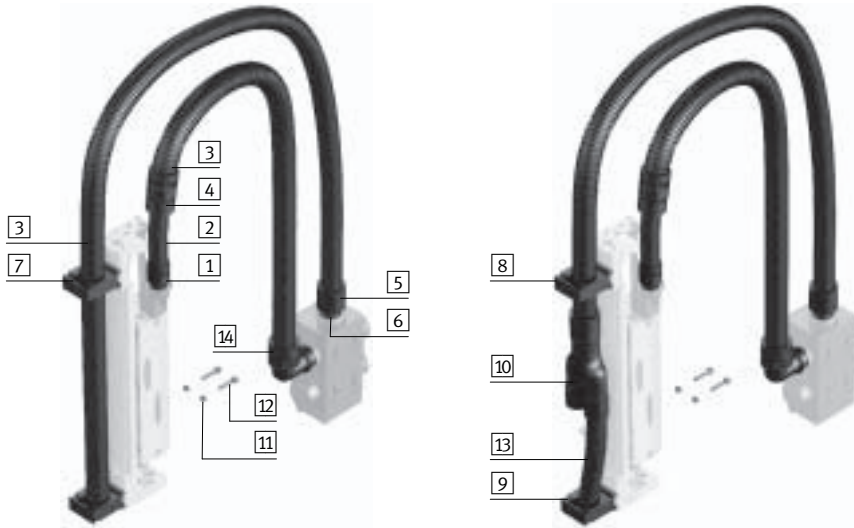
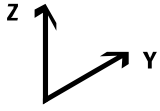
1) Length depends on the stroke of the drive

Pick & place

Z modules



Linear modules HMPL



Bill of materials								
Type		HMBSZ-HMPL-1	HMBSZ-HMPL-2	HMBSZ-HMPL-3	HMBSZ-HMPL-4			
For drives		HMPL-12	HMPL-12	HMPL-16	HMPL-16			
		HMPL-16	HMPL-16	HMPL-20	HMPL-20			
		without intermediate position	with intermediate position	without intermediate position	with intermediate position			
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type	→ Page
[1]	1	177 571	MKRV-16,5-PG-16	177 571	MKRV-16,5-PG-16	177 571	MKRV-16,5-PG-16	5 / 3.3-212
[2]	1 ¹⁾	177 566	MKR-16,5-PG-16	177 566	MKR-16,5-PG-16	177 566	MKR-16,5-PG-16	5 / 3.3-210
[3]	2 ¹⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	
[4]	1	194 321	MKRT-23-16,5	194 321	MKRT-23-16,5	194 321	MKRT-23-16,5	5 / 3.3-214
[5]	1	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	5 / 3.3-212
[6]	2	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21	5 / 3.3-215
[7]	2 ²⁾	192 290	MKRS-23-B	-		192 290	MKRS-23-B	5 / 3.3-217
[8]	1 ²⁾	-		192 290	MKRS-23-B	-		
[9]	1 ²⁾	-		192 289	MKRS-16,5-B	-		
[10]	1	-		193 946	MKY-PG-21-2PG-16	-		5 / 3.3-214
[11]	1 ³⁾	150 927	ZBH-9	150 927	ZBH-9	150 927	ZBH-9	-
[12]	2	M5x16 DIN 912		M5x16 DIN 912		M5x22 DIN 912		-
[13]	1 ¹⁾	-		177 566	MKR-16,5-PG-16	-		5 / 3.3-210
[14]	1	177 577	MKRL-23-PG-21	177 577	MKRL-23-PG-21	177 577	MKRL-23-PG-21	5 / 3.3-213

1) Length depends on the stroke of the drive

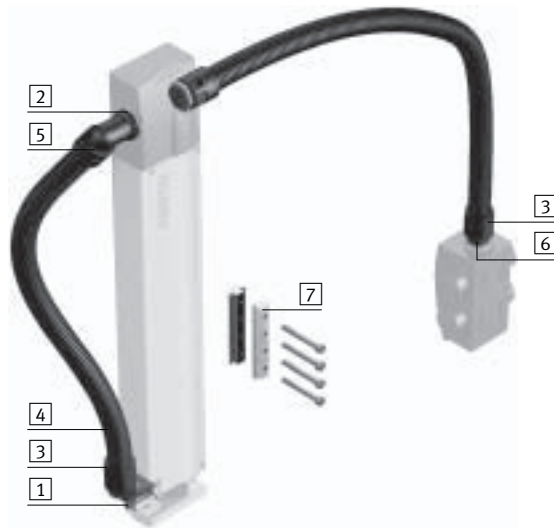
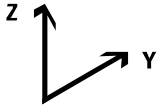
2) In order to be able to mount the retaining clip MKRS, a clamping component (2x code I) must be selected as an accessory in the order for the linear module HMPL.

3) 10 per packaging unit

Pick & place

Z modules

Linear modules HMP



Bill of materials							
Type	HMBSZ-HMP-1		HMBSZ-HMP-2		HMBSZ-HMP-3		→ Page
For drives	HMP-16		HMP-20		HMP-25		
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	
1	1	193 124	HMZAS-PG-21	177 603	HMZAS-PG-29	177 603	5 / 3.3-218
2	3	177 599	MKM-PG-21	177 600	MKM-PG-29	177 600	5 / 3.3-217
3	3	177 572	MKRV-23-PG-21	177 573	MKRV-29-PG-29	177 573	5 / 3.3-212
4	2 ¹⁾	177 567	MKR-23-PG-21	177 568	MKR-29-PG-29	177 568	5 / 3.3-210
5	1	177 577	MKRL-23-PG-21	177 578	MKRL-29-PG-29	177 578	5 / 3.3-213
6	1	177 595	MKA-PG-29-PG-21	-	-	-	5 / 3.3-215
7	1	177 647	HMSV-1	177 649	HMSV-3	177 653	5 / 3.3-183

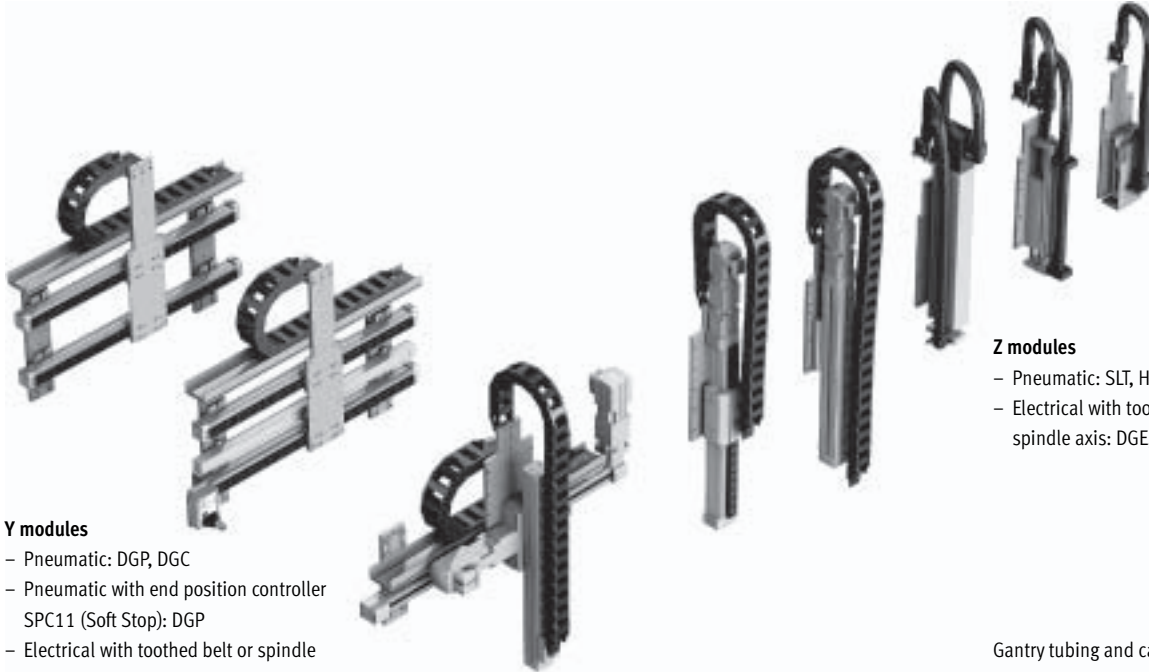
1) Length depends on the stroke of the drive

Linear gantries

Key features



Y and Z modules



Y modules

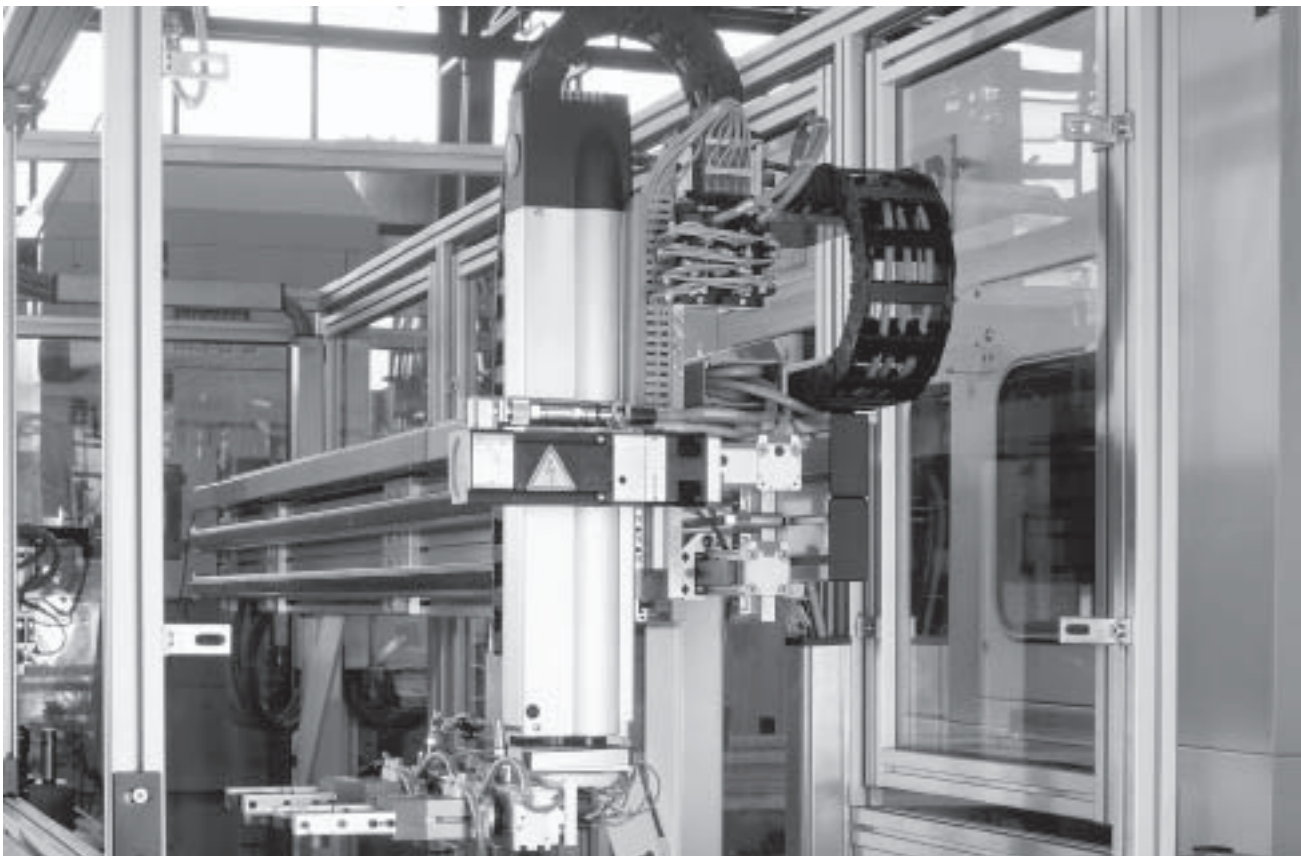
- Pneumatic: DGP, DGC
- Pneumatic with end position controller SPC11 (Soft Stop): DGP
- Electrical with toothed belt or spindle axis: DGE
- Single-axis systems (mono) or drives with guide axis (duo)

Z modules

- Pneumatic: SLT, HMPL, HMP
- Electrical with toothed belt or spindle axis: DGE, DGEA

Gantry tubing and cables are routed via protective trunking. Festo uses a base profile for this purpose specially designed for handling technology.

Application



Linear gantries

Product range overview



Selection aid				
System type	Mono 25	Mono 40	Duo 25	Duo 40
Y-axis	DG...-25	DG...-40	DG...-25	DG...-40
Drive function	Pneumatic, pneumatic with end position controller SPC11 (Soft Stop) or electrical			
Options	Spindle or toothed belt axis			
Z-axis	SLT-16 HMPL-16	SLT-20 HMPL-20 HMP-16	SLT-25 HMP-20	HMP-25
Drive function	Pneumatic			
Options	Intermediate position with HMPL	Intermediate position with HMPL, HMP		Intermediate position with HMP
Z-axis	DGEA-18	DGEA-18 DGE-25-SP-KF	DGEA-25 DGE-40-SP-KF	DGEA-25 DGE-40-SP-KF
Drive function	Electrical			
Options	-	Spindle or toothed belt axis		Spindle or toothed belt axis
Working load [kg]				
1	■	■	■	■
2	■	■	■	■
3	-	■	■	■
4	-	■	■	■
6	-	-	■	■
10	-	-	-	■
→ Page	5 / 3.3-146			

- Note
 Applicable stroke ranges:
 → Volume 1

Linear gantries

Selection aid for basic, connection and installation components



Y-axis				
System type	Mono 25	Mono 40	Duo 25	Duo 40
Pneumatic drives	Type			
DGPL-25	HMBSY-LP-M25-1 5 / 3.3-148	–	HMBSY-LP-D25-1 5 / 3.3-150	–
DGC-25	HMBSY-LP-M25-2 5 / 3.3-148	–	HMBSY-LP-D25-2 5 / 3.3-150	–
DGPL-25 with SPC11	HMBSY-LP-M25-3 5 / 3.3-148	–	HMBSY-LP-D25-3 5 / 3.3-150	–
DGPL-40	–	HMBSY-LP-M40-1 5 / 3.3-149	–	HMBSY-LP-D40-1 5 / 3.3-151
DGC-40	–	HMBSY-LP-M40-2 5 / 3.3-149	–	HMBSY-LP-D40-2 5 / 3.3-151
DGPL-40 with SPC11	–	HMBSY-LP-M40-3 5 / 3.3-149	–	HMBSY-LP-D40-3 5 / 3.3-151
Electrical drives	Type			
DGE-25 -SP-KF	HMBSY-LP-M25-1 5 / 3.3-148	–	HMBSY-LP-D25-1 5 / 3.3-150	–
-ZR-KF				
-ZR-RF	HMBSY-LP-M25-4 5 / 3.3-148	–	HMBSY-LP-D25-4 5 / 3.3-150	–
DGE-40 -SP-KF	–	HMBSY-LP-M40-1 5 / 3.3-149	–	HMBSY-LP-D40-1 5 / 3.3-151
-ZR-KF				
-ZR-RF				

Selection example:

Project engineering produced the following drive combination:

Y-axis: Duo 25 system with DGE-25-ZR-RF
Z-axis: SLT-20

Step 1
Define the drive type in the selection aids for the Y- or Z-axis. The associated bill of materials can be found on the specified page.

Y-axis: HMBSY-LP-D25-4
→ 5 / 3.3-150
Z-axis: HMBSZ-SLT-7
→ 5 / 3.3-152




Step 2
The necessary basic, connection and installation components can be found in the bill of materials on the specified page.

Y-axis: HMBSY-LP-D25-4
Z-axis: HMBSZ-SLT-7

Step 3
Technical data on the basic, connection and installation components can be found on the specified pages. Further accessories for the selected drives, for example proximity sensors, centring sleeves, etc. are documented with the drives.

Linear gantries

Selection aid for basic, connection and installation components

Z-axis				
System type	Mono 25	Mono 40	Duo 25	Duo 40
				
Pneumatic drives	Type			
SLT-16	HMBSZ-SLT-7 5 / 3.3-152	-	-	-
SLT-20	-	HMBSZ-SLT-7 5 / 3.3-152	HMBSZ-SLT-7 5 / 3.3-152	-
SLT-25	-	-	HMBSZ-SLT-7 5 / 3.3-152	-
HMPL-16	HMBSZ-HMPL-5 HMBSZ-HMPL-6 5 / 3.3-153	-	-	-
HMPL-20	-	HMBSZ-HMPL-5 HMBSZ-HMPL-6 5 / 3.3-153	HMBSZ-HMPL-5 HMBSZ-HMPL-6 5 / 3.3-153	-
HMP-16	-	HMBSZ-HMP-4 5 / 3.3-154	HMBSZ-HMP-4 5 / 3.3-154	-
HMP-20	-	-	HMBSZ-HMP-5 5 / 3.3-154	-
HMP-25	-	-	-	HMBSZ-HMP-6 5 / 3.3-154
Electrical drives	Type			
DGEA-18	HMBSZ-DGEA-1 5 / 3.3-155	HMBSZ-DGEA-1 5 / 3.3-155	HMBSZ-DGEA-1 5 / 3.3-155	-
DGEA-25	-	-	HMBSZ-DGEA-2 5 / 3.3-155	HMBSZ-DGEA-3 5 / 3.3-155
DGE-25-SP	-	HMBSZ-DGE-1 5 / 3.3-156	HMBSZ-DGE-1 5 / 3.3-156	-
DGE-40-SP	-	-	HMBSZ-DGE-2 5 / 3.3-156	HMBSZ-DGE-3 5 / 3.3-156

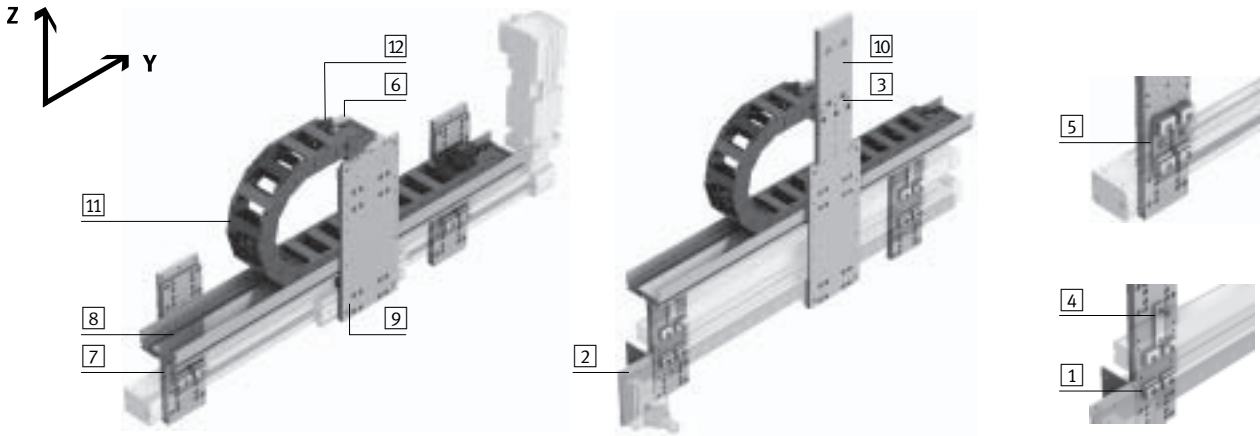
Linear gantries

Y modules



Mono system

Toothed belt axes DGE, linear drives DGC, DGPL



Bill of materials

Type	HMBSY-LP-M25-1	HMBSY-LP-M25-2	HMBSY-LP-M25-3	HMBSY-LP-M25-4		
For drives	DGPL-25 DGE-25-SP-KF DGE-25-ZR-KF	DGC-25	DGPL-25 with SPC11	DGE-25-ZR-RF		
System type	Mono 25					
Item	Quantity	Part No. Type	Part No. Type	Part No. Type	Part No. Type	→ Page
1	2 ¹⁾	150 736 MUP-18/25	–	150 736 MUP-18/25	150 736 MUP-18/25	Volume 1
	1 ¹⁾	–	531 753 MUC-25	–	–	Volume 1
2	1	–	–	539 367 HMVW-SPC	–	5 / 3.3-201
3	1	–	–	539 364 HMIM-LP	–	5 / 3.3-226
4	1 ¹⁾	–	–	539 973 HMVO-POT	–	5 / 3.3-200
5	2 ¹⁾	–	–	–	539 362 HMVO-RF25	5 / 3.3-200
6	1	539 366 HMIO-AP1	539 366 HMIO-AP1	539 366 HMIO-AP1	539 366 HMIO-AP1	5 / 3.3-226
7	2 ²⁾	539 972 HMVM-LP-DL25/40	539 972 HMVM-LP-DL25/40	539 972 HMVM-LP-DL25/40	539 972 HMVM-LP-DL25/40	5 / 3.3-196
8	1 ³⁾	539 378 HMIA-E05	539 378 HMIA-E05	539 378 HMIA-E05	539 378 HMIA-E05	5 / 3.3-225
9	1	539 368 HMVS-DL25	539 368 HMVS-DL25	539 368 HMVS-DL25	539 368 HMVS-DL25	5 / 3.3-198
10	1	–	–	539 365 HMIZB-E03	–	5 / 3.3-224
11	1	IGUS E2 medium 240.05.100 and 211 or KABELSCHLEPP MC 0320.60-01-100 and TS O/h _T 2			–	–
12	1	IGUS E2 medium 2050.12.PZB or KABELSCHLEPP MC FA/MA			–	–

1) Per basic kit HMVM-LP-DL25/40

2) Quantity with stroke ≤ 500 mm. With stroke > 500 mm, a basic kit HMVM-LP-DL25/40 must be additionally ordered per 500 mm stroke or part thereof.

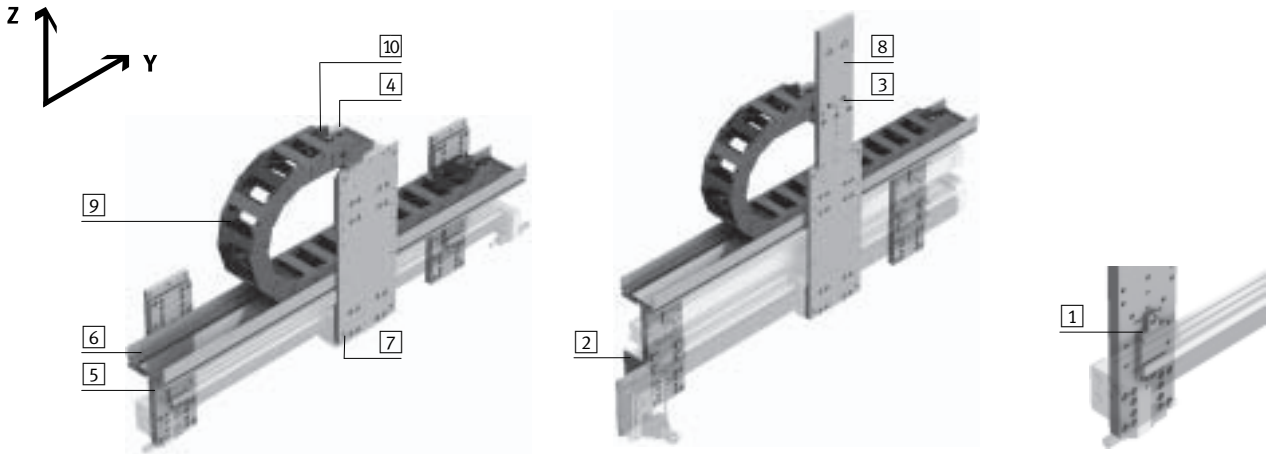
3) Length depends on the stroke of the drive

Linear gantries

Y modules

Mono system

Toothed belt axes DGE, linear drives DGC, DGPL



Bill of materials								
Type	HMBSY-LP-M40-1		HMBSY-LP-M40-2		HMBSY-LP-M40-3			
For drives	DGPL-40 DGE-40-SP-KF DGE-40-ZR-KF DGE-40-ZR-RF		DGC-40		DGPL-40 with SPC11			
System type	Mono 40							
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type	→ Page
1	1 ¹⁾	-		531 755 MUC-40		-		Volume 1
2	1	-		-		539 367 HMVW-SPC		5 / 3.3-201
3	1	-		-		539 364 HMIM-LP		5 / 3.3-226
4	1	539 366 HMIO-AP-1		540 121 HMIO-AP-2		539 366 HMIO-AP-1		5 / 3.3-226
5	2 ²⁾	539 972 HMVM-LP-DL25/40		539 972 HMVM-LP-DL25/40		539 972 HMVM-LP-DL25/40		5 / 3.3-196
6	1 ³⁾	539 378 HMIA-E05		539 378 HMIA-E05		539 378 HMIA-E05		5 / 3.3-225
7	1	539 369 HMVS-DL40		539 369 HMVS-DL40		539 369 HMVS-DL40		5 / 3.3-198
8	1	-		-		539 365 HMIZB-E03		5 / 3.3-224
9	1	IGUS E2 medium 240.05.100 and 211 or KABELSCHLEPP MC 0320.60-01-100 and TS O/n _T 2						-
10	1	IGUS E2 medium 2050.12.PZB or KABELSCHLEPP MC FA/MA						-

1) Per basic kit HMVM-LP-DL25/40

2) Quantity with stroke ≤ 500 mm. With stroke > 500 mm, a basic kit HMVM-LP-DL25/40 must be additionally ordered per 500 mm stroke or part thereof.

3) Length depends on the stroke of the drive

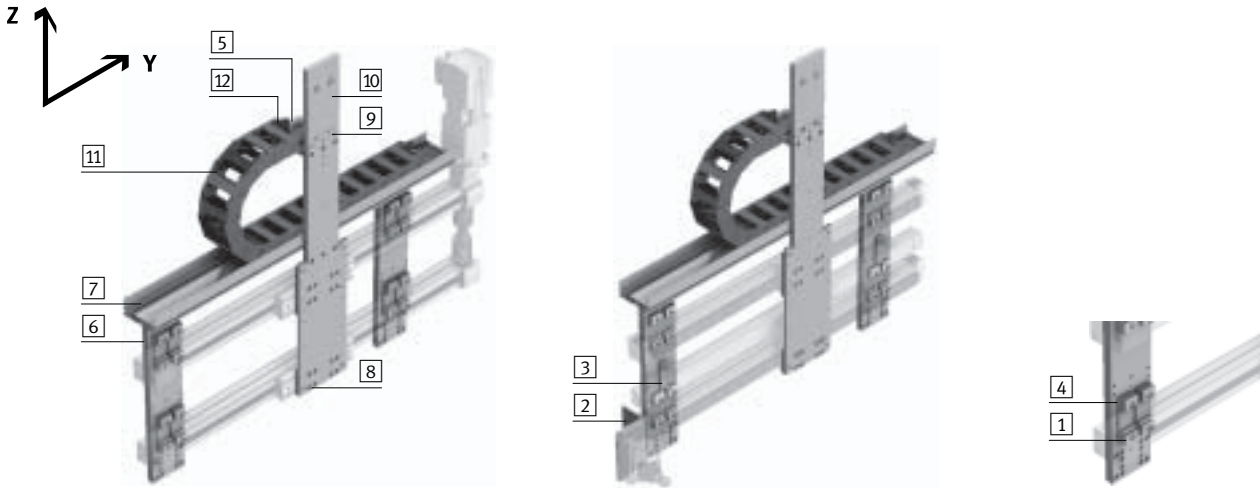
Linear gantries

Y modules



Duo system

Toothed belt axes DGE, linear drives DGC, DGPL



Bill of materials

Type	HMBSY-LP-D25-1	HMBSY-LP-D25-2	HMBSY-LP-D25-3	HMBSY-LP-D25-4		
For drives	DGPL-25 DGE-25-SP-KF DGE-25-ZR-KF	DGC-25	DGPL-25 with SPC11	DGE-25-ZR-RF		
System type	Duo 25					
Item	Quantity	Part No. Type	Part No. Type	Part No. Type	Part No. Type	→ Page
1	4 ¹⁾	150 736 MUP-18/25	–	150 736 MUP-18/25	150 736 MUP-18/25	Volume 1
	2 ¹⁾	–	531 753 MUC-25	–	–	Volume 1
2	1	–	–	539 367 HMVW-SPC	–	5 / 3.3-201
3	1 ¹⁾	–	–	539 973 HMVO-POT	–	5 / 3.3-200
4	4 ¹⁾	–	–	–	539 362 HMVO-RF25	5 / 3.3-200
5	1	539 366 HMIO-AP-1	539 366 HMIO-AP-1	539 366 HMIO-AP-1	539 366 HMIO-AP-1	5 / 3.3-226
6	2 ²⁾	539 971 HMVD-LP-DL25/40	539 971 HMVD-LP-DL25/40	539 971 HMVD-LP-DL25/40	539 971 HMVD-LP-DL25/40	5 / 3.3-196
7	1 ³⁾	539 378 HMIA-E05	539 378 HMIA-E05	539 378 HMIA-E05	539 378 HMIA-E05	5 / 3.3-225
8	1	539 368 HMVS-DL25	539 368 HMVS-DL25	539 368 HMVS-DL25	539 368 HMVS-DL25	5 / 3.3-198
9	1	539 363 HMID-LP	539 363 HMID-LP	539 363 HMID-LP	539 363 HMID-LP	5 / 3.3-226
10	1	539 365 HMIZB-E03	539 365 HMIZB-E03	539 365 HMIZB-E03	539 365 HMIZB-E03	5 / 3.3-224
11	1	IGUS E2 medium 240.05.100 and 211 or KABELSCHLEPP MC 0320.60-01-100 and TS O/h _T 2				–
12	1	IGUS E2 medium 2050.12.PZB or KABELSCHLEPP MC FA/MA				–

1) Per basic kit HMVD-LP-DL25/40

2) Quantity with stroke ≤ 500 mm. With stroke > 500 mm, a basic kit HMVD-LP-DL25/40 must be additionally ordered per 500 mm stroke or part thereof.

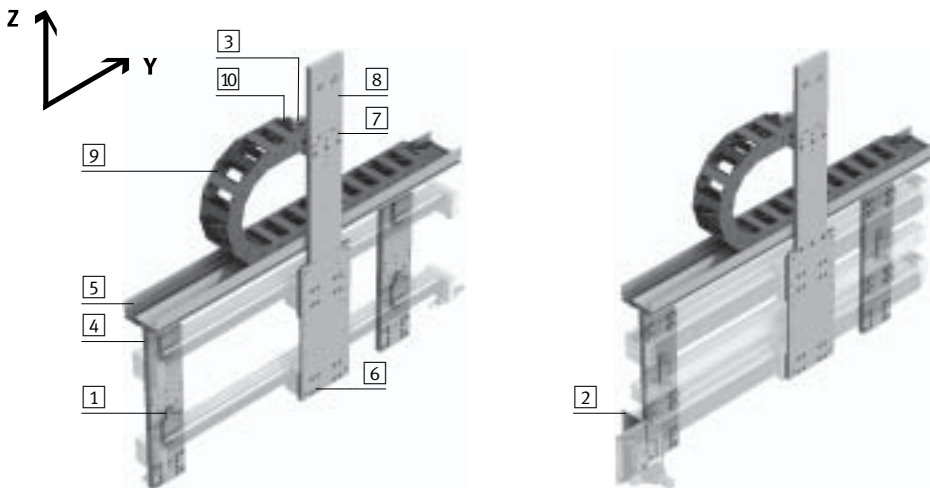
3) Length depends on the stroke of the drive

Linear gantries

Y modules

Duo system

Toothed belt axes DGE, linear drives DGC, DGPL



Bill of materials								
Type	HMBSY-LP-D40-1		HMBSY-LP-D40-2		HMBSY-LP-D40-3		→ Page	
For drives	DGPL-40 DGE-40-SP-KF DGE-40-ZR-KF DGE-40-ZR-RF		DGC-40		DGPL-40 with SPC11			
System type	Duo 40							
Item	Quantity	Part No.	Type	Part No.	Type	Part No.		Type
1	2 ¹⁾	-		531 755 MUC-40		-	Volume 1	
2	1	-		-		539 367 HMVW-SPC	5 / 3.3-201	
3	1	539 366	HMIO-AP-1	540 121	HMIO-AP-2	539 366	HMIO-AP-1	5 / 3.3-226
4	2 ²⁾	539 971	HMVD-LP-DL25/40	539 971	HMVD-LP-DL25/40	539 971	HMVD-LP-DL25/40	5 / 3.3-196
5	1 ³⁾	539 378	HMIA-E05	539 378	HMIA-E05	539 378	HMIA-E05	5 / 3.3-225
6	1	539 369	HMVS-DL40	539 369	HMVS-DL40	539 369	HMVS-DL40	5 / 3.3-198
7	1	539 363	HMID-LP	539 363	HMID-LP	539 363	HMID-LP	5 / 3.3-226
8	1	539 365	HMIZB-E03	539 365	HMIZB-E03	539 365	HMIZB-E03	5 / 3.3-224
9	1	IGUS E2 medium 240.05.100 and 211 or KABELSCHLEPP MC 0320.60-01-100 and TS O/n _T 2						-
10	1	IGUS E2 medium 2050.12.PZB or KABELSCHLEPP MC FA/MA						-

1) Per basic kit HMVD-LP-DL25/40

2) Quantity with stroke ≤ 500 mm. With stroke > 500 mm, a basic kit HMVD-LP-DL25/40 must be additionally ordered per 500 mm stroke or part thereof.

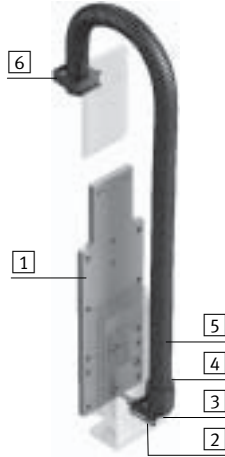
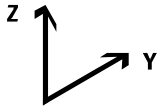
3) Length depends on the stroke of the drive

Linear gantries

Z modules

Mono/Duo system

Mini slides SLT



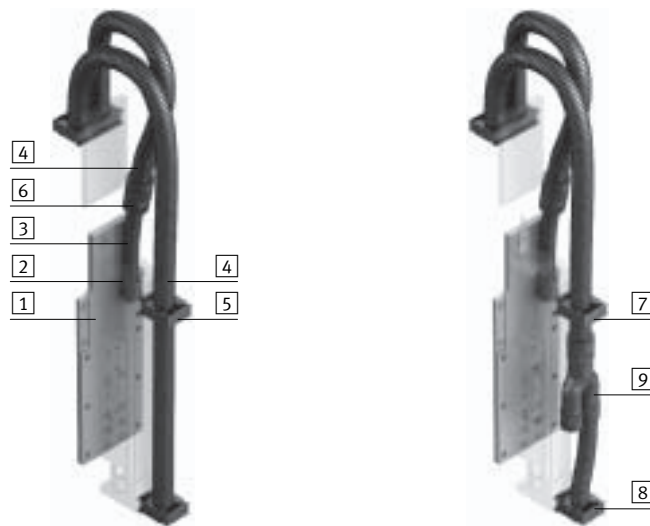
Bill of materials								
Type		HMBSZ-SLT-7						→ Page
For drives		SLT-16		SLT-20		SLT-25		
System type		Mono 25		Mono 40 Duo 25		Duo 25		
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type	
[1]	1	539 373	HMVZ-2	539 373	HMVZ-2	539 373	HMVZ-2	5 / 3.3-199
[2]	1	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	5 / 3.3-218
[3]	1	177 599	MKM-PG-21	177 599	MKM-PG-21	177 599	MKM-PG-21	5 / 3.3-217
[4]	1	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	5 / 3.3-212
[5]	1 ¹⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	5 / 3.3-210
[6]	1	192 290	MKRS-23-B	192 290	MKRS-23-B	192 290	MKRS-23-B	5 / 3.3-217

1) Length depends on the stroke of the drive

Linear gantries

Z modules

Mono/Duo system
Linear modules HMPL



Bill of materials								→ Page
Type	HMBSZ-HMPL-5			HMBSZ-HMPL-6				
For drives	HMPL-16	HMPL-20		HMPL-16	HMPL-20			
	without intermediate position			with intermediate position				
System type	Mono 25		Mono 40 Duo 25	Mono 25		Mono 40 Duo 25		
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type	
1	1	539 375	HMVZ-4	539 375	HMVZ-4	539 375	HMVZ-4	5 / 3.3-199
2	1	177 571	MKRV-16,5-PG-16	177 571	MKRV-16,5-PG-16	177 571	MKRV-16,5-PG-16	5 / 3.3-212
3	1 ¹⁾	177 566	MKR-16,5-PG-16	177 566	MKR-16,5-PG-16	177 566	MKR-16,5-PG-16	5 / 3.3-210
4	1 ²⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	
5	4 ³⁾	192 290	MKRS-23-B	192 290	MKRS-23-B	-	-	5 / 3.3-217
6	1	194 321	MKRT-23-16,5	194 321	MKRT-23-16,5	194 321	MKRT-23-16,5	5 / 3.3-214
7	3 ³⁾	-	-	-	-	192 290	MKRS-23-B	5 / 3.3-217
8	1	-	-	-	-	192 289	MKRS-16,5-B	
9	1	-	-	-	-	193 946	MKY-PG-21-2PG-16	5 / 3.3-214

1) Length 200 mm

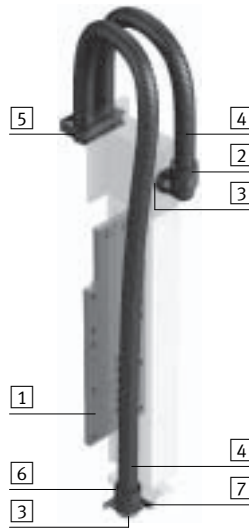
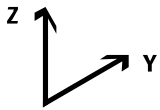
2) Length depends on the stroke of the drive, 2 conduits are required with an intermediate position.

3) In order to be able to mount the retaining clip MKRS, a clamping component (2x code I) must be selected as an accessory in the order for the linear module HMPL.

Linear gantries

Z modules

Mono/Duo system
Linear modules HMP



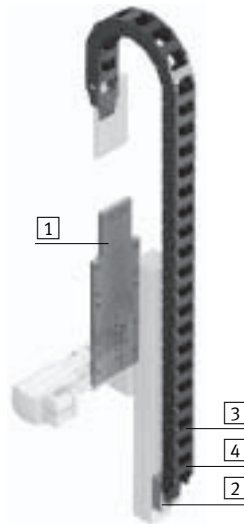
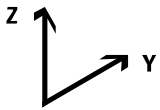
Bill of materials								
Type	HMBSZ-HMP-4		HMBSZ-HMP-5		HMBSZ-HMP-6		→ Page	
For drives	HMP-16		HMP-20		HMP-25			
System type	Mono 40 Duo 25		Duo 25		Duo 40			
Item	Quantity	Part No.	Type	Part No.	Type	Part No.		Type
[1]	1	539 374	HMVZ-3	539 374	HMVZ-3	539 377	HMVZ-6	5 / 3.3-199
[2]	1	177 577	MKRL-23-PG-21	177 578	MKRL-29-PG-29	177 578	MKRL-29-PG-29	5 / 3.3-213
[3]	2	177 599	MKM-PG-21	177 600	MKM-PG-29	177 600	MKM-PG-29	5 / 3.3-217
[4]	1 ¹⁾	177 567	MKR-23-PG-21	177 568	MKR-29-PG-29	177 568	MKR-29-PG-29	5 / 3.3-210
[5]	2	192 290	MKRS-23-B	192 291	MKRS-29-B	192 291	MKRS-29-B	5 / 3.3-217
[6]	1	177 572	MKRV-23-PG-21	177 573	MKRV-29-PG-29	177 573	MKRV-29-PG-29	5 / 3.3-212
[7]	1	193 124	HMZAS-PG-21	177 603	HMZAS-PG-29	177 603	HMZAS-PG-29	5 / 3.3-218

1) Length depends on the stroke of the drive

Linear gantries

Z modules

Mono/Duo system
Cantilever axes DGEA



Bill of materials							
Type	HMBSZ-DGEA-1		HMBSZ-DGEA-2		HMBSZ-DGEA-3		
For drives	DGEA-18		DGEA-25		DGEA-25		
System type	Mono 25 Mono 40 Duo 25		Duo 25		Duo 40		
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type
[1]	1	539 374	HMVZ-3	539 375	HMVZ-4	539 377	HMVZ-6
[2]	1	539 370	HMIZF-E03-DA18	539 371	HMIZF-E03-DA25	539 371	HMIZF-E03-DA25
[3]	1 ¹⁾	IGUS E2 medium 240.03.075.0 and 211 or KABELSCHLEPP MC 0320.40-01-77 and TS 0/n _T 2					-
[4]	1	IGUS E2 medium 2030.12.PZB or KABELSCHLEPP MC FA/MA					-

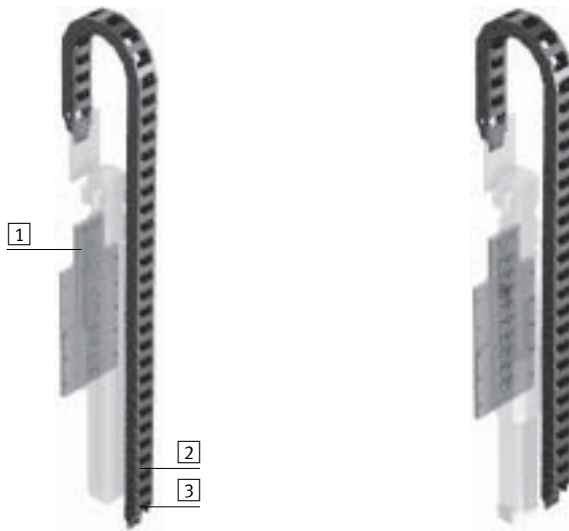
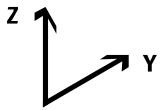
1) Length depends on the stroke of the drive

Linear gantries

Z modules

Mono/Duo system

Spindle axes DGE



Bill of materials

Type	HMBSZ-DGE-1	HMBSZ-DGE-2	HMBSZ-DGE-3					
For drives	DGE-25-SP	DGE-40-SP	DGE-40-SP					
System type	Mono 40 Duo 25	Duo 25	Duo 40					
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type	→ Page
[1]	1	539 374	HMVZ-3	539 375	HMVZ-4	539 377	HMVZ-6	5 / 3.3-199
[2]	1 ¹⁾	IGUS E2 medium 240.03.075.0 and 211 or KABELSCHLEPP MC 0320.40-01-77 and TS O/nT2						-
[3]	1	IGUS E2 medium 2030.12.PZB or KABELSCHLEPP MC FA/MA						-

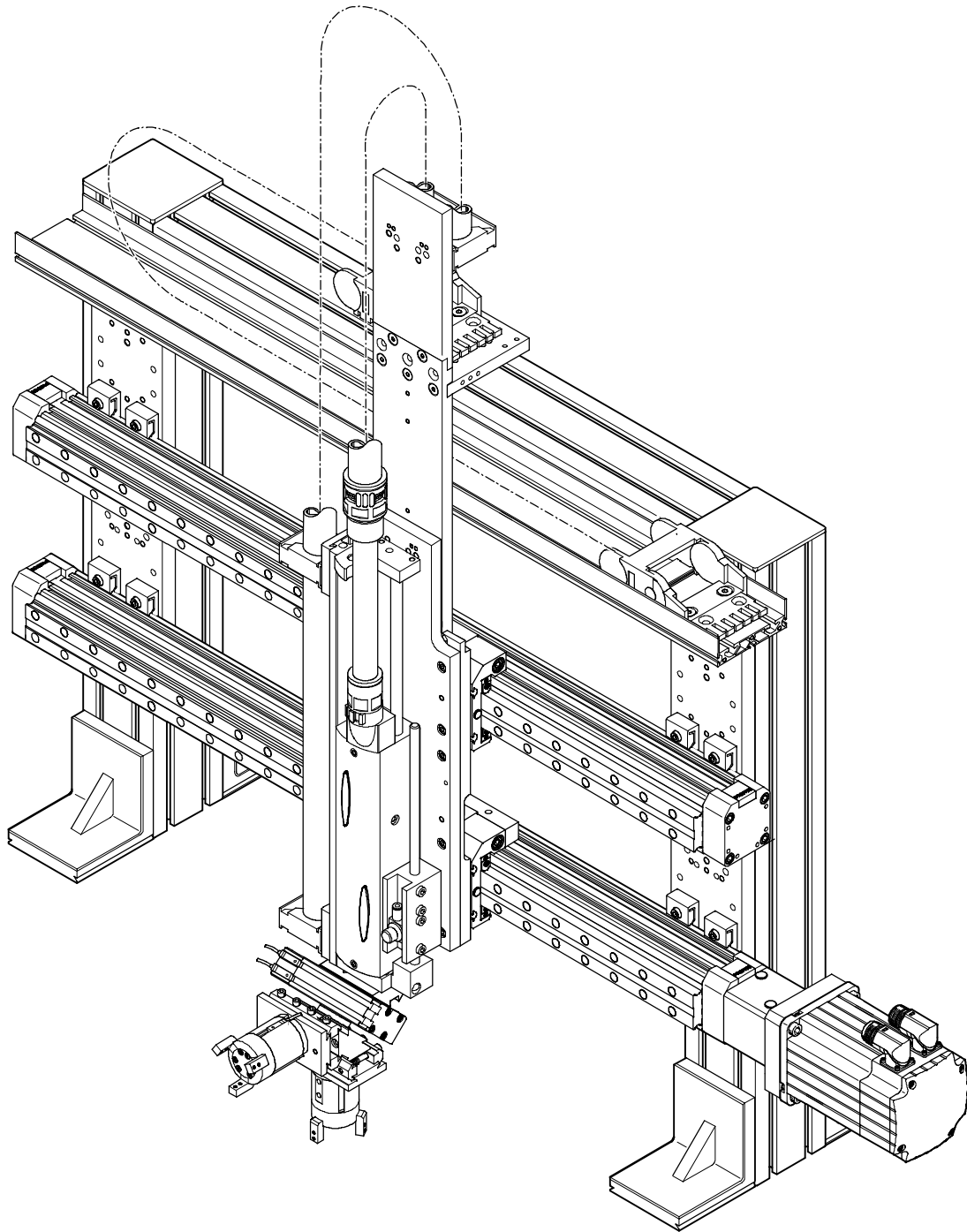
1) Length depends on the stroke of the drive

Linear gantries

System example

FESTO

Duo system DG/HMPL



System components
Multi-axis modular system

3.3

3-Dimensional gantries

Key features



X, Y and Z modules



Y modules

- Pneumatic: DGP, DGC
- Electrical with toothed belt or spindle axis: DGE
- Single-axis systems (mono) or drives with guide axis (duo)



Z modules

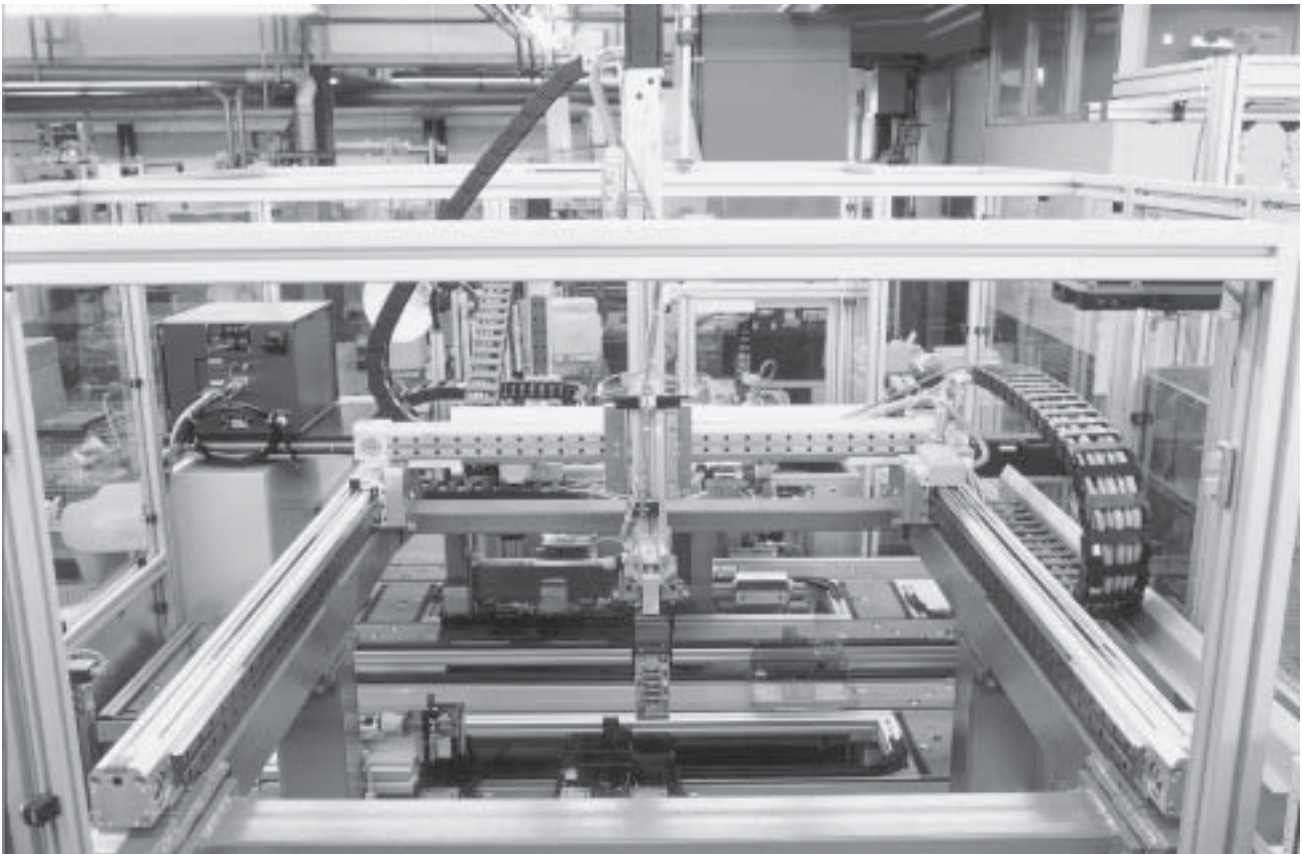
- Pneumatic: SLT, HMPL, HMP
- Electrical with toothed belt or spindle axis: DGE, DGEA

X modules

- Electrical with toothed belt axis: DGE

The components in the multi-axis modular system consist mainly of aluminium plates that are connected to each other and attached to the drives using screw connections and slot nut connectors. This permits fast and easy assembly.

Application



3-Dimensional gantries

Product range overview



Selection aid					
System type	Mono 25	Mono 40	Duo 25		Duo 40
X-axis	DGE-25-ZR	DGE-40-ZR	DGE-25-ZR	DGE-40-ZR	DGE-40-ZR
Drive function	Electrical				
Options	Ball bearing or roller guide				
Y-axis	DG...-25	DG...-40	DG...-25		DG...-40
Drive function	Pneumatic and electrical				
Options	Spindle or toothed belt axis				
Z-axis	SLT-16 HMPL-16	SLT-20 HMPL-20 HMP-16	SLT-25 HMP-20	HMP-25	
Drive function	Pneumatic				
Options	Intermediate position with HMPL	Intermediate position with HMPL, HMP		Intermediate position with HMP	
Z-axis	DGEA-18	DGEA-18 DGE-25-SP-KF	DGEA-25 DGE-40-SP-KF	DGEA-25 DGE-40-SP-KF	
Drive function	Electrical				
Options	-	Spindle or toothed belt axis		Spindle or toothed belt axis	
Working load [kg]					
	1	■	■	■	■
	2	■	■	■	■
	3	-	■	■	■
	4	-	■	■	■
	6	-	-	■	■
	10	-	-	-	■
→ Page	5 / 3.3-160				

Note
 Applicable stroke ranges:
 → Volume 1

System components
 Multi-axis modular system

3.3

3-Dimensional gantries

Selection aid for basic, connection and installation components



X-axis					
System type		Mono 25	Mono 40	Duo 25	Duo 40
Electrical drives	Type				
DGE-25	-ZR-KF	HMBSX-RP/FP-25-1 5 / 3.3-163	HMBSX-RP/FP-25-1 5 / 3.3-163	HMBSX-RP/FP-25-1 5 / 3.3-163	-
	-ZR-RF	HMBSX-RP/FP-25-2 5 / 3.3-163	HMBSX-RP/FP-25-2 5 / 3.3-163	HMBSX-RP/FP-25-2 5 / 3.3-163	-
DGE-40	-ZR-KF	-	HMBSX-RP/FP-40-1 5 / 3.3-163	HMBSX-RP/FP-40-1 5 / 3.3-163	HMBSX-RP/FP-40-1 5 / 3.3-163
	-ZR-RF	-	HMBSX-RP/FP-40-2 5 / 3.3-163	HMBSX-RP/FP-40-2 5 / 3.3-163	HMBSX-RP/FP-40-2 5 / 3.3-163

Selection example:

Project engineering produced the following drive combination:

Step 1
Define the drive type in the selection aids for the X-, Y- or Z-axis. The associated bill of materials can be found on the specified page.

Step 2
The necessary basic, connection and installation components can be found in the bill of materials on the specified page.

Step 3
Technical data on the basic, connection and installation components can be found on the specified pages. Further accessories for the selected drives, for example proximity sensors, centring sleeves, etc. are documented with the drives.

X-axis: DGE-40-ZR-KF

X-axis: HMBSX-RP/FP-40-1
→ 5 / 3.3-163

X-axis: HMBSX-RP/FP-40-1

Y-axis: Mono 40 system with DGC-40

Y-axis: HMBSY-RP/FP-M40-2
→ 5 / 3.3-164

Y-axis: HMBSY-RP/FP-M40-2




Z-axis: HMPL-20 without intermediate position

Z-axis: HMBSZ-HMPL-5 or 6
→ 5 / 3.3-167

Z-axis: HMBSZ-HMPL-5

3-Dimensional gantries




Selection aid for basic, connection and installation components

Y-axis				
System type	Mono 25	Mono 40	Duo 25	Duo 40
				
Pneumatic drives	Type			
DGPL-25	HMBSY-RP/FP-M25-1 5 / 3.3-164	-	HMBSY-RP/FP-D25-1 5 / 3.3-165	-
DGC-25	HMBSY-RP/FP-M25-2 5 / 3.3-164	-	HMBSY-RP/FP-D25-2 5 / 3.3-165	-
DGPL-40	-	HMBSY-RP/FP-M40-1 5 / 3.3-164	-	HMBSY-RP/FP-D40-1 5 / 3.3-165
DGC-40	-	HMBSY-RP/FP-M40-2 5 / 3.3-164	-	HMBSY-RP/FP-D40-2 5 / 3.3-165
Electrical drives	Type			
DGE-25 -SP-KF -ZR-KF -ZR-RF	HMBSY-RP/FP-M25-1 5 / 3.3-164	-	HMBSY-RP/FP-D25-1 5 / 3.3-165	-
DGE-40 -SP-KF -ZR-KF -ZR-RF	-	HMBSY-RP/FP-M40-1 5 / 3.3-164	-	HMBSY-RP/FP-D40-1 5 / 3.3-165

3-Dimensional gantries

Selection aid for basic, connection and installation components

FESTO

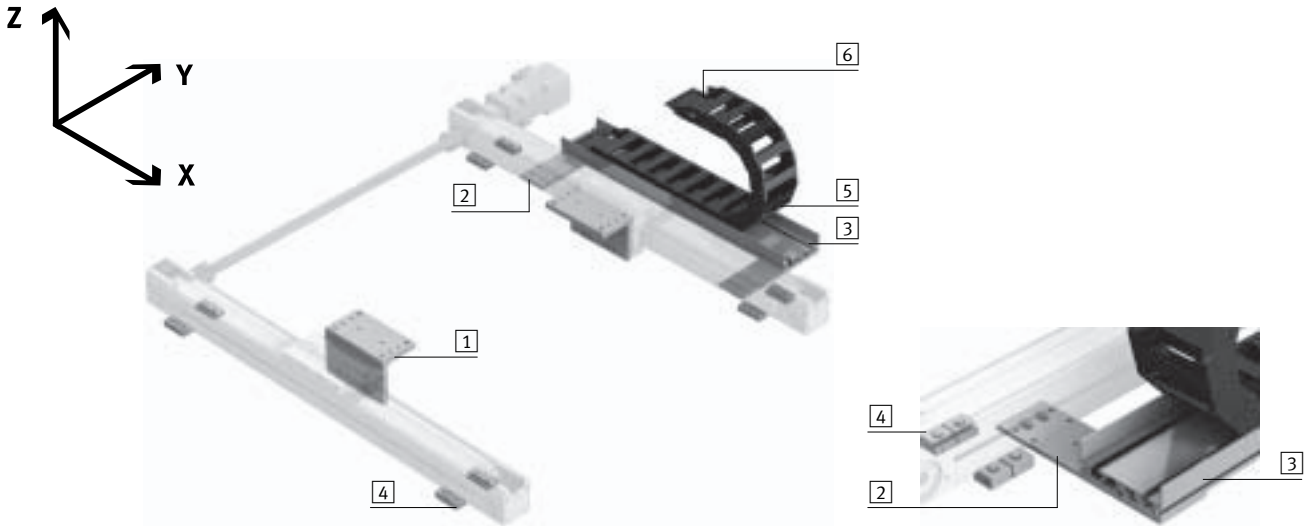
Z-axis				
System type	Mono 25	Mono 40	Duo 25	Duo 40
				
Pneumatic drives	Type			
SLT-16	HMBSZ-SLT-7 5 / 3.3-166	–	–	–
SLT-20	–	HMBSZ-SLT-7 5 / 3.3-166	HMBSZ-SLT-7 5 / 3.3-166	–
SLT-25	–	–	HMBSZ-SLT-7 5 / 3.3-166	–
HMPL-16	HMBSZ-HMPL-5 HMBSZ-HMPL-6 5 / 3.3-167	–	–	–
HMPL-20	–	HMBSZ-HMPL-5 HMBSZ-HMPL-6 5 / 3.3-167	HMBSZ-HMPL-5 HMBSZ-HMPL-6 5 / 3.3-167	–
HMP-16	–	HMBSZ-HMP-4 5 / 3.3-168	HMBSZ-HMP-4 5 / 3.3-168	–
HMP-20	–	–	HMBSZ-HMP-5 5 / 3.3-168	–
HMP-25	–	–	–	HMBSZ-HMP-6 5 / 3.3-168
Electrical drives	Type			
DGEA-18	HMBSZ-DGEA-1 5 / 3.3-169	HMBSZ-DGEA-1 5 / 3.3-169	HMBSZ-DGEA-1 5 / 3.3-169	–
DGEA-25	–	–	HMBSZ-DGEA-2 5 / 3.3-169	HMBSZ-DGEA-3 5 / 3.3-169
DGE-25-SP	–	HMBSZ-DGE-1 5 / 3.3-170	HMBSZ-DGE-1 5 / 3.3-170	–
DGE-40-SP	–	–	HMBSZ-DGE-2 5 / 3.3-170	HMBSZ-DGE-3 5 / 3.3-170

3-Dimensional gantries

X modules

Basic system

Toothed belt axes DGE



Bill of materials

Type	HMBSX-RP/FP-25-1	HMBSX-RP/FP-25-2	HMBSX-RP/FP-40-1	HMBSX-RP/FP-40-2		
For drives	DGE-25-ZR-KF	DGE-25-ZR-RF	DGE-40-ZR-KF	DGE-40-ZR-RF		
Item	Quantity	Part No.	Type	Part No.	Type	Page
1	1	539 651	HMVW-DL25	539 652	HMVS-RF25	5 / 3.3-193
2	2 ¹⁾	539 654	HMIXB-RP/FP	539 654	HMIXB-RP/FP	5 / 3.3-227
3	1 ²⁾	539 379	HMIA-E07	539 379	HMIA-E07	5 / 3.3-225
4	2 ³⁾	150 736	MUP-18/25	150 736	MUP-18/25	Volume 1
	1 ³⁾	-	-	150 738	MUP-40	Volume 1
5	1 ²⁾	IGUS E2 medium 240.07.100.0 and 211 or KABELSCHLEPP MC 0320.80-01 and TS O/n _T 2				-
6	1	IGUS E2 medium 2070.12.PZB or KABELSCHLEPP MC FA/MA				-

- 1) Quantity with stroke ≤ 500 mm. With stroke > 500 mm, an installation kit HMIXB-RP/FP must be additionally ordered per 500 mm stroke or part thereof.
- 2) Length depends on the stroke of the drive
- 3) Every 500 mm per axis

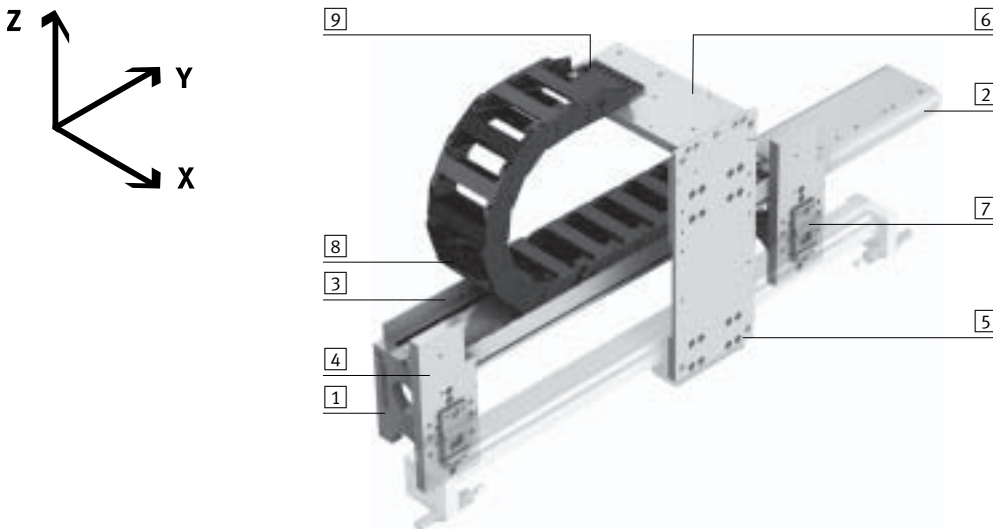
3-Dimensional gantries

Y modules



Mono system

Toothed belt/spindle axes DGE, linear drives DGC, DGPL



Bill of materials

Type	HMBSY-RP/FP-M25-1	HMBSY-RP/FP-M25-2	HMBSY-RP/FP-M40-1	HMBSY-RP/FP-M40-2		
For drives	DGE-25-SP-KF DGE-25-ZR-KF DGE-25-ZR-RF DGPL-25	DGC-25	DGE-40-SP-KF DGE-40-ZR-KF DGE-40-ZR-RF DGPL-40	DGC-40		
System type	Mono 25		Mono 40			
Item	Quantity	Part No. Type	Part No. Type	Part No. Type	Part No. Type	→ Page
[1]	2	539 657 HMVV-RP/FP	539 657 HMVV-RP/FP	539 657 HMVV-RP/FP	539 657 HMVV-RP/FP	5 / 3.3-195
[2]	1	539 658 HMIXF-RP/FP	539 658 HMIXF-RP/FP	539 658 HMIXF-RP/FP	539 658 HMIXF-RP/FP	5 / 3.3-195
[3]	1 ¹⁾	539 379 HMIA-E07	539 379 HMIA-E07	539 379 HMIA-E07	539 379 HMIA-E07	5 / 3.3-225
[4]	2 ³⁾	539 656 HMVM-RP/FP-DL25/40	539 656 HMVM-RP/FP-DL25/40	539 656 HMVM-RP/FP-DL25/40	539 656 HMVM-RP/FP-DL25/40	5 / 3.3-197
[5]	1	539 368 HMVS-DL25	539 368 HMVS-DL25	539 369 HMVS-DL40	539 369 HMVS-DL40	5 / 3.3-198
[6]	1	539 659 HMIYF-RF/DL25	539 659 HMIYF-RF/DL25	539 660 HMIYF-RF/DL40	539 660 HMIYF-RF/DL40	5 / 3.3-228
[7]	2 ²⁾	150 736 MUP-18/25	–	–	–	Volume 1
	1 ²⁾	–	531 753 MUC-25	–	531 755 MUC-40	Volume 1
	1 ²⁾	–	–	150 738 MUP-40	–	Volume 1
[8]	1 ¹⁾	IGUS E2 medium 240.07.100.0 and 211 or KABELSCHLEPP MC 0320.80-01 and TS O/n ₇ 2				–
[9]	1	IGUS E2 medium 2070.12.PZB or KABELSCHLEPP MC FA/MA				–

1) Length depends on the stroke of the drive

2) Per basic kit HMVM-RP/FP-DL25/40

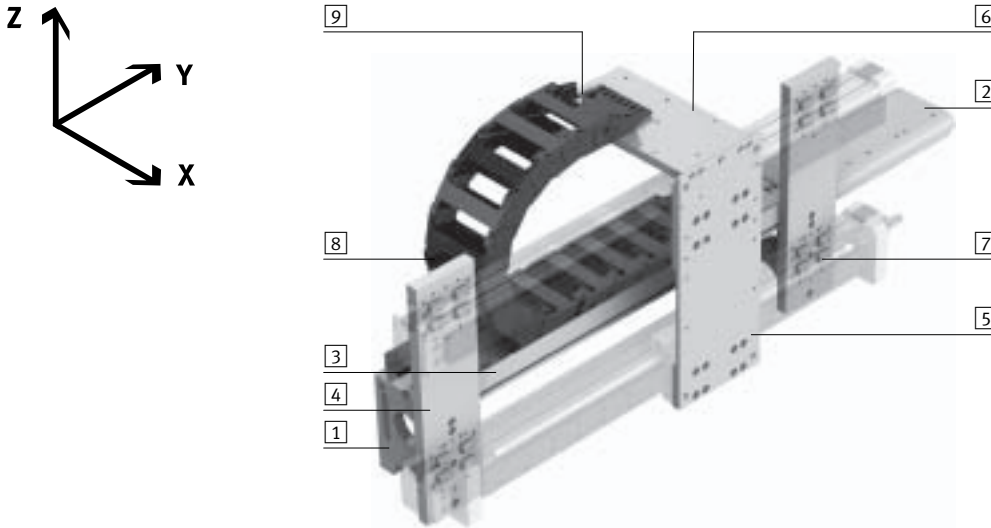
3) Quantity with stroke ≤ 500 mm. With stroke > 500 mm, a basic kit HMVM-RP/FP-DL25/40 must be additionally ordered per 500 mm stroke or part thereof.

3-Dimensional gantries

Y modules

Duo system

Toothed belt/spindle axes DGE, linear drives DGC, DGPL



Bill of materials								
Type		HMBSY-RP/FP-D25-1	HMBSY-RP/FP-D25-2	HMBSY-RP/FP-D40-1	HMBSY-RP/FP-D40-2			
For drives		DGE-25-SP-KF DGE-25-ZR-KF DGE-25-ZR-RF DGPL-25	DGC-25	DGE-40-SP-KF DGE-40-ZR-KF DGE-40-ZR-RF DGPL-40	DGC-40			
System type		Duo 25		Duo 40				
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type	→ Page
1	2	539 657	HMVV-RP/FP	539 657	HMVV-RP/FP	539 657	HMVV-RP/FP	5 / 3.3-195
2	1	539 658	HMIXF-RP/FP	539 658	HMIXF-RP/FP	539 658	HMIXF-RP/FP	5 / 3.3-195
3	1 ¹⁾	539 379	HMIA-E07	539 379	HMIA-E07	539 379	HMIA-E07	5 / 3.3-225
4	2 ³⁾	539 655	HMVD-RP/FP-DL25/40	539 655	HMVD-RP/FP-DL25/40	539 655	HMVD-RP/FP-DL25/40	5 / 3.3-197
5	1	539 368	HMVS-DL25	539 368	HMVS-DL25	539 369	HMVS-DL40	5 / 3.3-198
6	1	539 659	HMIYF-RF/DL25	539 659	HMIYF-RF/DL25	539 660	HMIYF-RF/DL40	5 / 3.3-228
7	4 ²⁾	150 736	MUP-18/25	-	-	-	-	Volume 1
	2	-	-	531 753	MUC-25	-	531 755	MUC-40
8	1 ¹⁾	IGUS E2 medium 240.07.100.0 and 211 or KABELSCHLEPP MC 0320.80-01 and TS O/n ₇ 2						
9	1	IGUS E2 medium 2070.12.PZB or KABELSCHLEPP MC FA/MA						

1) Length depends on the stroke of the drive

2) Per basic kit HMVD-RP/FP-DL25/40

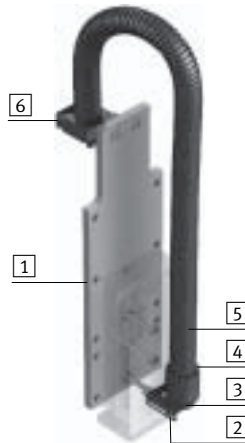
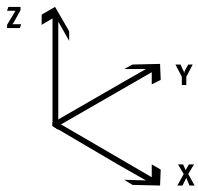
3) Quantity with stroke ≤ 500 mm. With stroke > 500 mm, a basic kit HMVD-RP/FP-DL25/40 must be additionally ordered per 500 mm stroke or part thereof.

3-Dimensional gantries

Z modules

Mono/Duo system

Mini slides SLT



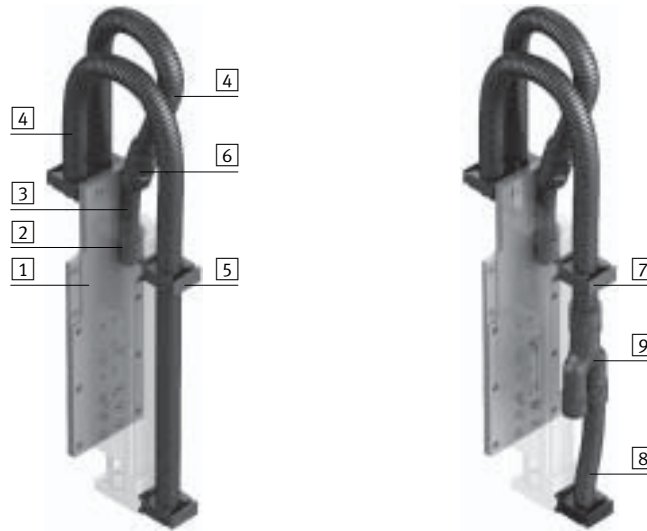
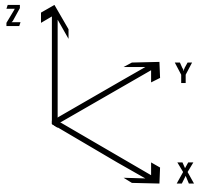
Bill of materials								
Type		HMBSZ-SLT-7						→ Page
For drives		SLT-16		SLT-20		SLT-25		
System type		Mono 25		Mono 40 Duo 25		Duo 25		
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type	
[1]	1	539 373	HMVZ-2	539 373	HMVZ-2	539 373	HMVZ-2	5 / 3.3-199
[2]	1	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	5 / 3.3-218
[3]	1	177 599	MKM-PG-21	177 599	MKM-PG-21	177 599	MKM-PG-21	5 / 3.3-217
[4]	1	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	5 / 3.3-212
[5]	1 ¹⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	5 / 3.3-210
[6]	1	192 290	MKRS-23-B	192 290	MKRS-23-B	192 290	MKRS-23-B	5 / 3.3-217

1) Length depends on the stroke of the drive

3-Dimensional gantries

Z modules

Mono/Duo system
Linear modules HMPL



Bill of materials								→ Page
Type	HMBSZ-HMPL-5			HMBSZ-HMPL-6				
For drives	HMPL-16	HMPL-20	HMPL-16	HMPL-20				
	without intermediate position			with intermediate position				
System type	Mono 25	Mono 40 Duo 25	Mono 25	Mono 40 Duo 25				
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type	
1	1	539 375	HMVZ-4	539 375	HMVZ-4	539 375	HMVZ-4	5 / 3.3-199
2	1	177 571	MKRV-16,5-PG-16	177 571	MKRV-16,5-PG-16	177 571	MKRV-16,5-PG-16	5 / 3.3-212
3	1 ¹⁾	177 566	MKR-16,5-PG-16	177 566	MKR-16,5-PG-16	177 566	MKR-16,5-PG-16	5 / 3.3-210
4	1 ²⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	
5	4 ³⁾	192 290	MKRS-23-B	192 290	MKRS-23-B	-	-	5 / 3.3-217
6	1	194 321	MKRT-23-16,5	194 321	MKRT-23-16,5	194 321	MKRT-23-16,5	5 / 3.3-214
7	3 ³⁾	-	-	-	-	192 290	MKRS-23-B	5 / 3.3-217
8	1	-	-	-	-	192 289	MKRS-16,5-B	
9	1	-	-	-	-	193 946	MKY-PG-21-2PG-16	5 / 3.3-214

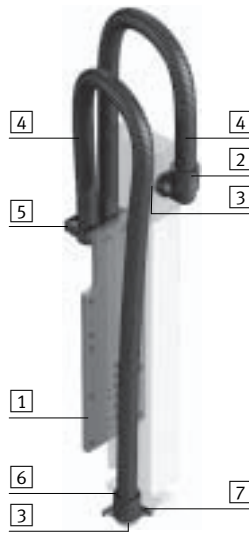
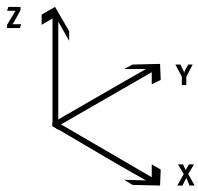
1) Length 200 mm
 2) Length depends on the stroke of the drive, 2 conduits are required with an intermediate position.
 3) In order to be able to mount the retaining clip MKRS, a clamping component (2x code I) must be selected as an accessory in the order for the linear module HMPL.

3-Dimensional gantries

Z modules

Mono/Duo system

Linear modules HMP



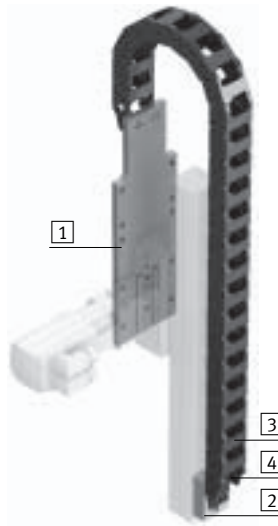
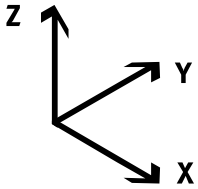
Bill of materials								
Type	HMBSZ-HMP-4		HMBSZ-HMP-5		HMBSZ-HMP-6		→ Page	
For drives	HMP-16		HMP-20		HMP-25			
System type	Mono 40 Duo 25		Duo 25		Duo 40			
Item	Quantity	Part No.	Type	Part No.	Type	Part No.		Type
[1]	1	539 374	HMVZ-3	539 374	HMVZ-3	539 377	HMVZ-6	5 / 3.3-199
[2]	1	177 577	MKRL-23-PG-21	177 578	MKRL-29-PG-29	177 578	MKRL-29-PG-29	5 / 3.3-213
[3]	2	177 599	MKM-PG-21	177 600	MKM-PG-29	177 600	MKM-PG-29	5 / 3.3-217
[4]	1 ¹⁾	177 567	MKR-23-PG-21	177 568	MKR-29-PG-29	177 568	MKR-29-PG-29	5 / 3.3-210
[5]	2	192 290	MKRS-23-B	192 291	MKRS-29-B	192 291	MKRS-29-B	5 / 3.3-217
[6]	1	177 572	MKRV-23-PG-21	177 573	MKRV-29-PG-29	177 573	MKRV-29-PG-29	5 / 3.3-212
[7]	1	193 124	HMZAS-PG-21	177 603	HMZAS-PG-29	177 603	HMZAS-PG-29	5 / 3.3-218

1) Length depends on the stroke of the drive

3-Dimensional gantries

Z modules

Mono/Duo system
Cantilever axes DGEA



Bill of materials							
Type	HMBSZ-DGEA-1		HMBSZ-DGEA-2		HMBSZ-DGEA-3		
For drives	DGEA-18		DGEA-25		DGEA-25		
System type	Mono 25 Mono 40 Duo 25		Duo 25		Duo 40		
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type
1	1	539 374	HMVZ-3	539 375	HMVZ-4	539 377	HMVZ-6
2	1	539 370	HMIZF-E03-DA18	539 371	HMIZF-E03-DA25	539 371	HMIZF-E03-DA25
3	1 ¹⁾	IGUS E2 medium 240.03.075.0 and 211 or KABELSCHLEPP MC 0320.40-01-77 and TS 0/n _T 2					-
4	1	IGUS E2 medium 2030.12.PZB or KABELSCHLEPP MC FA/MA					-

1) Length depends on the stroke of the drive

3-Dimensional gantries

Z modules

Mono/Duo system

Toothed belt axes DGE



Bill of materials									
Type	HMBSZ-DGE-1		HMBSZ-DGE-2		HMBSZ-DGE-3				
For drives	DGE-25-SP		DGE-40-SP		DGE-40-SP				
System type	Mono 40 Duo 25		Duo 25		Duo 40				
Item	Quantity	Part No.	Type	Part No.	Type	Part No.	Type	→ Page	
[1]	1	539 374	HMVZ-3	539 375	HMVZ-4	539 377	HMVZ-6	5 / 3.3-199	
[2]	1 ¹⁾	IGUS E2 medium 240.03.075.0 and 211 or KABELSCHLEPP MC 0320.40-01-77 and TS O/n _T 2							-
[3]	1	IGUS E2 medium 2030.12.PZB or KABELSCHLEPP MC FA/MA							-

1) Length depends on the stroke of the drive



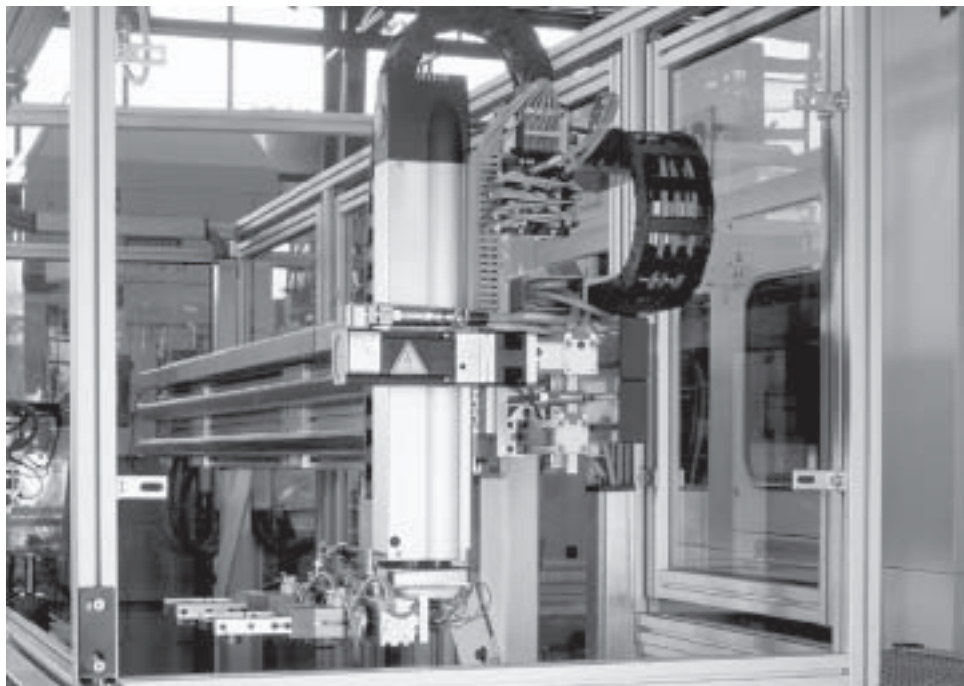
- Reliable guidance
- Rapid assembly and dismantling
- Low space requirement

Installation components, for long strokes

Key features

Installation components facilitate a clear-cut, safe layout of electrical cables and pneumatic tubing. They can be quickly dismantled and reassembled if servicing is required. They are mainly used for long strokes in gantries and cantilever axes for connecting protective trunking for the drives along the X- and Y-axes.

All the parts required for the combination are included in the scope of delivery



Base profile

HMIA



The base profile for protective trunking is ideally suited for the requirements of handling and assembly technology thanks to its lightweight, compact and functional design. This guarantees fast assembly of the protective trunking and profile via slot nut connections.

Installation kits

HMIXB-RP/FP



The installation kits permit easy and fast attachment of the protective trunking to the connectors of the multi-axis modular system. The kits are harmonised with the connectors for each standard so that the moving part of the protective trunking is always horizontal.

HMIXF-RP/FP



This means that cables and tubing are optimally routed over long strokes.

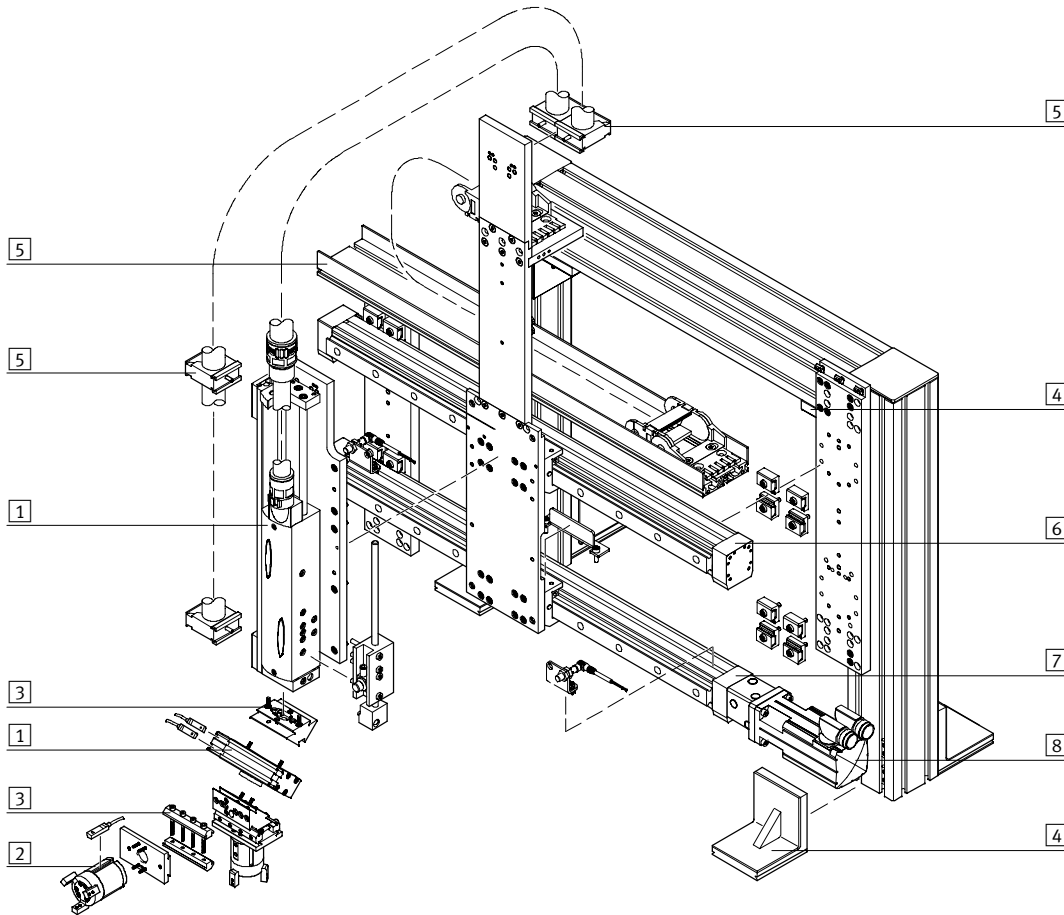
Accessories

- Slot nuts
- Protective trunking (IGUS/KABELSCHLEPP)

Installation components, for long strokes

System example

System product for handling and assembly technology










System elements and accessories			
	Brief description	→ Page	
1	Drives	Wide range of combinations options within handling and assembly technology	Volume 1
2	Grippers	Wide range of combination options within handling and assembly technology	Volume 1
3	Adapters	For drive/drive and drive/gripper combinations	Volume 5
4	Basic components	Profiles and profile connections as well as profile/drive connections	Volume 5
5	Installation components	For achieving a clear-cut, safe layout of electrical cables and tubing	Volume 5
6	Passive guide axes	To increase force and torque capacity in multi-axis modular systems	Band 5
7	Axes	Wide range of combinations options within handling and assembly technology	Volume 5
8	Motors	Servo and stepper motors, with or without gearing	Volume 5

Installation components, for long strokes

Selection aid









Installation kits and base profiles	Protective trunking			KABELSCHLEPP MC series		
	IGUS E2 medium series 240			Energy chain		
	Energy chain			Energy chain		
	240.03.075	240.05.100	240.07.100	0320.40-01-077	0320.60-01-100	0320.80-01-100
	Connecting piece			Connecting piece		
	2030.12.PZB	2050.12.PZB	2070.12.PZB	FA/MA	FA/MA	FA/MA
	Internal divider			Internal divider		
	211	211	211	TS 0-ηT2	TS 0-ηT2	TS 0-ηT2
Installation kit HMIZB-E03 	5 / 3.3-224			5 / 3.3-224		
Installation kit HMIZF-E03-DA18 	5 / 3.3-224			5 / 3.3-224		
Installation kit HMIZF-E03-DA25 	5 / 3.3-224			5 / 3.3-224		
Base profile HMIA-E05 		5 / 3.3-225			5 / 3.3-225	
Base profile HMIA-E07 			5 / 3.3-225			5 / 3.3-225
Installation kit HMIO-AP-1 		5 / 3.3-225			5 / 3.3-225	
Installation kit HMIO-AP-2 		5 / 3.3-225			5 / 3.3-225	

Installation components, for long strokes

Selection aid



Installation kits and base profiles	Protective trunking			KABELSCHLEPP MC series		
	IGUS E2 medium series 240			Energy chain		
	Energy chain			Energy chain		
	240.03.075	240.05.100	240.07.100	0320.40-01-077	0320.60-01-100	0320.80-01-100
	Connecting piece			Connecting piece		
	2030.12.PZB	2050.12.PZB	2070.12.PZB	FA/MA	FA/MA	FA/MA
	Internal divider			Internal divider		
	211	211	211	TS 0-ηT2	TS 0-ηT2	TS 0-ηT2
Installation kit HMIXF-RP/FP 			5 / 3.3-225			5 / 3.3-225
Installation kit HMIYF-RF/DL25 			5 / 3.3-228			5 / 3.3-228
Installation kit HMIYF-RF/DL40 			5 / 3.3-228			5 / 3.3-228
Installation kit HMIM-LP 	5 / 3.3-226			5 / 3.3-226		
Installation kit HMID-LP 	5 / 3.3-226			5 / 3.3-226		
Installation kit HMIXB-RP/FP 	5 / 3.3-227			5 / 3.3-227		

Installation components, for long strokes

Technical data

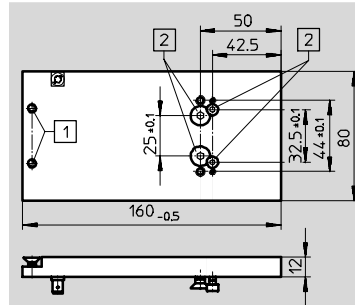


Installation kit HMIZB-E03

For connecting protective trunking and protective conduits to the Z-axis in linear gantries

- Cantilever axes DGEA
- Spindle axes DGE
- Linear modules HMP and HMPL
- Mini slides SLT
- Fastening material and earthing kits are included in delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



- 1 HMIM-LP/HMID-LP
- 2 Protective trunking

Technical data and ordering codes

CRC ¹⁾	Weight [g]	Part No.	Type
2	410	539 365	HMIZB-E03

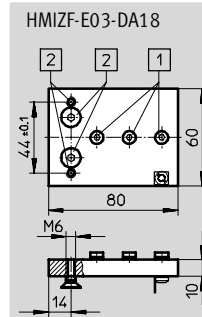
1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Installation kit HMIZF-E03

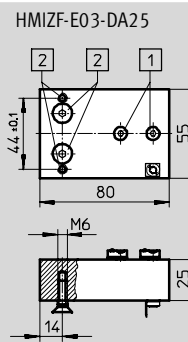
For connecting protective trunking to the Z-axis in gantries

- Cantilever axes DGEA
- Fastening material and earthing kits are included in delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



- 1 DGEA-18
- 2 Protective trunking



- 1 DGEA-25
- 2 Protective trunking

Technical data and ordering codes

CRC ¹⁾	Weight [g]	Part No.	Type
2	130	539 370	HMIZF-E03-DA18
	300	539 371	HMIZF-E03-DA25

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Installation components, for long strokes

Technical data



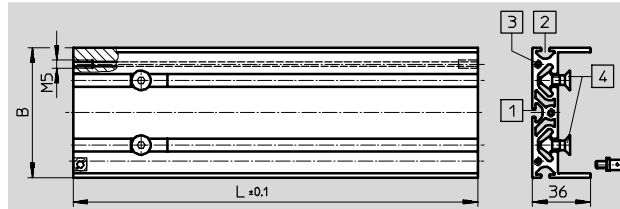
Base profile HMIA



For mounting and routing the protective trunking in gantries along the X- and Y-axes

■ Fastening material and earthing kits are included in delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



- 1 HMIXB-RP/FP
- 2 HMVM-LP-DL25/40, HMVD-LP-DL25/40
- 3 HMVV-RP/FP
- 4 Protective trunking

The length L depends on the stroke length and must be specified with the order (L_{max.} = 3 m).

Technical data and ordering codes				
B	CRC ¹⁾	Weight per metre	Part No.	Type
[mm]		[g]		
80	2	2120	539 378	HMIA-E05
100		2340	539 379	HMIA-E07

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

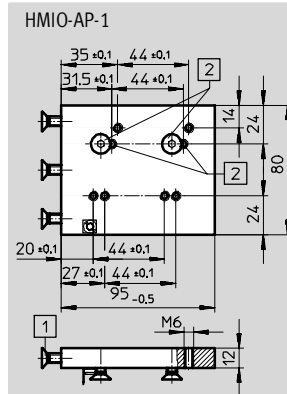
Installation kit HMIO-AP



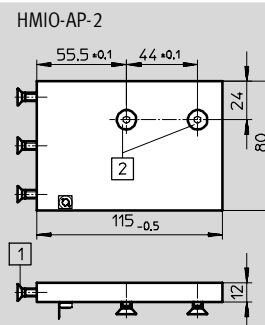
For mounting the protective trunking along the Y-axis in linear gantries

■ Fastening material and earthing kits are included in delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



- 1 HMVS-DL25, HMVS-DL40
HMIM-LD
HMID-LD
- 2 Protective trunking



- 1 HMVS-DL40
HMID-LD
- 2 Protective trunking

Technical data and ordering codes			
CRC ¹⁾	Weight	Part No.	Type
	[g]		
2	240	539 366	HMIO-AP-1
	300	540 121	HMIO-AP-2

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Installation components, for long strokes

Technical data



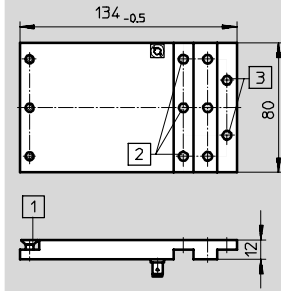
Installation kit HMIM-LP



Extension plate for linear gantries for height compensation in mono systems and systems with end position controller SPC-11

■ Fastening material and earthing kits are included in delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



- 1 HMVS-DL25, HMVS-DL40
- 2 HMIO-AP-1
- 3 HMIZB-E03

Technical data and ordering codes

CRC ¹⁾	Weight [g]	Part No.	Type
2	300	539 364	HMIM-LP

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

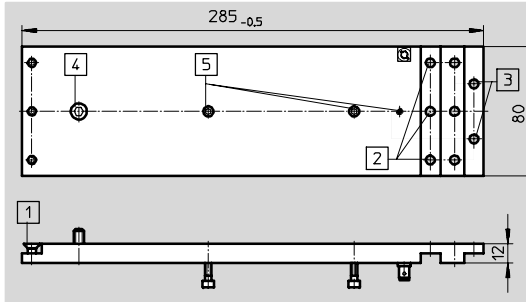
Installation kit HMID-LP



Extension plate for linear gantries for height compensation in duo systems

■ Fastening material and earthing kits are included in delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



- 1 HMVS-DL25, HMVS-DL40
- 2 HMIO-AP-1, HMIO-AP-2
- 3 HMIZB-E03
- 4 HMVZ
- 5 MPV-E/A08-M8,
MPV-E/A12-M8

Technical data and ordering codes

CRC ¹⁾	Weight [g]	Part No.	Type
2	700	539 363	HMID-LP

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Installation components, for long strokes

Technical data

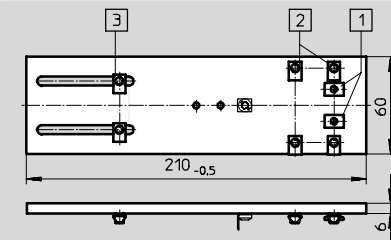
Installation kit HMIXB-RP/FP



For mounting the base profile
HMIA-E07 along the X-axis in
3-dimensional gantries

■ Fastening material and earthing
kits are included in delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



- 1 DGE-25
- 2 DGE-40
- 3 HMIA-E07

Technical data and ordering codes

CRC ¹⁾	Weight	Part No.	Type
	[g]		
2	200	539 654	HMIXB-RP/FP

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

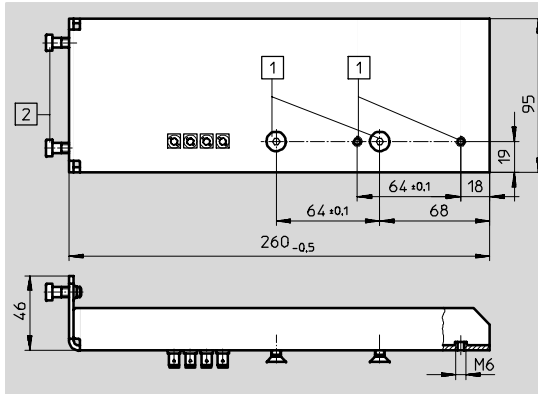
Installation kit HMIXF-RP/FP



For mounting the protective trunking
along the X-axis in 3-dimensional
gantries

■ Fastening material and earthing
kits are included in delivery

Material:
Galvanised steel
Free of copper, PTFE and silicone



- 1 Protective trunking
- 2 HMVV-RP/FP

Technical data and ordering codes

CRC ¹⁾	Weight	Part No.	Type
	[g]		
2	330	539 658	HMIXF-RP/FP

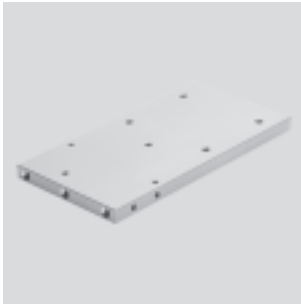
1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Installation components, for long strokes

Technical data



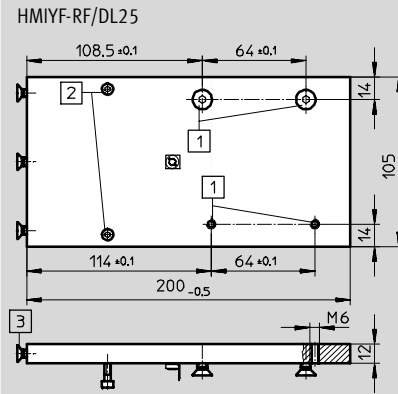
Installation kit HMIYF-RF/DL



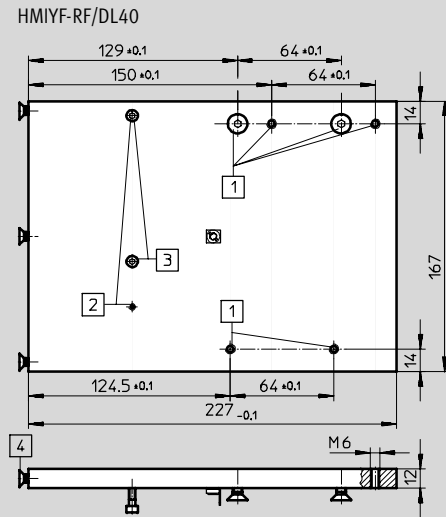
For mounting the protective trunking along the Y-axis in 3-dimensional gantries

■ Fastening material and earthing kits are included in delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



- 1 Protective trunking
- 2 MPV-E/A08-M8
- 3 HMVS-DL25



- 1 Protective trunking
- 2 MPV-E/A12-M8
- 3 MPV-E/A08-M8
- 4 HMVS-DL40

Technical data and ordering codes			
CRC ¹⁾	Weight	Part No.	Type
	[g]		
2	700	539 659	HMIYF-RF/DL25
	1200	539 660	HMIYF-RF/DL40

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.