



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

Multi-axis modular systems

Key features








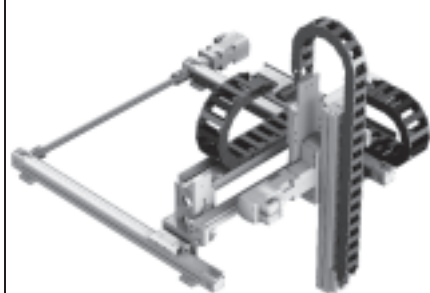
The concept

The multi-axis modular system for handling and assembly technology includes basic, connecting and installation components for assembly. These standardised axis combinations are the product of over ten years' experience in designing 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 and can thus be combined.

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

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

Selection matrix		
Pick & place	Linear gantries	Three-dimensional gantries
Pneumatic		Pneumatic/electrical
 <p>→4</p>	 <p>→24</p>	 <p>→44</p>
Pneumatic with end-position controller SPC11 (Soft Stop)		
	 <p>→24</p>	
Electrical with spindle or toothed belt axis		
	 <p>→24</p>	 <p>→44</p>

Multi-axis modular systems

Key features

Pick & place



Linear gantries



Three-dimensional gantries

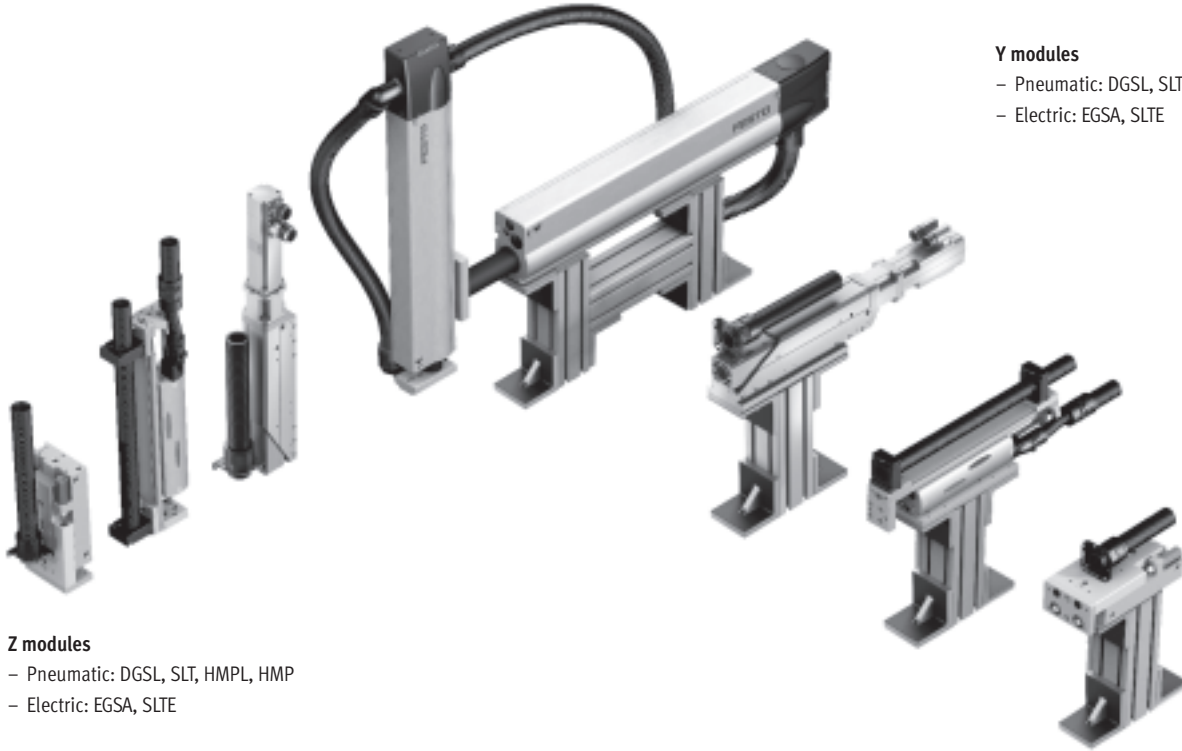


Pick & place

Key features

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Y and Z modules



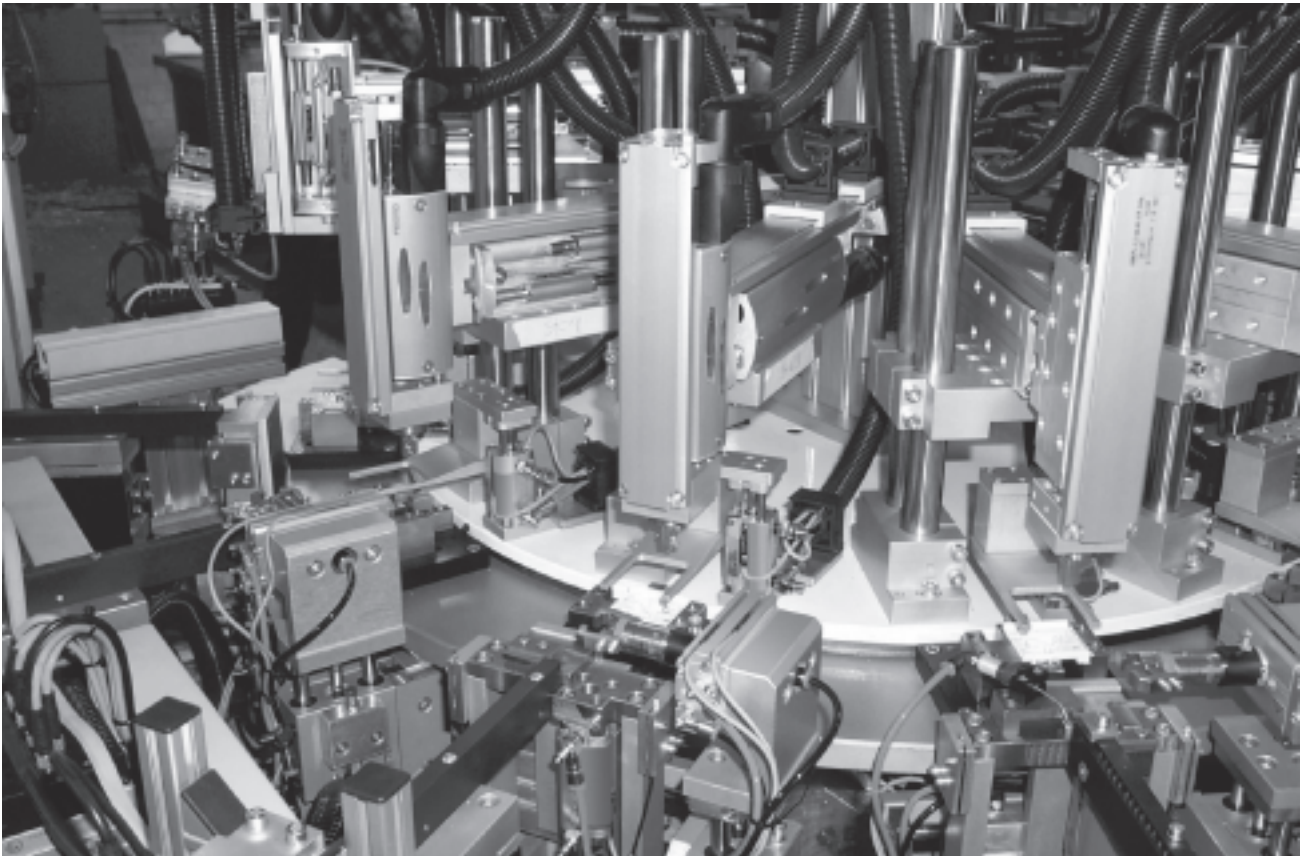
Y modules

- Pneumatic: DGSL, SLT, HMPL, HMP
- Electric: EGSA, SLTE

Z modules

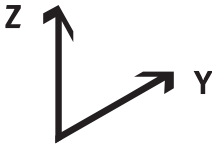







- Pneumatic: DGSL, SLT, HMPL, HMP
- Electric: EGSA, SLTE

Application



Pick & place






Product range overview

Selection aid							
Function	DGSL/DGSL	SLT(E)/SLT(E)	HMPL/HMPL	EGSA/EGSA	HM.../DGSL, SLT(E)	HM.../HMPL	HM.../HMP
							
Y-axis	DGSL	SLT(E)	HMPL	EGSA	HMP	HMP	HMP
Drive type	Pneumatic/electric						
Options	Shock absorber, adjustable/non-adjustable cushioning	Shock absorber, adjustable/non-adjustable cushioning	Intermediate position, clamping unit	Parallel kit for motor attachment	Intermediate position		
Z-axis	DGSL	SLT(E)	HMPL	EGSA/DGSL	DGSL, SLT(E)	HMPL	HMP
Drive type	Pneumatic/electric						
Options	Shock absorber, adjustable/non-adjustable cushioning	Shock absorber, adjustable/non-adjustable cushioning	Intermediate position, clamping unit	Parallel kit for motor attachment	Shock absorber, adjustable/non-adjustable cushioning	Intermediate position, clamping unit	
Effective load [kg]							
1	■	■	■	■	■	■	■
2	■	■	■	■	■	■	■
3	■	■	■	■	■	■	■
4	■	-	-	-	■	■	■
6	-	-	-	-	■	■	■
10	-	-	-	-	-	-	■
→ Page/Internet	6						

Pick & place





Selection aid for basic, connecting and installation components

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Y-axis				
Function	DGSL/DGSL	SLT/SLT	HMPL/HMPL	EGSA/EGSA, DGSL
				
Pneumatic drives	Stroke [mm]	Type		
DGSL-12	30 ... 150	HMBSY-DGSL-1 → 10	-	-
DGSL-16	30 ... 150	HMBSY-DGSL-1 → 10	-	-
DGSL-20	30 ... 100	HMBSY-DGSL-2 → 10	-	-
	125 ... 200	HMBSY-DGSL-3 → 10	-	-
DGSL-25	30 ... 100	HMBSY-DGSL-4 → 10	-	-
	125 ... 200	HMBSY-DGSL-5 → 10	-	-
SLT-16	30 ... 150	-	HMBSY-SLT-1 → 11	-
SLT-20	30 ... 100	-	HMBSY-SLT-2 → 11	-
	125 ... 200	-	HMBSY-SLT-3 → 11	-
SLT-25	30 ... 100	-	HMBSY-SLT-4 → 11	-
	125 ... 200	-	HMBSY-SLT-5 → 11	-
HMPL-16	50 ... 160	-	-	HMBSY-HMPL-1 HMBSY-HMPL-2 → 12
HMPL-20	50 ... 200	-	-	HMBSY-HMPL-3 HMBSY-HMPL-4 → 12
Electric drives	Stroke [mm]	Type		
EGSA-50	100	-	-	HMBSY-EGSA-1 → 13
EGSA-60	100 ... 300	-	-	HMBSY-EGSA-1 → 13

Pick & place

Selection aid for basic, connecting and installation components

Y-axis				
Function	HMP, DGSL, SLT	HMP, HMPL	HMP, HMP	
				
Pneumatic drives	Type			
Stroke [mm]				
HMP-16	150 ... 250	HMBSY-HMP-1 → 14	HMBSY-HMP-1 → 14	–
	320	HMBSY-HMP-2 → 14	HMBSY-HMP-2 → 14	–
HMP-20	100 ... 250	HMBSY-HMP-3 → 14	HMBSY-HMP-3 → 14	HMBSY-HMP-3 → 14
	320 ... 400	HMBSY-HMP-4 → 14	HMBSY-HMP-4 → 14	HMBSY-HMP-4 → 14
HMP-25	100 ... 200	HMBSY-HMP-5 → 15	–	HMBSY-HMP-5 → 15
	250 ... 400	HMBSY-HMP-6 → 15	–	HMBSY-HMP-6 → 15
HMP-32	100 ... 200	–	–	HMBSY-HMP-7 → 15
	250 ... 400	–	–	HMBSY-HMP-8 → 15

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 parts list can be found on the specified page.

Y-axis: HMBSY-HMP-1
→ 14
Z-axis: HMBSZ-HMPL-3 or 4
→ 22







Step 2
The necessary basic, connecting and installation components can be found in the parts list on the specified page.

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

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





Pick & place

Selection aid for basic, connecting and installation components

Z-axis					
Function	DGSL/DGSL	SLT/SLT	HMPL/HMPL	EGSA/DGSL, EGSA	HMP, DGSL
					
Pneumatic drives	Type				
DGSL-10	HMBSZ-DGSL-1 → 16	-	-	HMBSZ-DGSL-10 → 18	-
DGSL-12	HMBSZ-DGSL-9 →	-	-	HMBSZ-DGSL-11/-12 → 18	-
DGSL-16	HMBSZ-DGSL-2 → 16	-	-	HMBSZ-DGSL-12 → 18	HMBSZ-DGSL-4 → 17
DGSL-20	HMBSZ-DGSL-3 → 16	-	-	-	HMBSZ-DGSL-5 → 17
DGSL-25	-	-	-	-	HMBSZ-DGSL-6 → 17
SLT-10	-	HMBSZ-SLT-1 → 19	-	-	-
SLT-16	-	HMBSZ-SLT-2 → 19	-	-	-
SLT-20	-	HMBSZ-SLT-3 → 19	-	-	-
SLT-25	-	-	-	-	-
HMPL-12	-	-	HMBSZ-HMPL-1 HMBSZ-HMPL-2 → 22	-	-
HMPL-16	-	-		-	-
HMPL-20	-	-		-	-
HMP-16	-	-	-	-	-
HMP-20	-	-	-	-	-
HMP-25	-	-	-	-	-
Electric drives	Type				
EGSA-50	-	-	-	HABSZ-EGSA-1 → 21	-

Pick & place

Selection aid for basic, connecting and installation components

Z-axis			
Function	HMP, SLT	HMP, HMPL	HMP, HMP
			
Pneumatic drives	Type		
SLT-16	HMBSZ-SLT-4 → 20	–	–
SLT-20	HMBSZ-SLT-5 → 20	–	–
SLT-25	HMBSZ-SLT-6 → 20	–	–
HMPL-16	–	HMBSZ-HMPL-3 HMBSZ-HMPL-4 → 22	–
HMPL-20	–		–
HMP-16	–	–	HMBSZ-HMP-1 → 23
HMP-20	–	–	HMBSZ-HMP-2 → 23
HMP-25	–	–	HMBSZ-HMP-3 → 23

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 parts list can be found on the specified page.

Y-axis: HMBSY-HMP-1
→ 14
Z-axis: HMBSZ-HMPL-3 or 4
→ 22

Step 2
The necessary basic, connecting and installation components can be found in the parts list on the specified page.

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

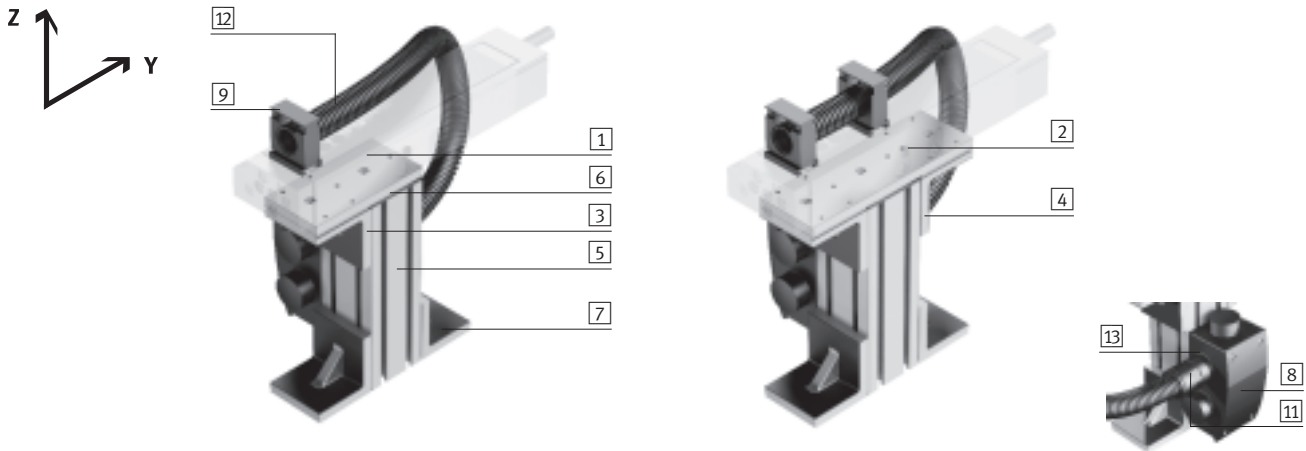
Step 3
Technical data on the basic, connecting and installation components can be found on the specified pages. Further accessories for the selected drives, for example proximity sensors, centring sleeves, etc. are listed in the documentation for the drives.

Pick & place

Y modules

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Mini slides DGSL



Parts list												
Type		HMBSY-DGSL-1	HMBSY-DGSL-2	HMBSY-DGSL-3	HMBSY-DGSL-4	HMBSY-DGSL-5						
	For drives	DGSL-12/-16		DGSL-20		DGSL-25				→ Page/ Internet		
	Stroke [mm]	30 ... 150		30 ... 100		125 ... 200		30 ... 100			125 ... 200	
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	Part No.	Type	Part No.	Type	
1	1	539 968	HMVY-1	539 969	HMVY-2	–	–	539 969	HMVY-2	–	–	87
2	1	–	–	–	–	539 970	HMVY-3	–	–	539 970	HMVY-3	
3	1	175 967	HMBV-ND	175 967	HMBV-ND	–	–	175 967	HMBV-ND	–	–	73
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	70
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	70
7	2	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	72
8	1	175 126	HMZV	175 126	HMZV	175 126	HMZV	175 126	HMZV	175 126	HMZV	103
9	1	192 289	MKRS-16,5-B	192 290	MKRS-23-B	192 290	MKRS-23-B	192 290	MKRS-23-B	192 290	MKRS-23-B	109
		548 803	ZBV-M5-7	548 804	ZBV-M6-9	548 804	ZBV-M6-9	548 804	ZBV-M6-9	548 804	ZBV-M6-9	79
11	1	177 571	MKRV-16,5-PG-16	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	104
12	1 ²⁾	177 566	MKR-16,5-PG-16	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	102
		193 949	MKA-PG-29-PG-16-KU	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	107

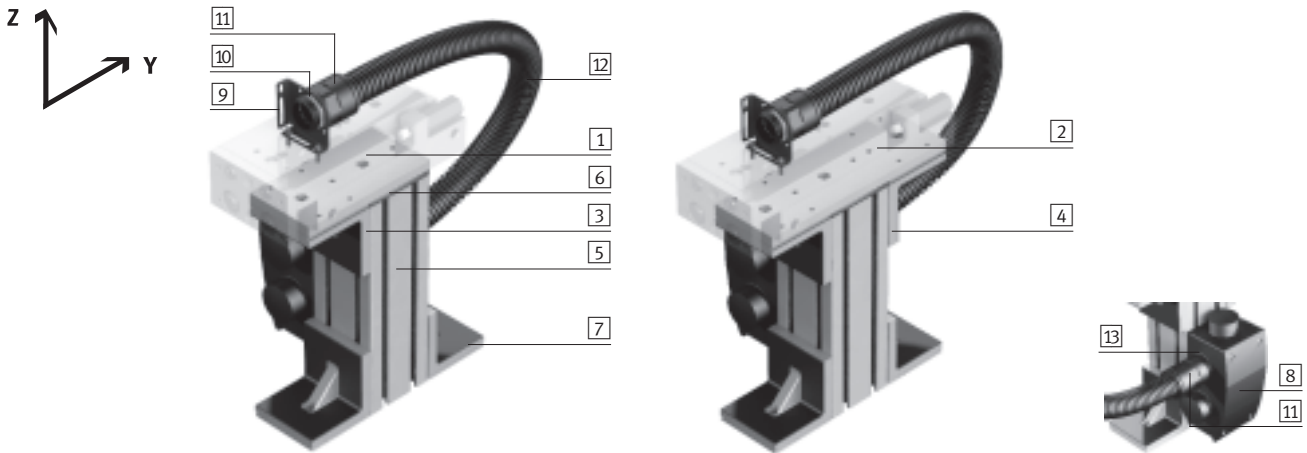
1) Height max. 500 mm

2) Length depends on the stroke of the drive

Pick & place

Y modules

Mini slides SLT



Parts list												
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				→ Page/ Internet		
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	Part No.	Type	Part No.	Type	
1	1	539 968	HMVY-1	539 969	HMVY-2	–		539 969	HMVY-2	–		87
2	1	–		–		539 970	HMVY-3	–		539 970	HMVY-3	
3	1	175 967	HMBV-ND	175 967	HMBV-ND	–		175 967	HMBV-ND	–		73
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	70
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	70
7	2	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	72
8	1	175 126	HMZV	175 126	HMZV	175 126	HMZV	175 126	HMZV	175 126	HMZV	103
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	110
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	109
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	104
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	102
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	107

1) Height max. 500 mm

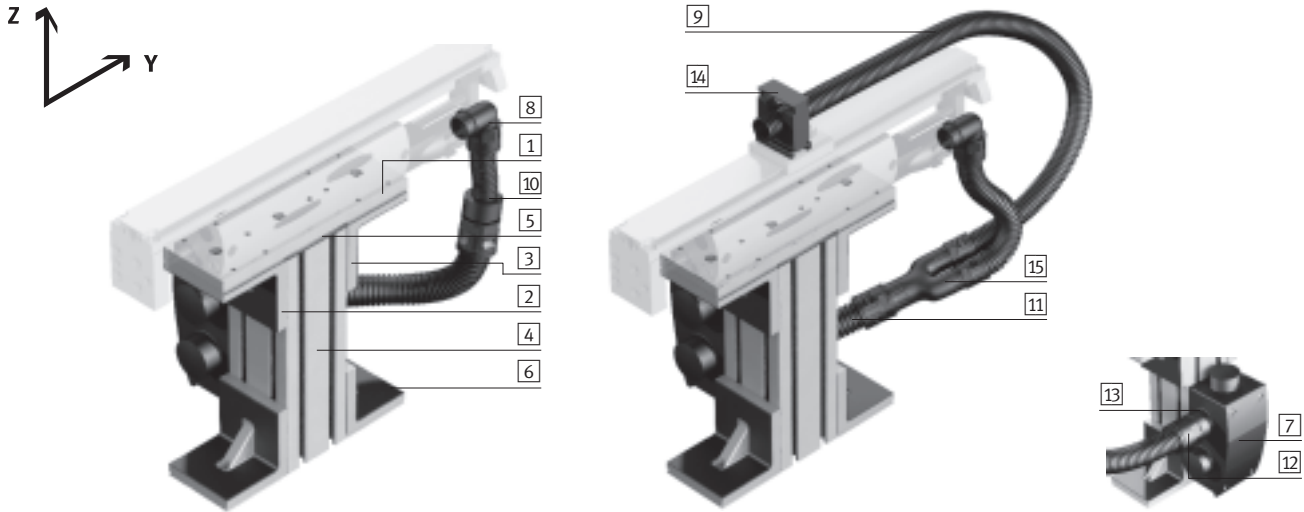
2) Length depends on the stroke of the drive

Pick & place

Y modules

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Linear modules HMPL



Parts list										
Type		HMBSY-HMPL-1	HMBSY-HMPL-2	HMBSY-HMPL-3	HMBSY-HMPL-4					
For drives		HMPL-16		HMPL-20						
		Without intermediate position		With intermediate position		Without intermediate position		With intermediate position		→ Page/ Internet
Item	Pieces	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	87
[2]	1	175 967	HMBV-ND	175 967	HMBV-ND	-	-	-	-	73
[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	70
[5]	1	175 965	HMBSA-80/80	175 965	HMBSA-80/80	175 965	HMBSA-80/80	175 965	HMBSA-80/80	70
[6]	2	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	72
[7]	1	175 126	HMZV	175 126	HMZV	175 126	HMZV	175 126	HMZV	103
[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	104
[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	102
[10]	1	194 321	MKRT-23-16,5	-	-	194 321	MKRT-23-16,5	-	-	106
[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	102
[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	104
[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	107
[14]	1 ³⁾	-	-	192 289	MKRS-16,5-B	-	-	192 289	MKRS-16,5-B	109
[15]	1	-	-	193 946	MKY-PG-21-2PG-16	-	-	193 946	MKY-PG-21-2PG-16	106

1) Height max. 500 mm

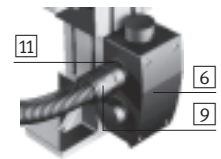
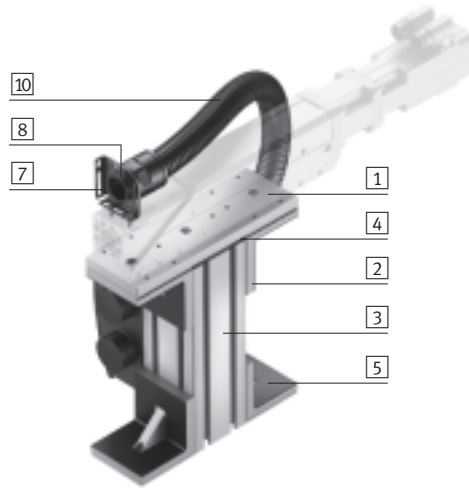
2) Length depends on the stroke of the drive, 2 conduits are required with an intermediate position

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

Pick & place

Y modules

Cantilever axes EGSA



Parts list					
Type		HMBSY-EGSA-1		HMBSY-EGSA-1	
For drives		EGSA-50		EGSA-60	
Stroke [mm]		100		100 ... 300	
Item	Pieces	Part No.	Type	Part No.	Type
1	1	560 020	HMVY-4	560 020	HMVY-4
2	2	175 967	HMBV-ND	175 967	HMBV-ND
3	1 ¹⁾	175 958	HMBS-80/80	175 958	HMBS-80/80
4	1	175 965	HMBSA-80/80	175 965	HMBSA-80/80
5	2	175 951	HMBF-DB	175 951	HMBF-DB
6	1	175 126	HMZV	175 126	HMZV
7	1	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21
8	1	177 599	MKM-PG-21	177 599	MKM-PG-21
9	2	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21
10	1 ²⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21
11	1	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21

1) Height max. 500 mm

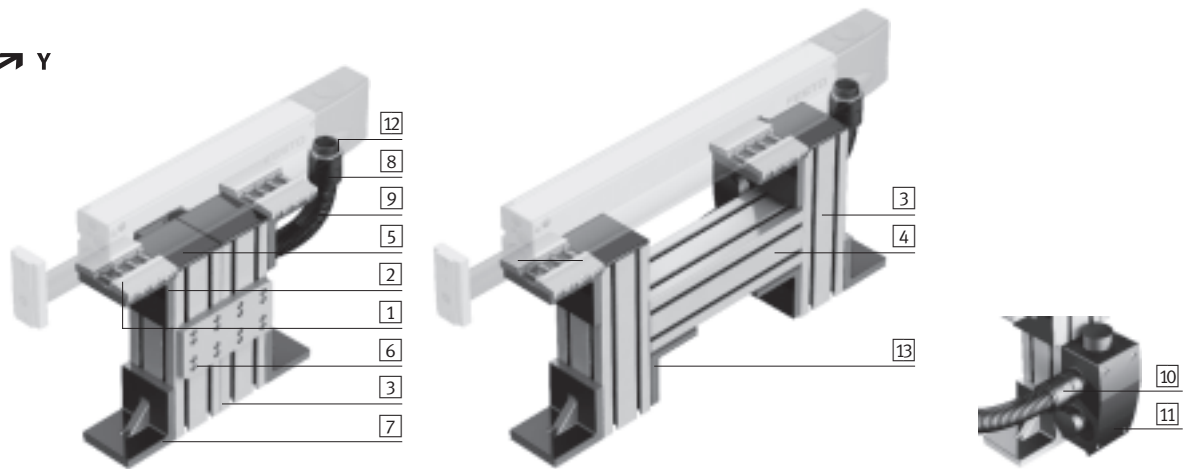
2) Length depends on the stroke of the drive

Pick & place

Y modules

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Linear modules HMP



Parts list								
Type	HMBSY-HMP-1		HMBSY-HMP-2		HMBSY-HMP-3		HMBSY-HMP-4	
For drives	HMP-16			HMP-20				
Stroke [mm]	150 ... 250		320		100 ... 250		320 ... 400	
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	→ Page/ Internet
[1]	2	175 975	HMBK-WS	175 975	HMBK-WS	175 975	HMBK-WS	87
[2]	2	175 967	HMBV-ND	175 967	HMBV-ND	175 967	HMBV-ND	73
[3]	2 ¹⁾	175 958	HMBS-80/80	175 958	HMBS-80/80	175 958	HMBS-80/80	70
[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	70
[6]	1	175 972	HMBSV	–		175 972	HMBSV	71
[7]	2	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	72
[8]	2	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 573	MKRV-29-PG-29	104
[9]	1 ³⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 568	MKR-29-PG-29	102
[10]	1	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21	–	–	107
[11]	1	175 126	HMZV	175 126	HMZV	175 126	HMZV	103
[12]	1	177 599	MKM-PG-21	177 599	MKM-PG-21	177 600	MKM-PG-29	109
[13]	2	–		178 228	HMBSW	–	178 228 HMBSW	71

1) Height max. 500 mm

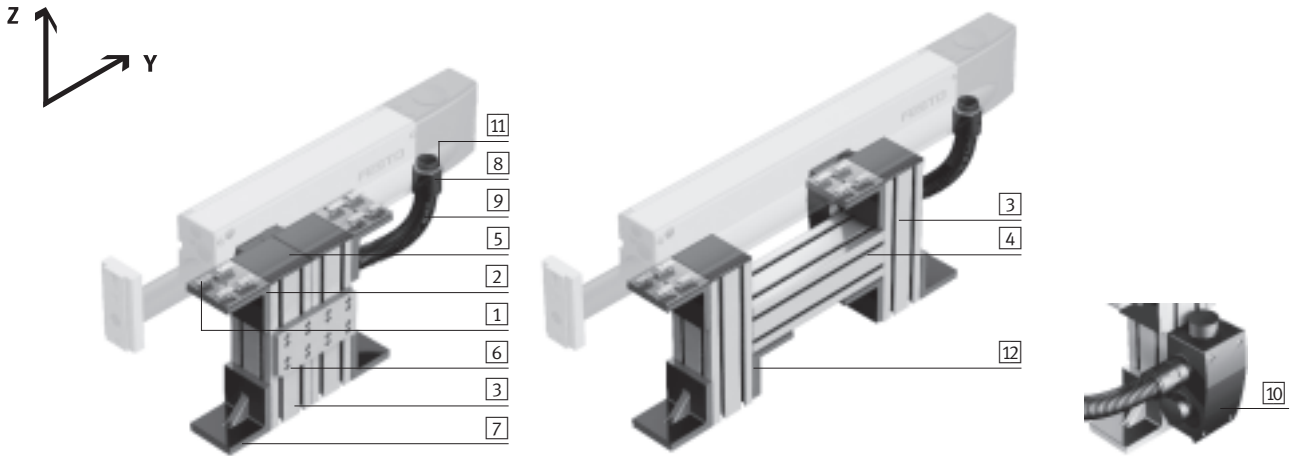
2) Length 250 mm

3) Length depends on the stroke of the drive

Pick & place

Y modules

Linear modules HMP



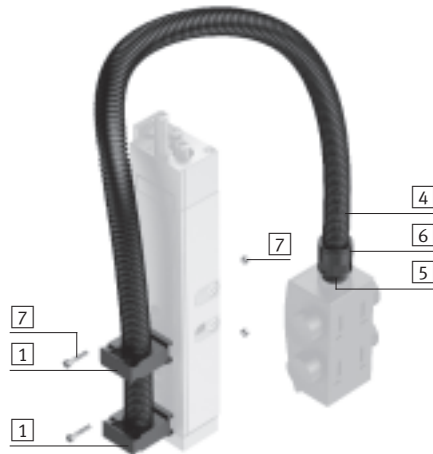
Parts list										
Type		HMBSY-HMP-5		HMBSY-HMP-6		HMBSY-HMP-7		HMBSY-HMP-8		→ Page/ Internet
For drives		HMP-25				HMP-32				
Stroke [mm]		100 ... 200		250 ... 400		100 ... 200		250 ... 400		
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	Part No.	Type	
1	2	175 970	HMBK-ND	175 970	HMBK-ND	175 970	HMBK-ND	175 970	HMBK-ND	86
2	2	175 967	HMBV-ND	175 967	HMBV-ND	175 967	HMBV-ND	175 967	HMBV-ND	73
3	2 ¹⁾	175 958	HMBS-80/80	175 958	HMBS-80/80	175 958	HMBS-80/80	175 958	HMBS-80/80	70
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	175 965	HMBSA-80/80	70
6	1	175 972	HMBSV	-		175 972	HMBSV	-		71
7	2	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	175 951	HMBF-DB	72
8	2	177 573	MKRV-29-PG-29	177 573	MKRV-29-PG-29	177 573	MKRV-29-PG-29	177 573	MKRV-29-PG-29	104
9	1 ³⁾	177 568	MKR-29-PG-29	177 568	MKR-29-PG-29	177 568	MKR-29-PG-29	177 568	MKR-29-PG-29	102
10	1	175 126	HMZV	175 126	HMZV	175 126	HMZV	175 126	HMZV	103
11	1	177 600	MKM-PG-29	177 600	MKM-PG-29	177 600	MKM-PG-29	177 600	MKM-PG-29	109
12	2	-		178 228	HMBSW	-		178 228	HMBSW	71

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

Pick & place

Z modules

Mini slides DGSL



Parts list						
Type		HMBSZ-DGSL-1	HMBSZ-DGSL-9	HMBSZ-DGSL-2	HMBSZ-DGSL-3	
For drives		DGSL-10	DGSL-12	DGSL-16	DGSL-20	
Item	Pieces	Part No. Type	Part No. Type	Part No. Type	Part No. Type	→ Page/Internet
1	2	192 289 MKRS-16,5-B	192 289 MKRS-16,5-B	192 289 MKRS-16,5-B	192 290 MKRS-23-B	110
		M4x12 DIN 912	548 803 ZBV-M5-7	548 803 ZBV-M5-7	548 804 ZBV-M6-9	79
4	1 ¹⁾	177 566 MKR-16,5-PG-16	177 566 MKR-16,5-PG-16	177 566 MKR-16,5-PG-16	177 567 MKR-23-PG-21	102
5	1	193 949 MKA-PG-29-PG-16-KU	193 949 MKA-PG-29-PG-16-KU	193 949 MKA-PG-29-PG-16-KU	177 595 MKA-PG-29-PG-21	107
6	1	177 571 MKRV-16,5-PG-16	177 571 MKRV-16,5-PG-16	177 571 MKRV-16,5-PG-16	177 572 MKRV-23-PG-21	104
7	1	548 803 ZBV-M5-7	–	548 804 ZBV-M6-9	–	79
		–	186 717 ZBH-7 ²⁾	–	150 927 ZBH-9 ²⁾	78
7	2	–	M5x14 DIN 912	–	M6x20 DIN 912	–

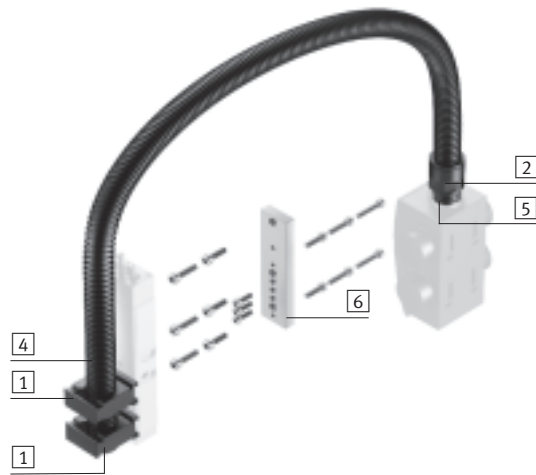
1) Length depends on the stroke of the drive

2) Centring sleeves are included in the scope of delivery of the mini slide DGSL

Pick & place

Z modules

Mini slides DGSL



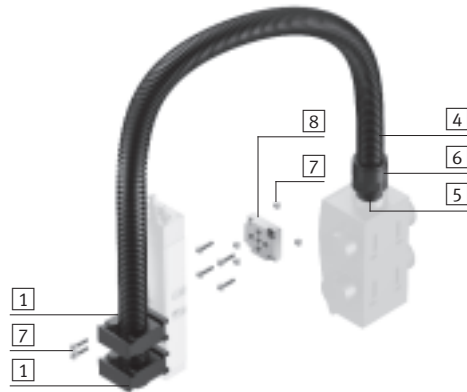
Parts list						
Type	HMBSZ-DGSL-4		HMBSZ-DGSL-5		HMBSZ-DGSL-6	→ Page/Internet
For drives	DGSL-16		DGSL-20		DGSL-25	
Item	Pieces	Part No.	Type	Part No.	Type	
1	2	192 289	MKRS-16,5-B	192 290	MKRS-23-B	109
		548 803	ZBV-M5-7	548 804	ZBV-M6-9	79
2	1	177 571	MKRV-16,5-PG-16	177 572	MKRV-23-PG-21	104
4	1 ¹⁾	177 566	MKR-16,5-PG-16	177 567	MKR-23-PG-21	102
5	1	193 949	MKA-PG-29-PG-16-KU	177 595	MKA-PG-29-PG-21	107
6	1	548 779	HMSV-49	548 779	HMSV-49	10

1) Length depends on the stroke of the drive

Pick & place

Z modules

Mini slides DGSL



Parts list					
Type		HMBSZ-DGSL-10	HMBSZ-DGSL-11	HMBSZ-DGSL-12	
For drives		DGSL-10	DGSL-12	DGSL-12/-16	
Item	Pieces	Part No. Type	Part No. Type	Part No. Type	→ Page/Internet
1	2	192 289 MKRS-16,5-B	192 289 MKRS-16,5-B	192 289 MKRS-16,5-B	110
		M4x12 DIN 912	548 803 ZBV-M5-7	548 803 ZBV-M5-7	79
4	1 ¹⁾	177 566 MKR-16,5-PG-16	177 566 MKR-16,5-PG-16	177 566 MKR-16,5-PG-16	102
5	1	193 949 MKA-PG-29-PG-16-KU	193 949 MKA-PG-29-PG-16-KU	193 949 MKA-PG-29-PG-16-KU	107
6	1	177 571 MKRV-16,5-PG-16	177 571 MKRV-16,5-PG-16	177 571 MKRV-16,5-PG-16	104
7	1	548 803 ZBV-M5-7	-	548 804 ZBV-M6-9	79
	1	-	186 717 ZBH-7 ²⁾	-	78
	2	-	M5x14 DIN 912	-	-
8	1	560 017 HMSV-61	560 017 HMSV-61	560 018 HMSV-62	39

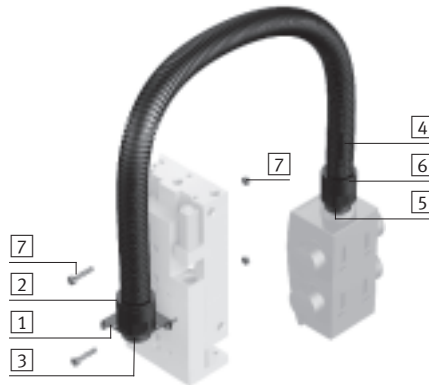
1) Length depends on the stroke of the drive

2) Centring sleeves are included in the scope of delivery of the mini slide DGSL

Pick & place

Z modules

Mini slides SLT



Parts list					
Type		HMBSZ-SLT-1	HMBSZ-SLT-2	HMBSZ-SLT-3	
For drives		SLT-10	SLT-16	SLT-20	
Item	Pieces	Part No. Type	Part No. Type	Part No. Type	→ Page/Internet
[1]	1	192 289 MKRS-16,5-B	193 124 HMZAS-PG-21	193 124 HMZAS-PG-21	110
[2]	1	-	177 572 MKRV-23-PG-21	177 572 MKRV-23-PG-21	104
[3]	1	-	177 599 MKM-PG-21	177 599 MKM-PG-21	109
[4]	1 ¹⁾	177 566 MKR-16,5-PG-16	177 567 MKR-23-PG-21	177 567 MKR-23-PG-21	102
[5]	1	193 949 MKA-PG-29-PG-16-KU	177 595 MKA-PG-29-PG-21	177 595 MKA-PG-29-PG-21	107
[6]	1	177 571 MKRV-16,5-PG-16	177 572 MKRV-23-PG-21	177 572 MKRV-23-PG-21	104
[7]	- ²⁾	186 717 ZBH-7	150 927 ZBH-9	189 653 ZBH-12	-
	2	M4x25 DIN 912	M5x30 DIN 912	M6x40 DIN 912	-

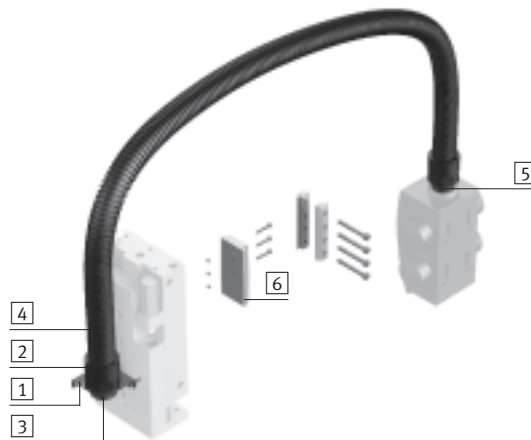
1) Length depends on the stroke of the drive

2) Centring sleeves are included in the scope of delivery of the mini slide SLT.

Pick & place

Z modules

Mini slides SLT



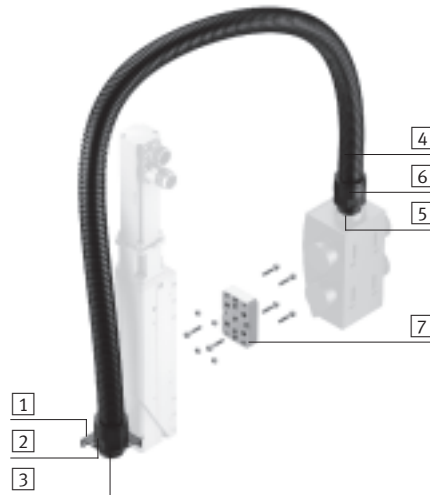
Parts list						
Type		HMBSZ-SLT-4	HMBSZ-SLT-5	HMBSZ-SLT-6		
For drives		SLT-16	SLT-20	SLT-25		
Item	Pieces	Part No.	Type	Part No.	Type	→ Page/Internet
1	1	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	110
2	2	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	104
3	1	177 599	MKM-PG-21	177 599	MKM-PG-21	109
4	1 ¹⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	102
5	1	177 595	MKA-PG-29-PG-21	177 595	MKA-PG-29-PG-21	107
6	1	178 331	HMSV-36	178 332	HMSV-37	11

1) Length depends on the stroke of the drive

Pick & place

Z modules

Cantilever axes EGSA



Parts list				
Type	HMBSZ-EGSA-1			→ Page/Internet
For drives	EGSA-50			
Item	Pieces	Part No.	Type	
1	1	193 124	HMZAS-PG-21	110
2	1	177 572	MKRV-23-PG-21	104
3	1	177 599	MKM-PG-21	109
4	1 ¹⁾	177 567	MKR-23-PG-21	102
5	1	177 595	MKA-PG-29-PG-21	107
6	1	177 572	MKRV-23-PG-21	104
7	1	560 019	HMSV-63	39

1) Length depends on the stroke of the drive

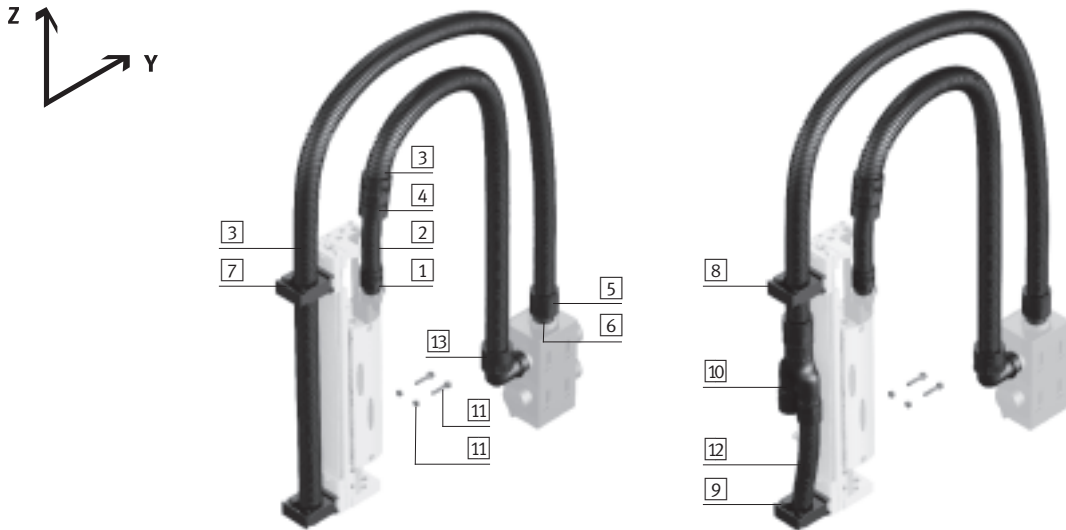
2) Centring sleeves are included in the scope of delivery of the mini slide SLT.

Pick & place

Z modules

FESTO

Linear modules HMPL



Parts list								
Type		HMBSZ-HMPL-1	HMBSZ-HMPL-2	HMBSZ-HMPL-3	HMBSZ-HMPL-4			
For drives		HMPL-12 HMPL-16 HMPL-20	HMPL-12 HMPL-16 HMPL-20	HMPL-16 HMPL-20	HMPL-16 HMPL-20			
		Without intermediate position	With intermediate position	Without intermediate position	With intermediate position			
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	→ Page/Internet
[1]	1	177 571 MKRV-16,5-PG-16		177 571 MKRV-16,5-PG-16		177 571 MKRV-16,5-PG-16		104
[2]	1 ¹⁾	177 566 MKR-16,5-PG-16		177 566 MKR-16,5-PG-16		177 566 MKR-16,5-PG-16		102
[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		106
[5]	1	177 572 MKRV-23-PG-21		177 572 MKRV-23-PG-21		177 572 MKRV-23-PG-21		104
[6]	2	177 595 MKA-PG-29-PG-21		177 595 MKA-PG-29-PG-21		177 595 MKA-PG-29-PG-21		107
[7]	2 ²⁾	192 290 MKRS-23-B				192 290 MKRS-23-B		109
[8]	1 ²⁾			192 290 MKRS-23-B			192 290 MKRS-23-B	
[9]	1 ²⁾			192 289 MKRS-16,5-B			192 289 MKRS-16,5-B	
[10]	1			193 946 MKY-PG-21-2PG-16			193 946 MKY-PG-21-2PG-16	106
[11]	1 ³⁾	150 927 ZBH-9		150 927 ZBH-9		150 927 ZBH-9		
	2	M5x16 DIN 912		M5x16 DIN 912		M5x22 DIN 912		
[12]	1 ¹⁾			177 566 MKR-16,5-PG-16			177 566 MKR-16,5-PG-16	102
[13]	1	177 577 MKRL-23-PG-21		177 577 MKRL-23-PG-21		177 577 MKRL-23-PG-21		105

1) Length depends on the stroke of the drive

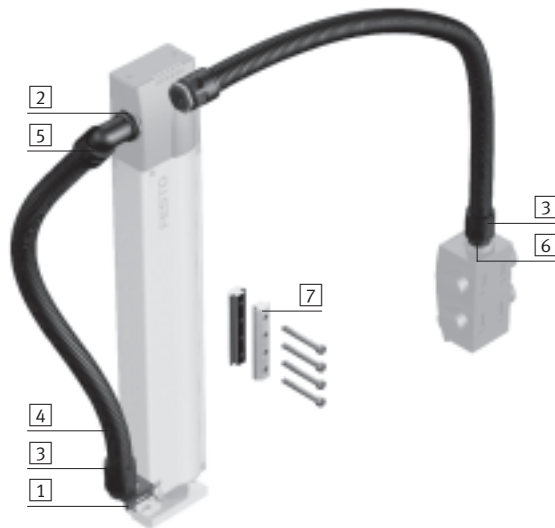
2) In order to be able to mount the retaining clip MKRS, a clamping component (2x code I) must be selected as an accessory when ordering the linear module HMPL.

3) 10 per packaging unit

Pick & place

Z modules

Linear modules HMP



Parts list					
Type		HMBSZ-HMP-1	HMBSZ-HMP-2	HMBSZ-HMP-3	
For drives		HMP-16	HMP-20	HMP-25	
Item	Pieces	Part No. Type	Part No. Type	Part No. Type	→ Page/Internet
1	1	193 124 HMZAS-PG-21	177 603 HMZAS-PG-29	177 603 HMZAS-PG-29	110
2	3	177 599 MKM-PG-21	177 600 MKM-PG-29	177 600 MKM-PG-29	109
3	3	177 572 MKRV-23-PG-21	177 573 MKRV-29-PG-29	177 573 MKRV-29-PG-29	104
4	2 ¹⁾	177 567 MKR-23-PG-21	177 568 MKR-29-PG-29	177 568 MKR-29-PG-29	102
5	1	177 577 MKRL-23-PG-21	177 578 MKRL-29-PG-29	177 578 MKRL-29-PG-29	105
6	1	177 595 MKA-PG-29-PG-21	-	-	107
7	1	177 647 HMSV-1	177 649 HMSV-3	177 653 HMSV-7	80

1) Length depends on the stroke of the drive

Linear gantries

Key features

FESTO

Y and Z modules



Y modules

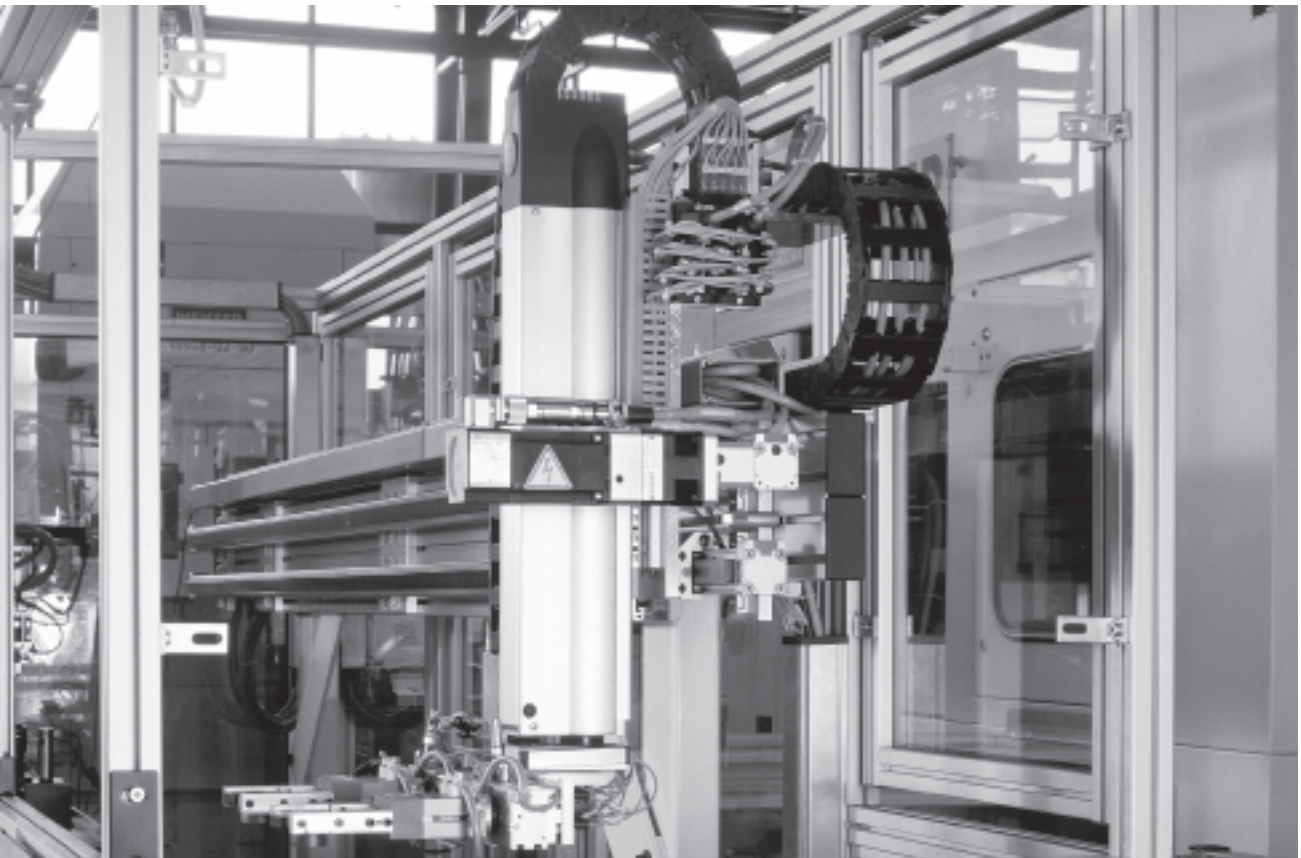
- Pneumatic: DGPL, DGC
- Pneumatic with end-position controller SPC11 (Soft Stop): DGPL
- Electric: DGE
- Single-axis systems (mono) or drives with guide axis (duo)

Z modules

- Pneumatic: DGSL, SLT, HMPL, HMP, DGC, DGPL
- Electric: EGSA, DGE, DGEA

Gantry tubing and cables are routed via energy chains. Festo uses a support profile for this purpose that is specially designed for handling technology.

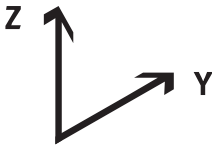



Application



Linear gantries




Product range overview

FESTO

Selection aid						
System type	Mono 25	Mono 40	Duo 25	Duo 40	Duo 63	
						
Y-axis	DG...-25	DG...-40	DG...-25	DG...-40	DG...-50/63	
Drive type	Pneumatic, pneumatic with end-position controller SPC11 (Soft Stop) or electric					
Options	Spindle or toothed belt axis					
Z-axis	DGSL-12 SLT-16 HMPL-16	DGSL-16 SLT-20 HMPL-20 HMP-16	DGSL-20 SLT-25 HMP-20	DGSL-25 HMP-25	DGPL-40 DGC-40 HMP-32	DGPL-50 DGPL-63 DGC-50 DGC-63
Drive type	Pneumatic					
Options	Intermediate position with HMPL	Intermediate position with HMPL, HMP	Intermediate position with HMP	Intermediate position with HMP		
Z-axis	EGSA-50 DGEA-18	EGSA-60 DGEA-18 DGE-25-SP-KF	EGSA-60 DGEA-25 DGE-40-SP-KF	DGEA-25 DGE-40-SP-KF	DGEA-40 DGE-40-SP-KF	DGEA-40 DGE-63-SP-KF
Drive type	Electric					
Options	-	Spindle or toothed belt axis	Spindle or toothed belt axis	Spindle or toothed belt axis		
Effective load [kg]						
	1	■	■	■	■	■
	2	■	■	■	■	■
	3	-	■	■	■	■
	4	-	■	■	■	■
	6	-	-	■	■	■
	10	-	-	-	■	■
	15	-	-	-	-	■
	25	-	-	-	-	■
→ Page/Internet	26					

Linear gantries

Selection aid for basic, connecting and installation components

Y-axis			
System type	Mono 25	Mono 40	Duo 25
			
Pneumatic drives	Type		
DGPL-25	HMBSY-LP-M25-1 → 30	–	HMBSY-LP-D25-1 → 32
DGC-25	HMBSY-LP-M25-2 → 30	–	HMBSY-LP-D25-2 → 32
DGPL-25 with SPC11	HMBSY-LP-M25-3 → 30	–	HMBSY-LP-D25-3 → 32
DGPL-40	–	HMBSY-LP-M40-1 → 31	–
DGC-40	–	HMBSY-LP-M40-2 → 31	–
DGPL-40 with SPC11	–	HMBSY-LP-M40-3 → 31	–
Electric drives	Type		
DGE-25 -SP-KF -ZR-KF -ZR-RF	HMBSY-LP-M25-1 → 30 HMBSY-LP-M25-4 → 30	–	HMBSY-LP-D25-1 → 32 HMBSY-LP-D25-4 → 32
DGE-40 -SP-KF -ZR-KF -ZR-RF	–	HMBSY-LP-M40-1 → 31	–

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 parts list can be found on the specified page.

Y-axis: HMBSY-LP-D25-4
→ 32
Z-axis: HMBSZ-SLT-7
→ 36

Step 2

The necessary basic, connecting and installation components can be found in the parts list on the specified page.




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

Step 3

Technical data on the basic, connecting and installation components can be found on the specified pages. Further accessories for the selected drives, for example proximity sensors, centring sleeves, etc. are listed in the documentation for the drives.




Linear gantries

Selection aid for basic, connecting and installation components

Y-axis		
System type	Duo 40	Duo 63
		
Pneumatic drives	Type	
DGPL-40	HMBSY-LP-D40-1 → 33	-
DGC-40	HMBSY-LP-D40-2 → 33	-
DGPL-40 with SPC11	HMBSY-LP-D40-3 → 33	-
DGPL-50 DGPL-63	-	HMBSY-LP-D50/63 → 34
DGC-50	-	HMBSY-LP-D50-2 → 34
DGC-63	-	HMBSY-LP-D63-2 → 34
Electric drives	Type	
DGE-40 -SP-KF -ZR-KF -ZR-RF	HMBSY-LP-D40-1 → 33	-
DGE-63 -SP-KF -ZR-KF -ZR-RF	-	HMBSY-LP-D50/63 → 34




Linear gantries

Selection aid for basic, connecting and installation components

Z-axis			
System type	Mono 25	Mono 40	Duo 25
			
Pneumatic drives	Type		
DGSL-12	HMBSZ-DGSL-7 → 35	–	–
DGSL-16	–	HMBSZ-DGSL-7 → 35	HMBSZ-DGSL-7 → 35
DGSL-20	–	–	HMBSZ-DGSL-8 → 35
SLT-16	HMBSZ-SLT-7 → 36	–	–
SLT-20	–	HMBSZ-SLT-7 → 36	HMBSZ-SLT-7 → 36
SLT-25	–	–	HMBSZ-SLT-7 → 36
HMPL-16	HMBSZ-HMPL-5 HMBSZ-HMPL-6 → 37	–	–
HMPL-20	–	HMBSZ-HMPL-5 HMBSZ-HMPL-6 → 37	HMBSZ-HMPL-5 HMBSZ-HMPL-6 → 37
HMP-16	–	HMBSZ-HMP-4 → 38	HMBSZ-HMP-4 → 38
HMP-20	–	–	HMBSZ-HMP-5 → 38
Electric drives	Type		
EGSA-50	HMBSZ-EGSA-2 → 41	–	–
EGSA-60	–	HMBSZ-EGSA-2 → 41	HMBSZ-EGSA-2 → 41
DGEA-18	HMBSZ-DGEA-1 → 42	HMBSZ-DGEA-1 → 42	HMBSZ-DGEA-1 → 42
DGEA-25	–	–	HMBSZ-DGEA-2 → 42
DGE-25-SP-KF	–	HMBSZ-DGE-1 → 43	HMBSZ-DGE-1 → 43
DGE-40-SP-KF	–	–	HMBSZ-DGE-2 → 43

Linear gantries

Selection aid for basic, connecting and installation components

Z-axis		
System type	Duo 40	Duo 63
		
Pneumatic drives	Type	
DGSL-25	HMBSZ-DGSL-8 → 35	–
DGPL-40	HMBSZ-DL40-63/DA40 → 39	–
DGPL-50 DGPL-63	–	HMBSZ-DL40-63/DA40 → 39
DGC-40	HMBSZ-DL40-63/DA40 → 40	–
DGC-50 DGC-63	–	HMBSZ-DL40-63/DA40 → 40
HMP-25	HMBSZ-HMP-6 → 38	–
HMP-32	HMBSZ-HMP-6 → 38	–
Electric drives	Type	
DGEA-25	HMBSZ-DGEA-3 → 42	–
DGEA-40	HMBSZ-DGEA-4 → 42	HMBSZ-DL40-63/DA40 → 42
DGE-40-SP-KF	HMBSZ-DGE-3 → 43	–
DGE-63-SP-KF	–	HMBSZ-DL40-63/DA40 → 43

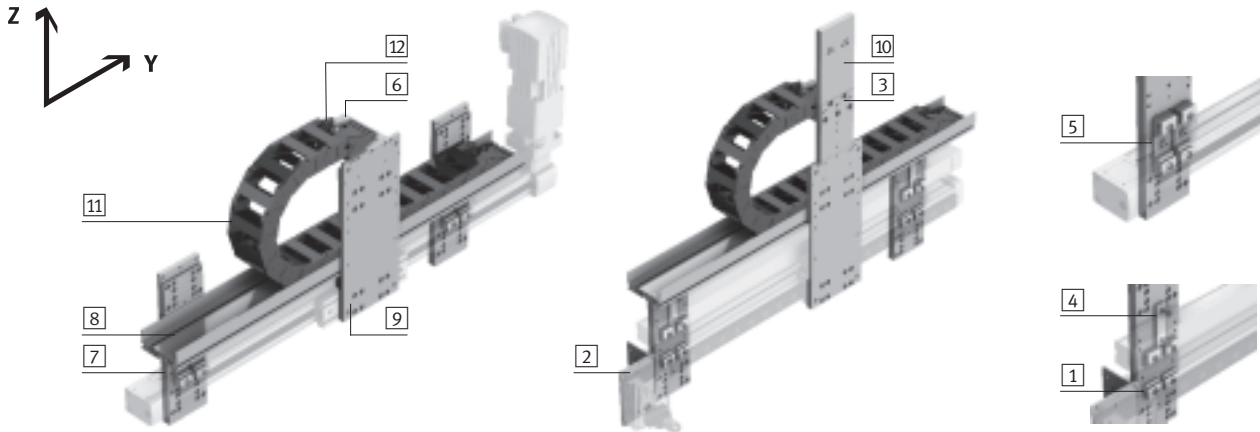
Linear gantries

Y modules

FESTO

Mono system for size 25

Toothed belt axes DGE, linear drives DGC, DGPL



Parts list						
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				→ Page/ Internet	
Item	Pieces	Part No. Type	Part No. Type	Part No. Type	Part No. Type	
1	2 ¹⁾	150 736 MUP-18/25	–	150 736 MUP-18/25	150 736 MUP-18/25	mup
	1 ¹⁾	–	531 753 MUC-25	–	–	muc
2	1	–	–	539 367 HMVW-SPC	–	93
3	1	–	–	539 364 HMIM-LP	–	117
4	1 ¹⁾	–	–	539 973 HMVO-POT	–	93
5	2 ¹⁾	–	–	–	539 362 HMVO-RF25	93
6	1	539 366 HMIO-AP1	539 366 HMIO-AP1	539 366 HMIO-AP1	539 366 HMIO-AP1	117
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	90
8	1 ³⁾	539 378 HMIA-E05	539 378 HMIA-E05	539 378 HMIA-E05	539 378 HMIA-E05	122
9	1	539 368 HMVS-DL25	539 368 HMVS-DL25	539 368 HMVS-DL25	539 368 HMVS-DL25	92
10	1	–	–	539 365 HMIZB-E03	–	120
11	1 ³⁾	IGUS E2 medium 2400.05.100 and 211 or ENERGY CHAIN MC 0320.55-01-100 and TS O/n _T 2				–
12	2	IGUS E2 medium 2050.ZB or ENERGY CHAIN 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.

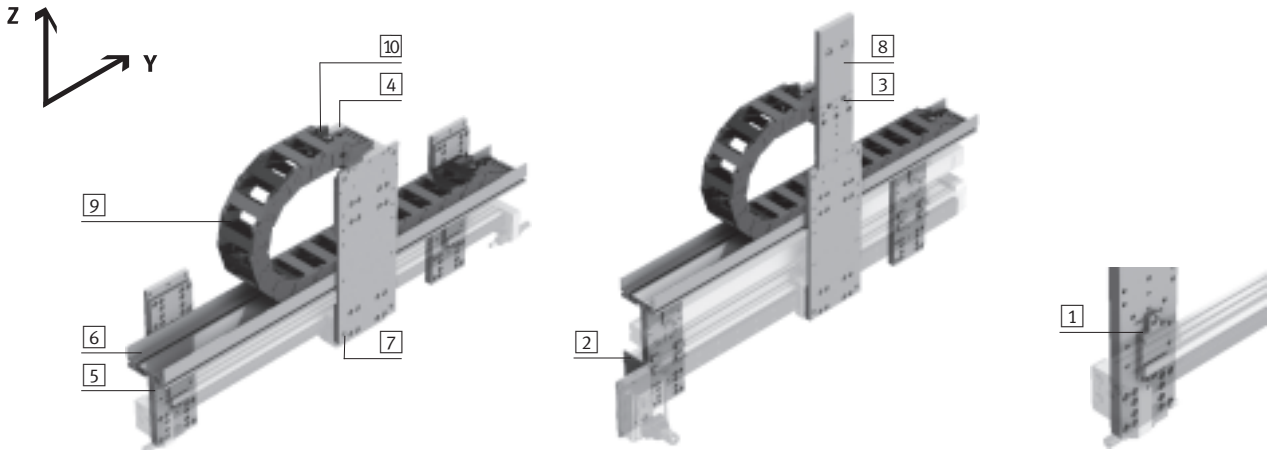
3) Length depends on the stroke of the drive

Linear gantries

Y modules

Mono system for size 40

Toothed belt axes DGE, linear drives DGC, DGPL



Parts list					
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				→ Page/ Internet
Item	Pieces	Part No.	Type	Part No.	Type
1	1 ¹⁾	–		531 755 MUC-40	– muc
2	1	–		–	539 367 HMVW-SPC 93
3	1	–		–	539 364 HMIM-LP 117
4	1	539 366	HMIO-AP-1	540 121	HMIO-AP-2 539 366 HMIO-AP-1 117
5	2 ²⁾	539 972	HMVM-LP-DL25/40	539 972	HMVM-LP-DL25/40 539 972 HMVM-LP-DL25/40 90
6	1 ³⁾	539 378	HMIA-E05	539 378	HMIA-E05 539 378 HMIA-E05 122
7	1	539 369	HMVS-DL40	539 369	HMVS-DL40 539 369 HMVS-DL40 92
8	1	–		–	539 365 HMIZB-E03 120
9	1 ³⁾	IGUS E2 medium 2400.05.100 and 211 or ENERGY CHAIN MC 0320.55-01-100 and TS O/n ₇ 2			–
10	2	IGUS E2 medium 2050.ZB or ENERGY CHAIN 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

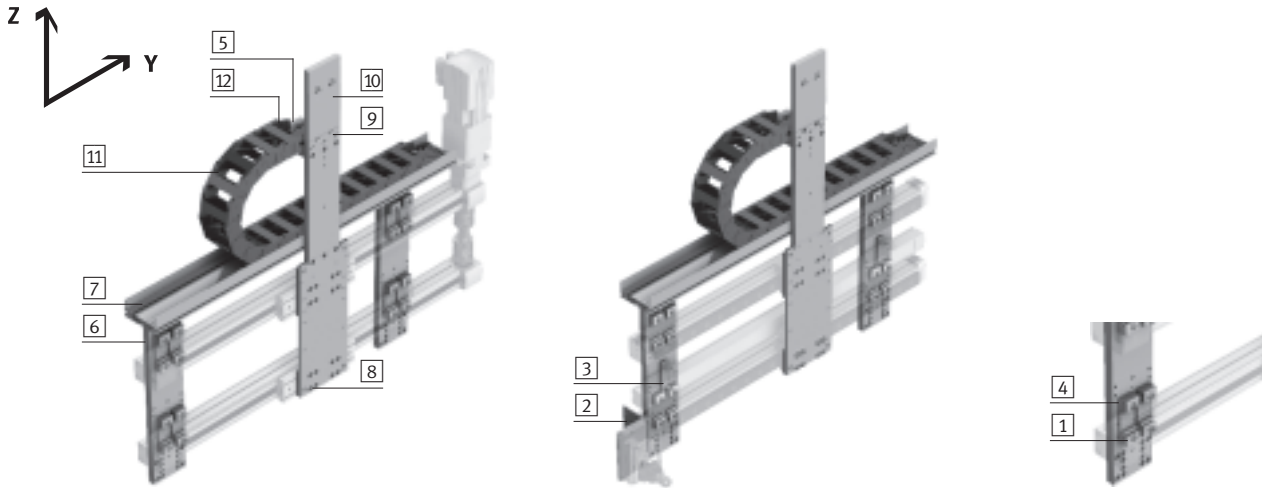
Linear gantries

Y modules

FESTO

Duo system for size 25

Toothed belt axes DGE, linear drives DGC, DGPL



Parts list						
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					→ Page/ Internet
Item	Pieces	Part No. Type	Part No. Type	Part No. Type	Part No. Type	
1	4 ¹⁾	150 736 MUP-18/25	-	150 736 MUP-18/25	150 736 MUP-18/25	mup
	2 ¹⁾	-	531 753 MUC-25	-	-	muc
2	1	-	-	539 367 HMVW-SPC	-	93
3	1 ¹⁾	-	-	539 973 HMVO-POT	-	93
4	4 ¹⁾	-	-	-	539 362 HMVO-RF25	93
5	1	539 366 HMIO-AP-1	539 366 HMIO-AP-1	539 366 HMIO-AP-1	539 366 HMIO-AP-1	117
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	90
7	1 ³⁾	539 378 HMIA-E05	539 378 HMIA-E05	539 378 HMIA-E05	539 378 HMIA-E05	122
8	1	539 368 HMVS-DL25	539 368 HMVS-DL25	539 368 HMVS-DL25	539 368 HMVS-DL25	92
9	1	539 363 HMID-LP	539 363 HMID-LP	539 363 HMID-LP	539 363 HMID-LP	118
10	1	539 365 HMIZB-E03	539 365 HMIZB-E03	539 365 HMIZB-E03	539 365 HMIZB-E03	120
11	1 ³⁾	IGUS E2 medium 2400.05.100 and 211 or ENERGY CHAIN MC 0320.55-01-100 and TS O/n _T 2				-
12	2	IGUS E2 medium 2050.ZB or ENERGY CHAIN 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.

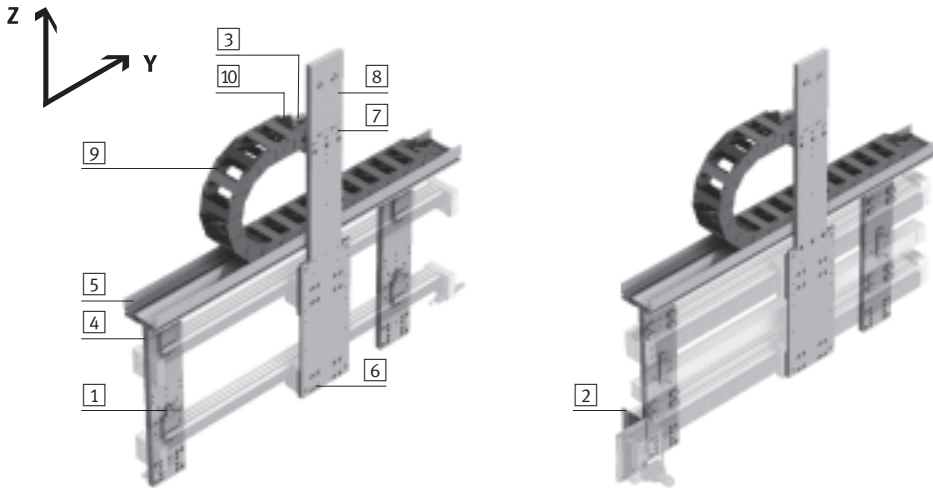
3) Length depends on the stroke of the drive

Linear gantries

Y modules

Duo system for size 40

Toothed belt axes DGE, linear drives DGC, DGPL



Parts list					
Type	HMBSY-LP-D40-1		HMBSY-LP-D40-2		HMBSY-LP-D40-3
For drives	DGPL-40 DGE-40-SP-KF DGE-40-ZR-KF DGE-40-ZR-RF		DGC-40		DGPL-40 with SPC11
System type	Duo 40				→ Page/ Internet
Item	Pieces	Part No.	Type	Part No.	Type
1	2 ¹⁾	-		531 755 MUC-40	- muc
2	1	-		-	539 367 HMVW-SPC 93
3	1	539 366 HMIO-AP-1		540 121 HMIO-AP-2	539 366 HMIO-AP-1 117
4	2 ²⁾	539 971 HMVD-LP-DL25/40		539 971 HMVD-LP-DL25/40	539 971 HMVD-LP-DL25/40 90
5	1 ³⁾	539 378 HMIA-E05		539 378 HMIA-E05	539 378 HMIA-E05 122
6	1	539 369 HMVS-DL40		539 369 HMVS-DL40	539 369 HMVS-DL40 92
7	1	539 363 HMID-LP		539 363 HMID-LP	539 363 HMID-LP 118
8	1	539 365 HMIZB-E03		539 365 HMIZB-E03	539 365 HMIZB-E03 120
9	1 ³⁾	IGUS E2 medium 2400.05.100 and 211 or ENERGY CHAIN MC 0320.55-01-100 and TS O/n _T 2			-
10	2	IGUS E2 medium 2050.ZB or ENERGY CHAIN 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

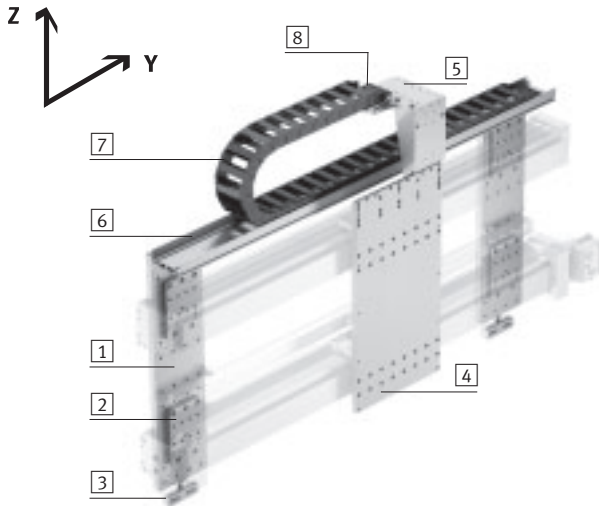
Linear gantries

Y modules

FESTO

Duo system for size 63

Toothed belt axes DGE, linear drives DGC, DGPL



Parts list					
Type	HMBSY-LP-D50/63		HMBSY-LP-D50-2		HMBSY-LP-D63-2
For drives	DGPL-50 DGPL-63 DGE-63-SP-KF DGE-63-ZR-KF DGE-63-ZR-RF		DGC-50		DGC-63
System type	Duo 63				→ Page/ Internet
Item	Pieces	Part No.	Type	Part No.	Type
1	2 ¹⁾	566 879	HMVD-LP-DL63	566 879	HMVD-LP-DL63
2	4 ²⁾	566 878	HMVA-63	–	–
2	4 ³⁾	–	–	531 756	531 757
3	2	566 884	HMVE	566 884	566 884
4	1	566 883	HMVS-DL63	566 883	566 883
5	1	566 886	HMIY-LP-E07	566 886	566 886
6	1 ⁴⁾	539 379	HMIA-E07	539 379	539 379
7	1 ⁴⁾	IGUS E2 medium 2400.07.100 and 211 or ENERGY CHAIN MC 0320.75-01-100 and TS O/n _T 2			–
8	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA			–

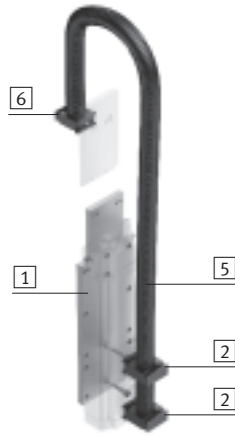
- 1) Quantity with stroke ≤ 1,000 mm. With stroke > 1,000 mm, a basic kit HMVD-LP-DL63 must be additionally ordered per 1,000 mm stroke or part thereof.
- 2) Quantity with stroke ≤ 1,000 mm. With stroke > 1,000 mm, two adapter kits HMVA-63 must be additionally ordered per 1,000 mm stroke or part thereof.
- 3) Quantity with stroke ≤ 1,000 mm. With stroke > 1,000 mm, two central supports MUC must be additionally ordered per 1,000 mm stroke or part thereof.
- 4) Length depends on the stroke of the drive

Linear gantries

Z modules

Mono/duo system

Mini slides DGSL



Parts list								
Type		HMBSZ-DGSL-7			HMBSZ-DGSL-8			→ Page/ Internet
For drives		DGSL-12	DGSL-16	DGSL-20	DGSL-25			
System type		Mono 25	Mono 40 Duo 25	Duo 25	Duo 40			
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	
1	1	539 373	HMVZ-2	539 373	HMVZ-2	539 373	HMVZ-2	91
2	1	192 289	MKRS-16,5-B	192 289	MKRS-16,5-B	192 290	MKRS-23-B	109
		548 803	ZBV-M5-7	548 803	ZBV-M5-7	548 804	ZBV-M5-9	79
5	1 ¹⁾	177 566	MKR-16,5-PG-16	177 566	MKR-16,5-PG-16	177 567	MKR-23-PG-21	102
6	1	192 289	MKRS-16,5-B	192 289	MKRS-16,5-B	192 290	MKRS-23-B	109

1) Length depends on the stroke of the drive

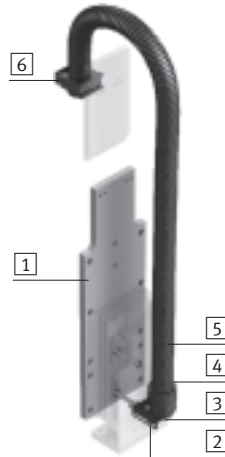
Linear gantries

Z modules

FESTO

Mono/duo system

Mini slides SLT



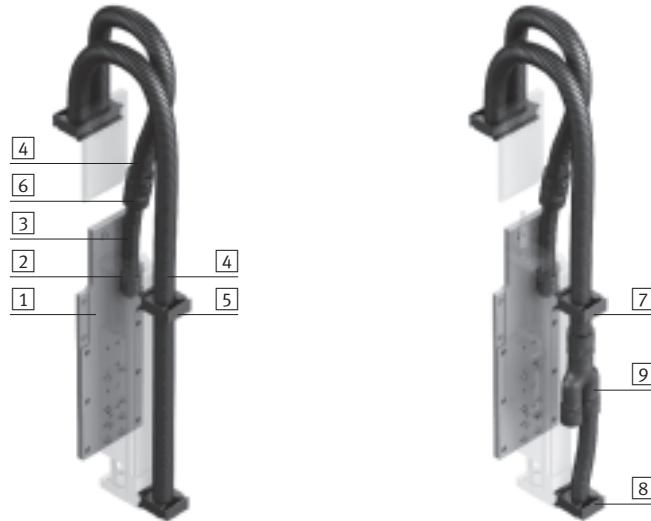
Parts list								
Type	HMBSZ-SLT-7						→ Page/ Internet	
For drives	SLT-16	SLT-20	SLT-25					
System type	Mono 25	Mono 40 Duo 25	Duo 25					
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	
1	1	539 373	HMVZ-2	539 373	HMVZ-2	539 373	HMVZ-2	91
2	1	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	110
3	1	177 599	MKM-PG-21	177 599	MKM-PG-21	177 599	MKM-PG-21	109
4	1	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	104
5	1 ¹⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	102
6	1	192 290	MKRS-23-B	192 290	MKRS-23-B	192 290	MKRS-23-B	109

1) Length depends on the stroke of the drive

Linear gantries

Z modules

Mono/duo system
Linear modules HMPL



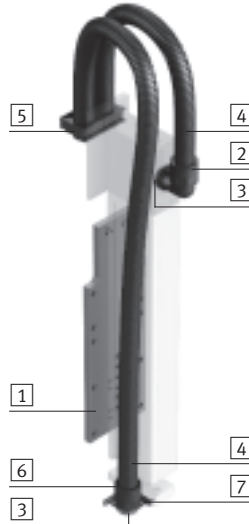
Parts list								→ Page/ Internet		
Type	HMBSZ-HMPL-5				HMBSZ-HMPL-6					
For drives	HMPL-16		HMPL-20		HMPL-16				HMPL-20	
System type	Without intermediate position				With intermediate position					
	Mono 25		Mono 40 Duo 25		Mono 25		Mono 40 Duo 25			
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	Part No.	Type	
1	1	539 375	HMVZ-4	539 375	HMVZ-4	539 375	HMVZ-4	539 375	HMVZ-4	91
2	1	177 571	MKRV-16,5-PG-16	177 571	MKRV-16,5-PG-16	177 571	MKRV-16,5-PG-16	177 571	MKRV-16,5-PG-16	104
3	1 ¹⁾	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	102
4	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	
5	4 ³⁾	192 290	MKRS-23-B	192 290	MKRS-23-B	-	-	-	-	109
6	1	194 321	MKRT-23-16,5	194 321	MKRT-23-16,5	194 321	MKRT-23-16,5	194 321	MKRT-23-16,5	106
7	3 ³⁾	-	-	-	-	192 290	MKRS-23-B	192 290	MKRS-23-B	109
8	1	-	-	-	-	192 289	MKRS-16,5-B	192 289	MKRS-16,5-B	
9	1	-	-	-	-	193 946	MKY-PG-21-2PG-16	193 946	MKY-PG-21-2PG-16	106

- 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 J) must be selected as an accessory when ordering the linear module HMPL.

Linear gantries

Z modules

Mono/duo system
Linear modules HMP



Parts list								
Type	HMBSZ-HMP-4	HMBSZ-HMP-5	HMBSZ-HMP-6					
For drives	HMP-16	HMP-20	HMP-25/HMP-32					
System type	Mono 40 Duo 25	Duo 25	Duo 40					
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	→ Page/ Internet
1	1	539 374 HMVZ-3		539 374 HMVZ-3		539 377 HMVZ-6		91
2	1	177 577 MKRL-23-PG-21		177 578 MKRL-29-PG-29		177 578 MKRL-29-PG-29		105
3	2	177 599 MKM-PG-21		177 600 MKM-PG-29		177 600 MKM-PG-29		109
4	1 ¹⁾	177 567 MKR-23-PG-21		177 568 MKR-29-PG-29		177 568 MKR-29-PG-29		102
5	2	192 290 MKRS-23-B		192 291 MKRS-29-B		192 291 MKRS-29-B		109
6	1	177 572 MKRV-23-PG-21		177 573 MKRV-29-PG-29		177 573 MKRV-29-PG-29		104
7	1	193 124 HMZAS-PG-21		177 603 HMZAS-PG-29		177 603 HMZAS-PG-29		110

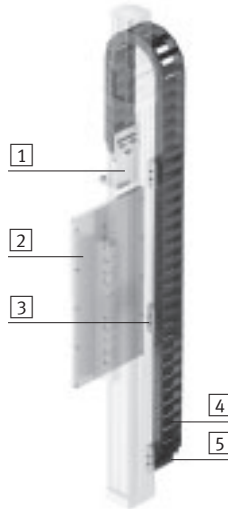
1) Length depends on the stroke of the drive

Linear gantries

Z modules

Mono/duo system

Linear drives DGPL



Parts list						
Type	HMBSZ-DL40-63/DA40		HMBSZ-DL40-63/DA40		→ Page/ Internet	
For drives	DGPL-40		DGPL-50 DGPL-63			
System type	Duo 40		Duo 63			
Item	Pieces	Part No.	Type	Part No.	Type	
1	1	566 885	HMIW-E05/E07	566 885	HMIW-E05/E07	121
2	1	566 876	HMVZ-9	566 876	HMVZ-9	91
3	3 ¹⁾	566 877	HMIZW-E05/E07-DL40/63	566 877	HMIZW-E05/E07-DL40/63	121
4	1 ²⁾	IGUS E2 medium 2400.05.100.0 and 211 or ENERGY CHAIN MC 0320.55-01-77 and TS O/n _T 2		IGUS E2 medium 2400.05.100.0 and 211 or ENERGY CHAIN MC 0320.55-01-77 and TS O/n _T 2		-
5	1	IGUS E2 medium 2050.ZB or ENERGY CHAIN MC FA/MA		IGUS E2 medium 2050.ZB or ENERGY CHAIN MC FA/MA		-
4	1 ²⁾	IGUS E2 medium 2400.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01-77 and TS O/n _T 2		IGUS E2 medium 2400.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01-77 and TS O/n _T 2		-
5	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA		IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA		-

1) The energy chain must be supported at least every 500 mm beyond the flexible bend. Increase the quantity accordingly if necessary.

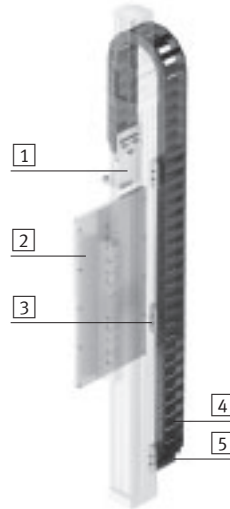
2) Length depends on the stroke of the drive

Linear gantries

Z modules

FESTO

Mono/duo system
Linear drives DGC



Parts list					
Type		HMBSZ-DL40-63/DA40		HMBSZ-DL40-63/DA40	
For drives		DGC-40		DGC-50 DGC-63	
System type		Duo 40		Duo 63	
Item	Pieces	Part No.	Type	Part No.	
1	1	566 885	HMIW-E05/E07	566 885 HMIW-E05/E07	121
2	1	566 876	HMVZ-9	566 876 HMVZ-9	91
3	3 ¹⁾	566 877	HMIZW-E05/E07-DL40/63	566 877 HMIZW-E05/E07-DL40/63	121
4	1 ²⁾	IGUS E2 medium 2400.05.100.0 and 211 or ENERGY CHAIN MC 0320.55-01-77 and TS O/n _T 2		IGUS E2 medium 2400.05.100.0 and 211 or ENERGY CHAIN MC 0320.55-01-77 and TS O/n _T 2	-
5	1	IGUS E2 medium 2050.ZB or ENERGY CHAIN MC FA/MA		IGUS E2 medium 2050.ZB or ENERGY CHAIN MC FA/MA	-
4	1 ²⁾	IGUS E2 medium 240.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01-77 and TS O/n _T 2		IGUS E2 medium 240.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01-77 and TS O/n _T 2	-
5	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA		IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA	-

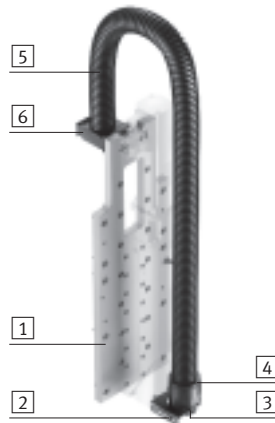
1) The energy chain must be supported at least every 500 mm beyond the flexible bend. Increase the quantity accordingly if necessary.

2) Length depends on the stroke of the drive

Linear gantries

Z modules

Mono/duo system
Cantilever axes EGSA



Parts list						
Type		HMBSZ-EGSA-2				→ Page/ Internet
For drives		EGSA-50		EGSA-60		
System type		Mono 25		Mono 40 Duo 25		
Item	Pieces	Part No.	Type	Part No.	Type	
1	1	560 021	HMVZ-7	560 021	HMVZ-7	91
2	1	193 124	HMZAS-PG21	193 124	HMZAS-PG21	104
3	1	177 599	MKM-PG-21	177 599	MKM-PG-21	102
4	1	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	
5	1 ¹⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	109
6	1	192 290	MKRS-23-B	192 290	MKRS-23-B	106

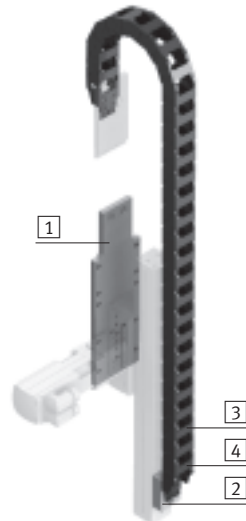
1) Length depends on the stroke of the drive.

Linear gantries

Z modules

Mono/duo system

Cantilever axes DGEA



Parts list								→ Page/ Internet			
Type	HMBSZ-DGEA-1	HMBSZ-DGEA-2	HMBSZ-DGEA-3	HMBSZ-DGEA-4	HMBSZ-DL40-63/DA40						
For drives	DGEA-18	DGEA-25	DGEA-25	DGEA-40	DGEA-40						
System type	Mono 25 Mono 40 Duo 25	Duo 25	Duo 40	Duo 40	Duo 63						
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	Part No.	Type		
[1]	1	539 374 HMVZ-3		539 375 HMVZ-4		539 377 HMVZ-6		539 377 HMVZ-6		566 876 HMVZ-9	91
[2]	1	539 370 HMIZF-E03-DA18		539 371 HMIZF-E03-DA25		539 371 HMIZF-E03-DA25		566 895 HMIZF-E03/E05/E07-DA40		566 877 HMIZW-E05/E07-DL40/63	121
[3]	1 ¹⁾	IGUS E2 medium 240.05.100.0 and 211 or ENERGY CHAIN MC 0320.55-01-77 and TS O/n _T 2								-	
[4]	1	IGUS E2 medium 2050.ZB or ENERGY CHAIN MC FA/MA								-	
[3]	1 ¹⁾	IGUS E2 medium 240.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01-77 and TS O/n _T 2								-	
[4]	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA								-	

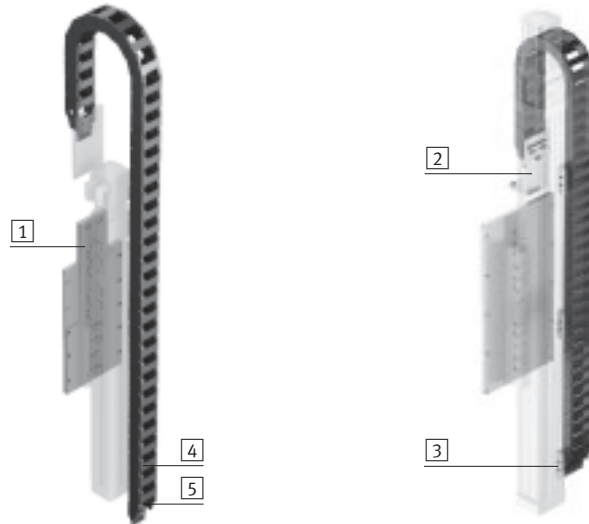
1) Length depends on the stroke of the drive

Linear gantries

Z modules

Mono/duo system

Spindle axes DGE



Parts list								
Type	HMBSZ-DGE-1		HMBSZ-DGE-2		HMBSZ-DGE-3		HMBSZ-DL40-63/DA40	→ Page/ Internet
For drives	DGE-25-SP		DGE-40-SP		DGE-40-SP		DGE-63-SP	
System type	Mono 40 Duo 25		Duo 25		Duo 40		Duo 63	
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	
1	1	539 374 HMVZ-3		539 375 HMVZ-4		539 377 HMVZ-6	566 876 HMVZ-9	91
2	1	566 885 HMIW-E05/E07						121
3	3 ¹⁾	-		-		566 877 HMIZW-E05/E07-DL40/63		121
4	1 ²⁾	IGUS E2 medium 240.05.100.0 and 211 or ENERGY CHAIN MC 0320.55-01-77 and TS O/n _T 2						-
5	1	IGUS E2 medium 2050.ZB or ENERGY CHAIN MC FA/MA						-
4	1 ²⁾	IGUS E2 medium 240.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01-77 and TS O/n _T 2						-
5	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA						-

1) The energy chain must be supported at least every 500 mm beyond the flexible bend. Increase the quantity accordingly if necessary.

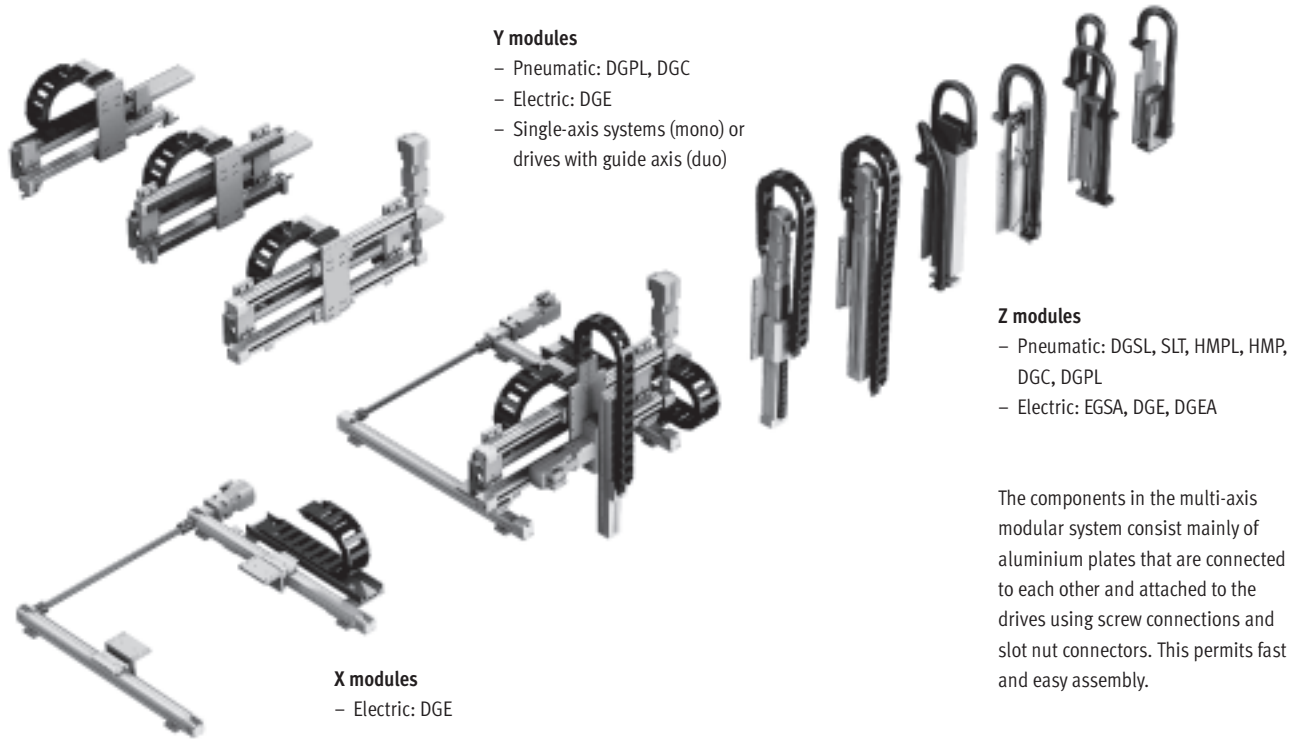
2) Length depends on the stroke of the drive

Three-dimensional gantries

Key features



X, Y and Z modules



Y modules

- Pneumatic: DGPL, DGC
- Electric: DGE
- Single-axis systems (mono) or drives with guide axis (duo)

Z modules

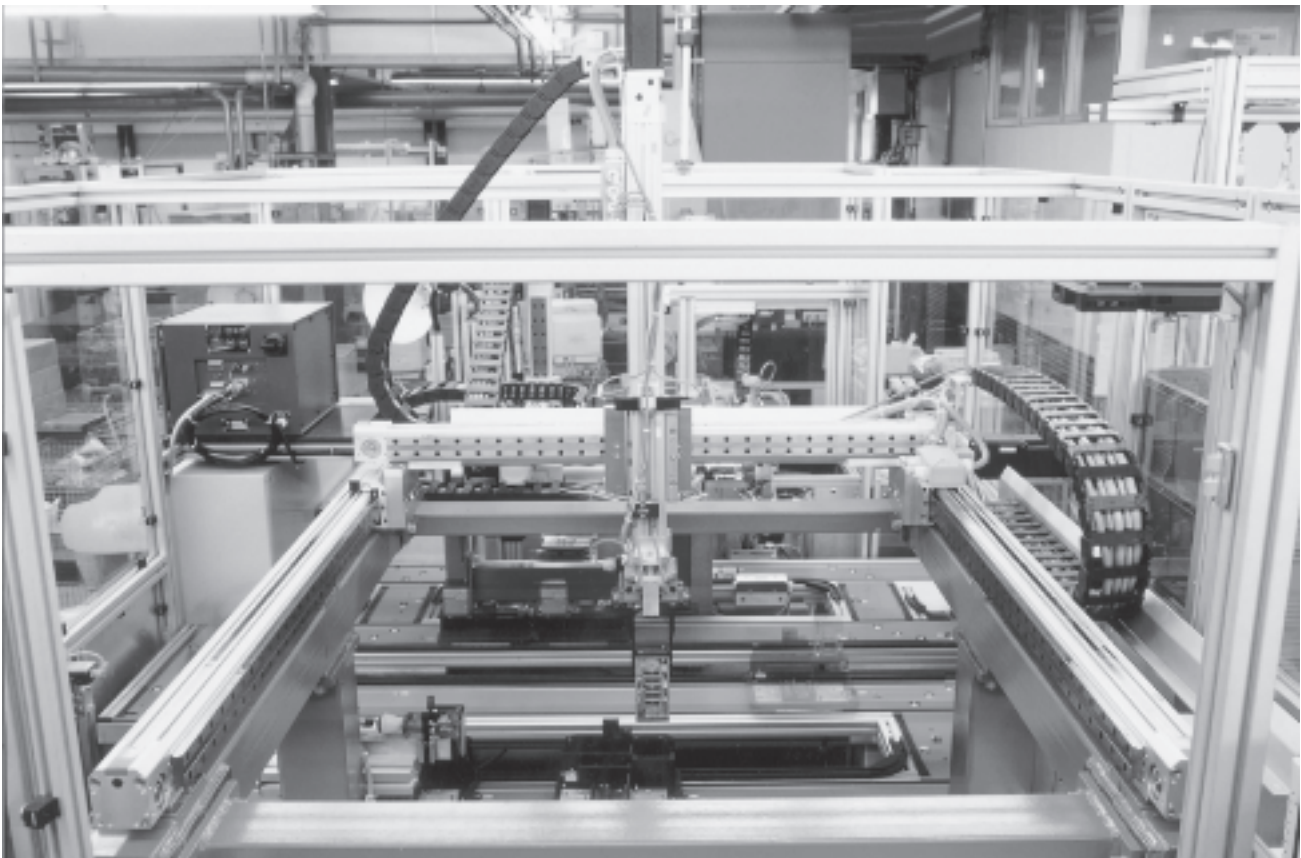
- Pneumatic: DGSL, SLT, HMPL, HMP, DGC, DGPL
- Electric: EGSA, DGE, DGEA

X modules

- Electric: DGE

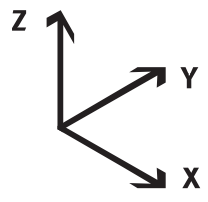









The components in the multi-axis modular system consist mainly of aluminium plates that are connected to each other and attached to the drives using screw connections and slot nut connectors. This permits fast and easy assembly.

Application






Three-dimensional gantries

Product range overview

Selection aid								
System type	Mono 25	Mono 40	Duo 25		Duo 40		Duo 63	
								
X-axis	DGE-25-ZR	DGE-40-ZR	DGE-25-ZR	DGE-40-ZR	DGE-40-ZR	DGE-63-ZR	DGE-63-ZR	
Drive type	Electric							
Options	Ball bearing or roller guide							
Y-axis	DG...-25	DG...-40	DG...-25		DG...-40		DG...-50/63	
								
Drive type	Pneumatic and electric							
Options	Spindle or toothed belt axis							
Z-axis	DGSL-12 SLT-16 HMPL-16	DGSL-16 SLT-20 HMPL-20 HMP-16	DGSL-20 SLT-25 HMP-20	DGSL-25 HMP-25	DGPL-40 DGC-40 HMP-32	DGPL-50 DGPL-63 DGC-50 DGC-63		
Drive type	Pneumatic							
Options	Intermediate position with HMPL	Intermediate position with HMPL, HMP	Intermediate position with HMP		Intermediate position with HMP			
Z-axis	EGSA-50 DGEA-18	EGSA-60 DGEA-18 DGE-25-SP-KF	EGSA-60 DGEA-25 DGE-40-SP-KF	DGEA-25 DGE-40-SP-KF	DGEA-40 DGE-40-SP-KF	DGEA-40 DGE-63-SP-KF		
Drive type	Electric							
Options	-	Spindle or toothed belt axis	Spindle or toothed belt axis		Spindle or toothed belt axis			
Effective load [kg]								
	1	■	■	■	■	■	■	
	2	■	■	■	■	■	■	
	3	-	■	■	■	■	■	
	4	-	■	■	■	■	■	
	6	-	-	■	■	■	■	
	10	-	-	-	■	■	■	
	15	-	-	-	-	■	■	
	25	-	-	-	-	-	■	
→ Page/Internet	46							

Three-dimensional gantries

Selection aid for basic, connecting and installation components

X-axis				
System type	Mono 25		Mono 40	Duo 25
				
Electric drives	Type			
DGE-25	-ZR-KF	HMBSX-RP/FP-25-1 → 52	HMBSX-RP/FP-25-1 → 52	HMBSX-RP/FP-25-1 → 52
	-ZR-RF	HMBSX-RP/FP-25-2 → 52	HMBSX-RP/FP-25-2 → 52	HMBSX-RP/FP-25-2 → 52
DGE-40	-ZR-KF	-	HMBSX-RP/FP-40-1 → 52	HMBSX-RP/FP-40-1 → 52
	-ZR-RF	-	HMBSX-RP/FP-40-2 → 52	HMBSX-RP/FP-40-2 → 52

Selection example:

Project engineering produced the following drive combination:

X-axis: DGE-40-ZR-KF
Y-axis: Mono 40 system with DGC-40
Z-axis: HMPL-20 without intermediate position

Step 1

Define the drive type in the selection aids for the X, Y or Z-axis. The associated parts list can be found on the specified page.

X-axis: HMBSX-RP/FP-40-1
→ 52
Y-axis: HMBSY-RP/FP-M40-2
→ 54
Z-axis: HMBSZ-HMPL-5 or 6
→ 60

Step 2

The necessary basic, connecting and installation components can be found in the parts list on the specified page.




X-axis: HMBSX-RP/FP-40-1
Y-axis: HMBSY-RP/FP-M40-2
Z-axis: HMBSZ-HMPL-5

Step 3

Technical data on the basic, connecting and installation components can be found on the specified pages. Further accessories for the selected drives, for example proximity sensors, centring sleeves, etc. are listed in the documentation for the drives.




Three-dimensional gantries

Selection aid for basic, connecting and installation components

X-axis			
System type		Duo 40	Duo 63
			
			
Electric drives		Type	
DGE-40	-ZR-KF	HMBSX-RP/FP-40-1 → 52	-
	-ZR-RF	HMBSX-RP/FP-40-2 → 52	-
DGE-63	-ZR-KF	HMBSX-RP/FP-63-1 → 53	HMBSX-RP/FP-63-3 → 53
	-ZR-RF	HMBSX-RP/FP-63-2 → 53	-




Three-dimensional gantries

Selection aid for basic, connecting and installation components

Y-axis					
System type		Mono 25	Mono 40	Duo 25	
					
Pneumatic drives		Type			
DGPL-25		HMBSY-RP/FP-M25-1 → 54	–		HMBSY-RP/FP-D25-1 → 55
DGC-25		HMBSY-RP/FP-M25-2 → 54	–		HMBSY-RP/FP-D25-2 → 55
DGPL-40		–	HMBSY-RP/FP-M40-1 → 54		–
DGC-40		–	HMBSY-RP/FP-M40-2 → 54		–
Electric drives		Type			
DGE-25	-SP-KF -ZR-KF -ZR-RF	HMBSY-RP/FP-M25-1 → 54	–		HMBSY-RP/FP-D25-1 → 55
DGE-40	-SP-KF -ZR-KF -ZR-RF	–	HMBSY-RP/FP-M40-1 → 54		–




Three-dimensional gantries

Selection aid for basic, connecting and installation components

Y-axis		
System type	Duo 40	Duo 63
		
Pneumatic drives	Type	
DGPL-40	HMBSY-RP/FP-D40-1 → 55	-
DGC-40	HMBSY-RP/FP-D40-2 → 55	-
DGPL-50 DGPL-63	-	HMBSY-RP/FP-D50/63 → 56
DGC-50	-	HMBSY-RP/FP-D50-2 → 56
DGC-63	-	HMBSY-RP/FP-D63-2 → 57
Electric drives	Type	
DGE-40 -SP-KF -ZR-KF -ZR-RF	HMBSY-RP/FP-D40-1 → 55	-
DGE-63 -SP-KF -ZR-KF -ZR-RF	-	HMBSY-RP/FP-D50/63 → 56




Three-dimensional gantries

Selection aid for basic, connecting and installation components

Z-axis			
System type	Mono 25	Mono 40	Duo 25
			
Pneumatic drives	Type		
DGSL-12	HMBSZ-DGSL-7 → 58	–	–
DGSL-16	–	HMBSZ-DGSL-7 → 58	HMBSZ-DGSL-7 → 58
DGSL-20	–	–	HMBSZ-DGSL-8 → 58
DGSL-25	–	–	–
SLT-16	HMBSZ-SLT-7 → 59	–	–
SLT-20	–	HMBSZ-SLT-7 → 59	HMBSZ-SLT-7 → 59
SLT-25	–	–	HMBSZ-SLT-7 → 59
HMPL-16	HMBSZ-HMPL-5 HMBSZ-HMPL-6 → 60	–	–
HMPL-20	–	HMBSZ-HMPL-5 HMBSZ-HMPL-6 → 60	HMBSZ-HMPL-5 HMBSZ-HMPL-6 → 60
HMP-16	–	HMBSZ-HMP-4 → 61	HMBSZ-HMP-4 → 61
HMP-20	–	–	HMBSZ-HMP-5 → 61
HMP-25	–	–	–
Electric drives	Type		
EGSA-50	HMBSZ-EGSA-2 → 64	–	–
EGSA-60	–	HMBSZ-EGSA-2 → 64	HMBSZ-EGSA-2 → 64
DGEA-18	HMBSZ-DGEA-1 → 65	HMBSZ-DGEA-1 → 65	HMBSZ-DGEA-1 → 65
DGEA-25	–	–	HMBSZ-DGEA-2 → 65
DGE-25-SP-KF	–	HMBSZ-DGE-1 → 66	HMBSZ-DGE-1 → 66
DGE-40-SP-KF	–	–	HMBSZ-DGE-2 → 66

Three-dimensional gantries

Selection aid for basic, connecting and installation components

Z-axis		
System type	Duo 40	Duo 63
		
Pneumatic drives	Type	
DGSL-25	HMBSZ-DGSL-8 → 58	–
DGPL-40	HMBSZ-DL40-63/DA40 → 62	–
DGPL-50 DGPL-63	–	HMBSZ-DL40-63/DA40 → 62
DGC-40	HMBSZ-DL40-63/DA40 → 63	–
DGC-50 DGC-63	–	HMBSZ-DL40-63/DA40 → 63
HMP-25	HMBSZ-HMP-6 → 61	–
HMP-32	HMBSZ-HMP-6 → 61	–
Electric drives	Type	
DGEA-25	HMBSZ-DGEA-3 → 65	–
DGEA-40	HMBSZ-DGEA-4 → 65	HMBSZ-DL40-63/DA40 → 65
DGE-40-SP-KF	HMBSZ-DGE-3 → 66	–
DGE-63-SP-KF	–	HMBSZ-DL40-63/DA40 → 66

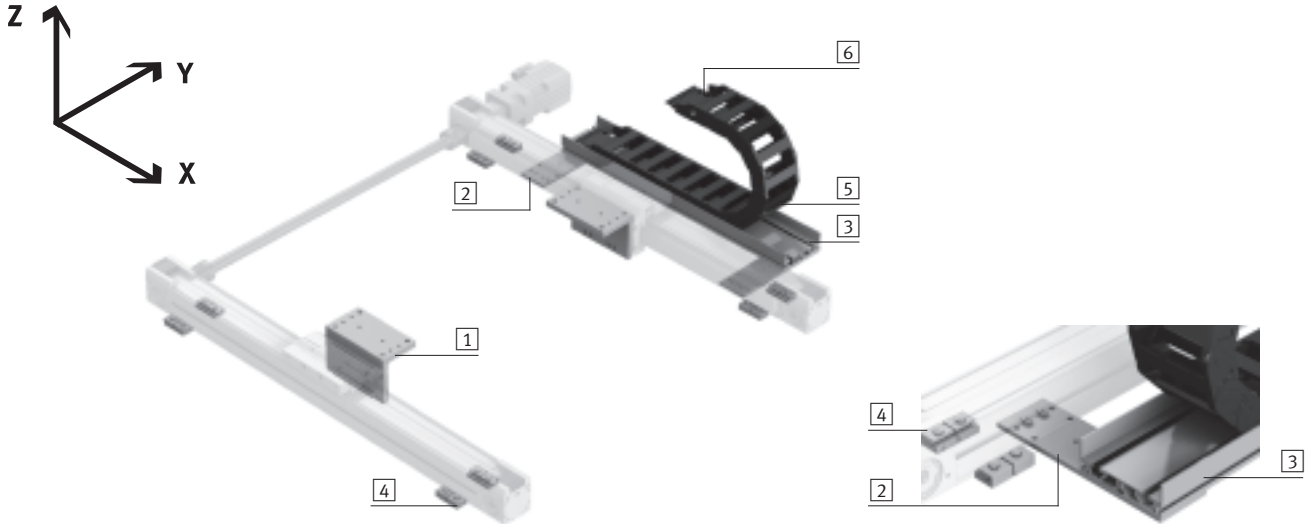
Three-dimensional gantries

X modules

FESTO

Basic system for size 25 and 40

Toothed belt axes DGE



Parts list						
Type		HMBSX-RP/FP-25-1	HMBSX-RP/FP-25-2	HMBSX-RP/FP-40-1	HMBSX-RP/FP-40-2	→ Page/ Internet
For drives		DGE-25-ZR-KF	DGE-25-ZR-RF	DGE-40-ZR-KF	DGE-40-ZR-RF	
Item	Pieces	Part No. Type	Part No. Type	Part No. Type	Part No. Type	
[1]	2	539 651 HMVW-DL25	539 652 HMVS-RF25	540 325 HMVW-DL40	539 653 HMVS-RF40	88
[2]	2 ¹⁾	539 654 HMIXB-RP/FP	539 654 HMIXB-RP/FP	539 654 HMIXB-RP/FP	539 654 HMIXB-RP/FP	116
[3]	1 ²⁾	539 379 HMIA-E07	539 379 HMIA-E07	539 379 HMIA-E07	539 379 HMIA-E07	122
[4]	2 ³⁾	150 736 MUP-18/25	150 736 MUP-18/25	–	–	mup
	1 ³⁾	–	–	150 738 MUP-40	150 738 MUP-40	mup
[5]	1 ²⁾	IGUS E2 medium 2400.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01 and TS 0/n _T 2				–
[6]	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN 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

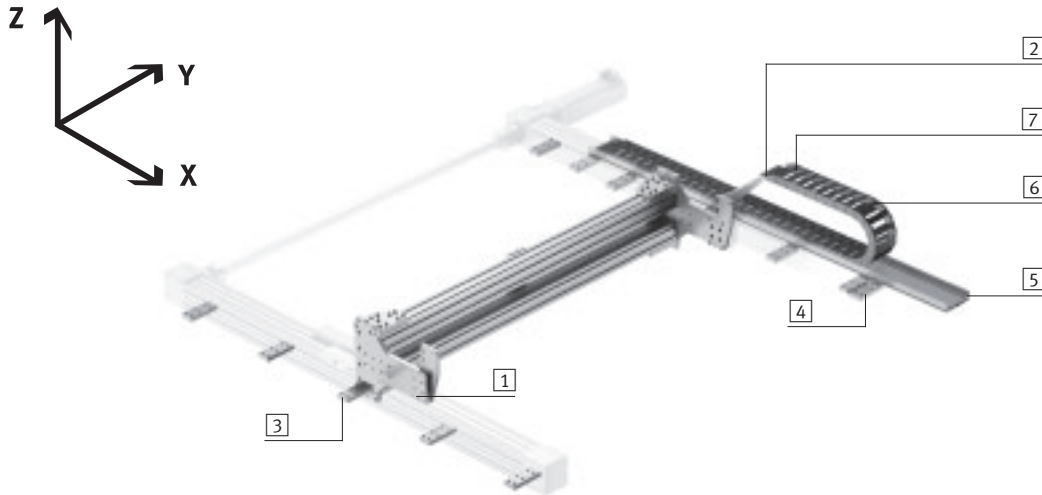
3) Every 500 mm per axis

Three-dimensional gantries

X modules

Basic system for size 63

Toothed belt axes DGE



Parts list								
Type		HMBSX-RP/FP-63-1	HMBSX-RP/FP-63-2	HMBSX-RP/FP-63-3				
For drives		DGE-63-ZR-KF		DGE-63-ZR-RF		DGE-63-ZR-KF		
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	
1	2	566 897	HMVW-DL-63-1	566 898	HMVS-RF63	566 890	HMVW-DL-63-2	
2	1	566 896	HMIXF-RP/FP-2	566 896	HMIXF-RP/FP-2	566 891	HMIX-RP/FP-E07/E10	
3	4 ¹⁾	150 800	MUP-63	150 800	MUP-63	150 800	MUP-63	
4	2 ²⁾	566 893	HMIXB-RP/FP-2	566 893	HMIXB-RP/FP-2	566 893	HMIXB-RP/FP-2	
5	1 ³⁾	539 379	HMIA-E07	539 379	HMIA-E07	539 379	HMIA-E07	
5	1 ³⁾	-	-	-	-	566 894	HMIA-E10	
6	1 ³⁾	IGUS E2 medium 2400.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01 and TS O/n _T 2					-	-
7	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA					-	-
6	1 ³⁾	-				IGUS E2 medium 2400.10.100.0 and 211 or ENERGY CHAIN MC 0320.105-01 and TS O/n _T 2	-	-
7	2	-				IGUS E2 medium 2100.ZB or ENERGY CHAIN MC FA/MA	-	-

- 1) Quantity with stroke ≤ 500 mm. With stroke > 500 mm, two central supports MUP must be additionally ordered per 500 mm stroke or part thereof.
- 2) Quantity with stroke ≤ 1,000 mm. With stroke > 1,000 mm, an installation kit HMIXB-RP/FP must be additionally ordered per 1,000 mm stroke or part thereof.
- 3) Length depends on the stroke of the drive

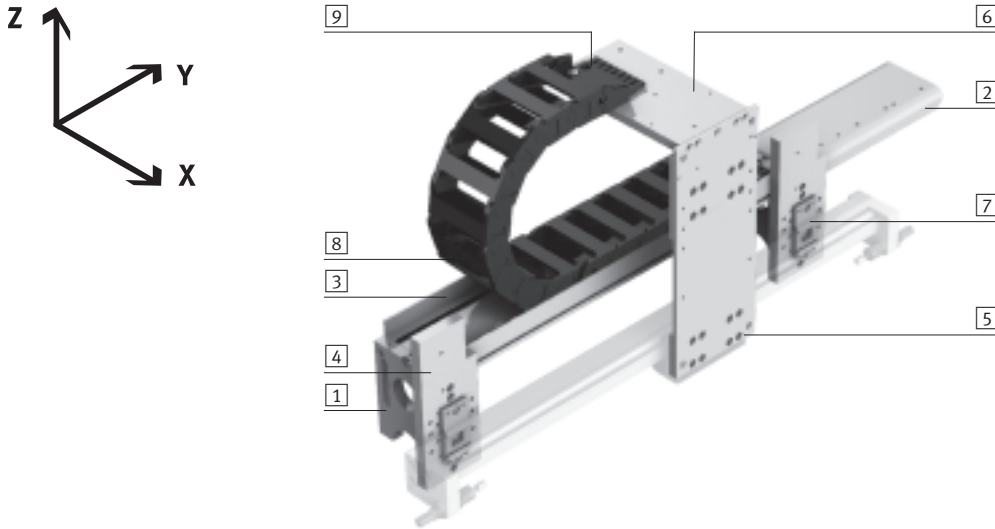
Three-dimensional gantries

Y modules

FESTO

Mono system for size 25 and 40

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



Parts list								
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	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	Page/ Internet
1	2	539 657	HMVV-RP/FP	539 657	HMVV-RP/FP	539 657	HMVV-RP/FP	89
2	1	539 658	HMIXF-RP/FP	539 658	HMIXF-RP/FP	539 658	HMIXF-RP/FP	89
3	1 ¹⁾	539 379	HMIA-E07	539 379	HMIA-E07	539 379	HMIA-E07	122
4	2 ³⁾	539 656	HMVM-RP/FP-DL25/40	539 656	HMVM-RP/FP-DL25/40	539 656	HMVM-RP/FP-DL25/40	90
5	1	539 368	HMVS-DL25	539 368	HMVS-DL25	539 369	HMVS-DL40	92
6	1	539 659	HMIYF-RF/DL25	539 659	HMIYF-RF/DL25	539 660	HMIYF-RF/DL40	119
7	2 ²⁾	150 736	MUP-18/25	-	-	-	-	mup
	1 ²⁾	-	-	531 753	MUC-25	-	531 755 MUC-40	muc
	1 ²⁾	-	-	-	-	150 738	MUP-40	mup
8	1 ¹⁾	IGUS E2 medium 2400.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01 and TS O/nT2						-
9	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA						-

1) Length depends on the stroke of the drive

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

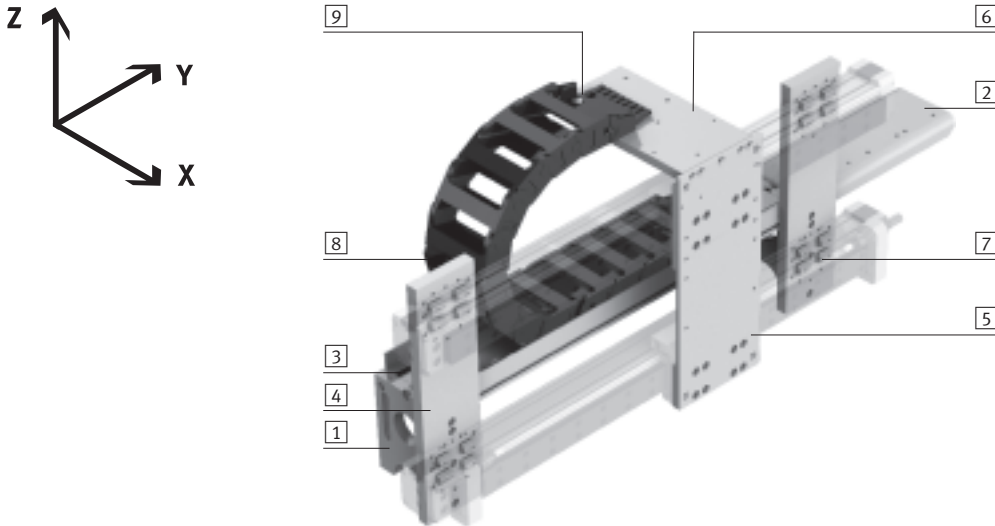
3) Quantity with stroke ≤ 500 mm. With stroke > 500 mm, a basic kit HMVM-RP/FP-DL25/40 must be additionally ordered per 500 mm stroke or part thereof.

Three-dimensional gantries

Y modules

Duo system for size 25 and 40

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



Parts list								
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	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	→ Page/ Internet
1	2	539 657	HMVV-RP/FP	539 657	HMVV-RP/FP	539 657	HMVV-RP/FP	89
2	1	539 658	HMIXF-RP/FP	539 658	HMIXF-RP/FP	539 658	HMIXF-RP/FP	89
3	1 ¹⁾	539 379	HMIA-E07	539 379	HMIA-E07	539 379	HMIA-E07	122
4	2 ³⁾	539 655	HMVD-RP/FP-DL25/40	539 655	HMVD-RP/FP-DL25/40	539 655	HMVD-RP/FP-DL25/40	90
5	1	539 368	HMVS-DL25	539 368	HMVS-DL25	539 369	HMVS-DL40	92
6	1	539 659	HMIYF-RF/DL25	539 659	HMIYF-RF/DL25	539 660	HMIYF-RF/DL40	119
7	4 ²⁾	150 736	MUP-18/25	-	-	-	-	mup
	2	-	-	531 753	MUC-25	-	531 755	muc
8	1 ¹⁾	IGUS E2 medium 240.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01 and TS O/ηT2						-
9	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN 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.

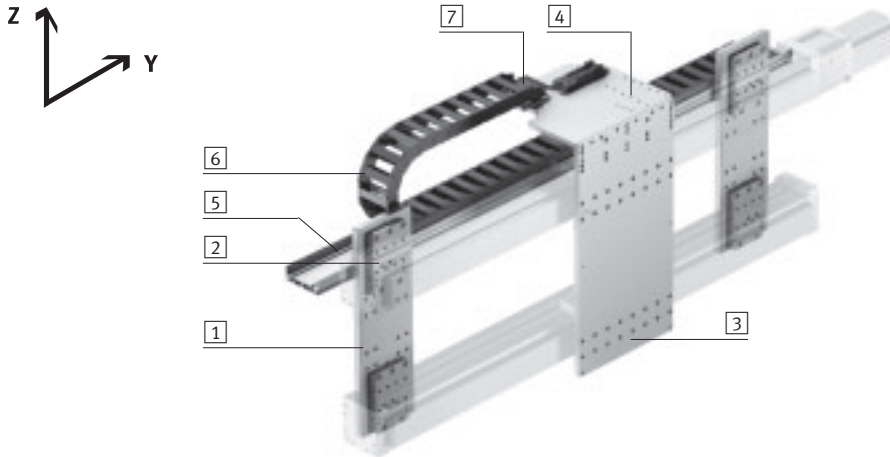
Three-dimensional gantries

Y modules

FESTO

Duo system for size 63

Toothed belt/spindle axes DGE, linear drives DGPL



Parts list						
Type	HMBSY-RP/FP-D50/63		HMBSY-RP/FP-D50-2			
For drives	DGPL-50 DGPL-63 DGE-63-SP-KF DGE-63-ZR-KF DGE-63-ZR-RF		DGC-50			
System type	Duo 63			→ Page/ Internet		
Item	Pieces	Part No.	Type	Part No.	Type	
[1]	2 ¹⁾	566 880	HMVD-RP/FP-DL63	566 880	HMVD-RP/FP-DL63	90
[2]	4 ²⁾	566 878	HMVA-63	–		92
[2]	4 ³⁾	–		531 756	MUC-50	muc
[3]	1	566 883	HMVS-DL63	566 883	HMVS-DL63	92
[4]	1	566 889	HMIY-RP/FP-E07	566 889	HMIY-RP/FP-E07	120
[5]	1 ⁴⁾	539 379	HMIA-E07-...	539 379	HMIA-E07-...	122
[6]	1 ⁴⁾	IGUS E2 medium 240.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01 and TS O/nT2				–
[7]	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA				–
–	2	175 958	HMBS-80/80			70
–	1 ⁵⁾	566 892	HMVD-DL40/63			94

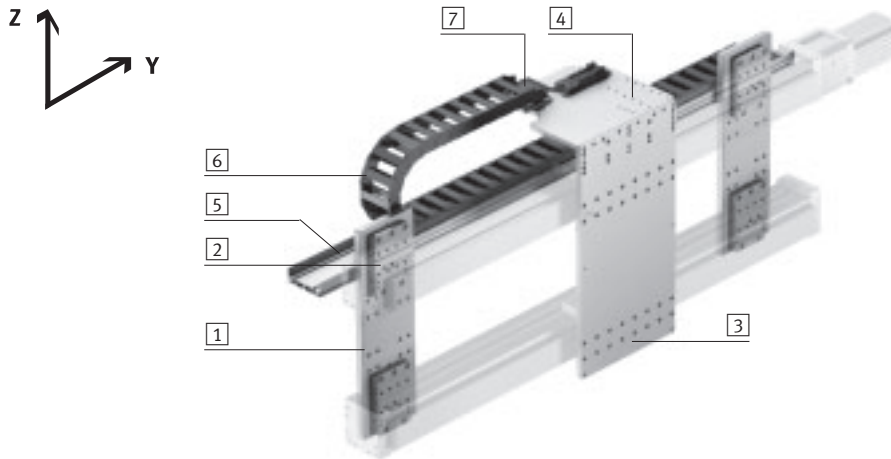
- 1) Quantity with stroke ≤ 1,000 mm. With stroke > 1,000 mm, a basic kit HMVD-RP/FP-DL63 must be additionally ordered per 1,000 mm stroke or part thereof.
- 2) Quantity with stroke ≤ 1,000 mm. With stroke > 1,000 mm, two adapter kits HMVA-63 must be additionally ordered per 1,000 mm stroke or part thereof.
- 3) Quantity with stroke ≤ 1,000 mm. With stroke > 1,000 mm, two central supports MUC-50 must be additionally ordered per 1,000 mm stroke or part thereof.
- 4) Length depends on the stroke of the drive
- 5) Quantity 0 with stroke ≤ 500 mm. With stroke > 500 mm, a reinforcing plate HMVD-DL must be ordered.

Three-dimensional gantries

Y modules

Duo system for size 63

Linear drives DGC



Parts list				
Type	HMBSY-RP/FP-D63-2			→ Page/ Internet
For drives	DGC-63			
System type	Duo 63			
Item	Pieces	Part No.	Type	
1	2 ¹⁾	566 880	HMVD-RP/FP-DL63	90
2	4 ²⁾	531 757	MUC-63	muc
3	1 ³⁾	566 883	HMVS-DL63	92
4	1	566 889	HMIY-RP/FP-E07	120
5	1 ⁴⁾	539 379	HMIA-E07-...	122
6	1 ⁴⁾	IGUS E2 medium 240.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01 and TS O/n _T 2		-
7	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA		-
-	2	175 958	HMBS-80/80	70
-	1 ⁵⁾	566 892	HMVD-DL40/63	94

1) Quantity with stroke ≤ 1,000 mm. With stroke > 1,000 mm, a basic kit HMVD-RP/FP-DL63 must be additionally ordered per 1,000 mm stroke or part thereof.

2) Quantity with stroke ≤ 1,000 mm. With stroke > 1,000 mm, two adapter kits HMVA-63 must be additionally ordered per 1,000 mm stroke or part thereof.

3) Quantity with stroke ≤ 1,000 mm. With stroke > 1,000 mm, two central supports MUC-50 must be additionally ordered per 1,000 mm stroke or part thereof.

4) Length depends on the stroke of the drive

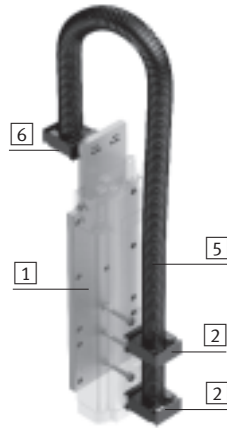
5) Quantity 0 with stroke ≤ 500 mm. With stroke > 500 mm, a reinforcing plate HMVD-DL must be ordered.

Three-dimensional gantries

Z modules

Mono/duo system

Mini slides DGSL



Parts list								
Type		HMBSZ-DGSL-7		HMBSZ-DGSL-8		→ Page/ Internet		
For drives		DGSL-12	DGSL-16	DGSL-20	DGSL-25			
System type		Mono 25	Mono 40 Duo 25	Duo 25	Duo 40			
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	
1	1	539 373	HMVZ-2	539 373	HMVZ-2	539 373	HMVZ-2	91
2	1	192 289	MKRS-16,5-B	192 289	MKRS-16,5-B	192 290	MKRS-23-B	109
		548 803	ZBV-M5-7	548 803	ZBV-M5-7	548 804	ZBV-M5-9	79
5	1 ¹⁾	177 566	MKR-16,5-PG-16	177 566	MKR-16,5-PG-16	177 567	MKR-23-PG-21	102
6	1	192 289	MKRS-16,5-B	192 289	MKRS-16,5-B	192 290	MKRS-23-B	109

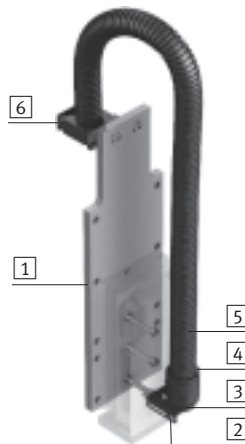
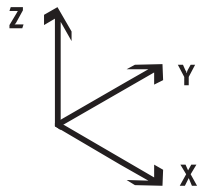
1) Length depends on the stroke of the drive

Three-dimensional gantries

Z modules

Mono/duo system

Mini slides SLT



Parts list								
Type		HMBSZ-SLT-7					→ Page/ Internet	
For drives		SLT-16	SLT-20	SLT-25				
System type		Mono 25	Mono 40 Duo 25	Duo 25				
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	
1	1	539 373	HMVZ-2	539 373	HMVZ-2	539 373	HMVZ-2	91
2	1	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	193 124	HMZAS-PG-21	110
3	1	177 599	MKM-PG-21	177 599	MKM-PG-21	177 599	MKM-PG-21	109
4	1	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	177 572	MKRV-23-PG-21	104
5	1 ¹⁾	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	177 567	MKR-23-PG-21	102
6	1	192 290	MKRS-23-B	192 290	MKRS-23-B	192 290	MKRS-23-B	109

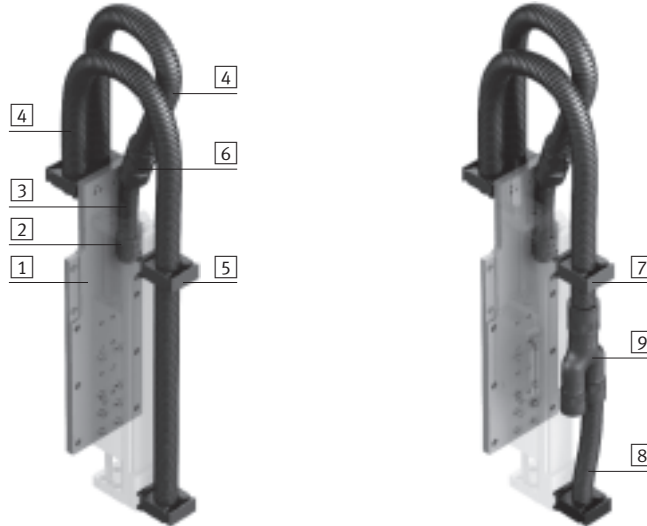
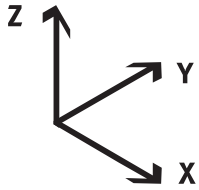
1) Length depends on the stroke of the drive

Three-dimensional gantries

Z modules

Mono/duo system

Linear modules HMPL



Parts list							→ Page/ Internet
Type	HMBSZ-HMPL-5		HMBSZ-HMPL-6				
For drives	HMPL-16	HMPL-20	HMPL-16	HMPL-20			
System type	Without intermediate position		With intermediate position				
	Mono 25	Mono 40 Duo 25	Mono 25	Mono 40 Duo 25			
Item	Pieces	Part No. Type	Part No. Type	Part No. Type	Part No. Type		
1	1	539 375 HMVZ-4	539 375 HMVZ-4	539 375 HMVZ-4	539 375 HMVZ-4	91	
2	1	177 571 MKRV-16,5-PG-16	177 571 MKRV-16,5-PG-16	177 571 MKRV-16,5-PG-16	177 571 MKRV-16,5-PG-16	104	
3	1 ¹⁾	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	102	
4	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		
5	4 ³⁾	192 290 MKRS-23-B	192 290 MKRS-23-B	-	-	109	
6	1	194 321 MKRT-23-16,5	194 321 MKRT-23-16,5	194 321 MKRT-23-16,5	194 321 MKRT-23-16,5	106	
7	3 ³⁾	-	-	192 290 MKRS-23-B	192 290 MKRS-23-B	109	
8	1	-	-	192 289 MKRS-16,5-B	192 289 MKRS-16,5-B		
9	1	-	-	193 946 MKY-PG-21-2PG-16	193 946 MKY-PG-21-2PG-16	106	

1) Length 200 mm

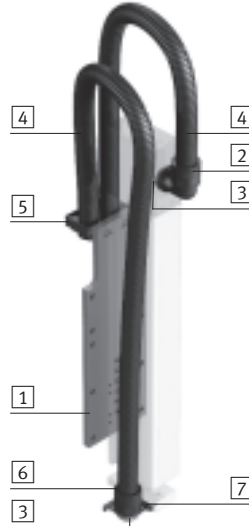
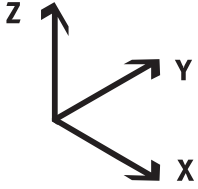
2) Length depends on the stroke of the drive, 2 conduits are required with an intermediate position.

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

Three-dimensional gantries

Z modules

Mono/duo system
Linear modules HMP



Parts list						
Type	HMBSZ-HMP-4		HMBSZ-HMP-5		HMBSZ-HMP-6	→ Page/ Internet
For drives	HMP-16		HMP-20		HMP-25/HMP-32	
System type	Mono 40 Duo 25		Duo 25		Duo 40	
Item	Pieces	Part No.	Type	Part No.	Type	
1	1	539 374	HMVZ-3	539 374	HMVZ-3	91
2	1	177 577	MKRL-23-PG-21	177 578	MKRL-29-PG-29	105
3	2	177 599	MKM-PG-21	177 600	MKM-PG-29	109
4	1 ¹⁾	177 567	MKR-23-PG-21	177 568	MKR-29-PG-29	102
5	2	192 290	MKRS-23-B	192 291	MKRS-29-B	109
6	1	177 572	MKRV-23-PG-21	177 573	MKRV-29-PG-29	104
7	1	193 124	HMZAS-PG-21	177 603	HMZAS-PG-29	110

1) Length depends on the stroke of the drive

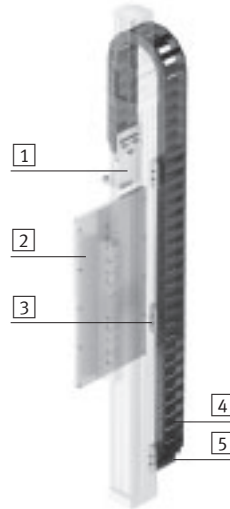
Three-dimensional gantries

Z modules

FESTO

Mono/duo system

Linear drives DGPL



Parts list					
Type		HMBSZ-DL40-63/DA40		HMBSZ-DL40-63/DA40	
For drives		DGPL-40		DGPL-50 DGPL-63	
System type		Duo 40		Duo 63	
Item	Pieces	Part No.	Type	Part No.	
1	1	566 885	HMIW-E05/E07	566 885 HMIW-E05/E07	121
2	1	566 876	HMVZ-9	566 876 HMVZ-9	91
3	3 ¹⁾	566 877	HMIW-E05/E07-DL40/63	566 877 HMIW-E05/E07-DL40/63	121
4	1 ²⁾	IGUS E2 medium 2400.05.100.0 and 211 or ENERGY CHAIN MC 0320.55-01-77 and TS O/n _T 2		IGUS E2 medium 2400.05.100.0 and 211 or ENERGY CHAIN MC 0320.55-01-77 and TS O/n _T 2	-
5	1	IGUS E2 medium 2050.ZB or ENERGY CHAIN MC FA/MA		IGUS E2 medium 2050.ZB or ENERGY CHAIN MC FA/MA	-
4	1 ²⁾	IGUS E2 medium 2400.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01-77 and TS O/n _T 2		IGUS E2 medium 2400.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01-77 and TS O/n _T 2	-
5	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA		IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA	-

1) The energy chain must be supported at least every 500 mm beyond the flexible bend. Increase the quantity accordingly if necessary.

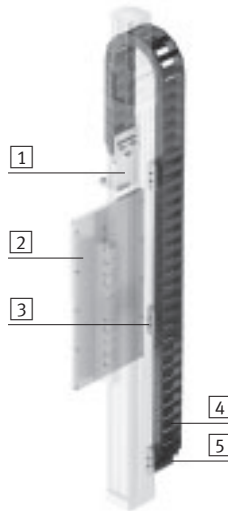
2) Length depends on the stroke of the drive

Three-dimensional gantries

Z modules

Mono/duo system

Linear drives DGC



Parts list					
Type		HMBSZ-DL40-63/DA40		HMBSZ-DL40-63/DA40	
For drives		DGC-40		DGC-50 DGC-63	
System type		Duo 40		Duo 63	
Item	Pieces	Part No.	Type	Part No.	Type
1	1	566 885	HMIW-E05/E07	566 885	HMIW-E05/E07
2	1	566 876	HMVZ-9	566 876	HMVZ-9
3	3 ¹⁾	566 877	HMIZW-E05/E07-DL40/63	566 877	HMIZW-E05/E07-DL40/63
4	1 ²⁾	IGUS E2 medium 2400.05.100.0 and 211 or ENERGY CHAIN MC 0320.55-01-77 and TS O/n _T 2		IGUS E2 medium 2400.05.100.0 and 211 or ENERGY CHAIN MC 0320.55-01-77 and TS O/n _T 2	
5	1	IGUS E2 medium 2050.ZB or ENERGY CHAIN MC FA/MA		IGUS E2 medium 2050.ZB or ENERGY CHAIN MC FA/MA	
4	1 ²⁾	IGUS E2 medium 240.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01-77 and TS O/n _T 2		IGUS E2 medium 240.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01-77 and TS O/n _T 2	
5	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA		IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA	

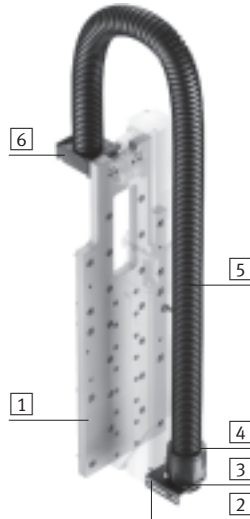
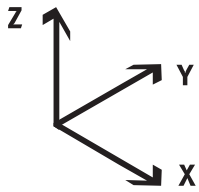
1) The energy chain must be supported at least every 500 mm beyond the flexible bend. Increase the quantity accordingly if necessary.
 2) Length depends on the stroke of the drive

Three-dimensional gantries

Z modules

Mono/duo system

Cantilever axes EGSA



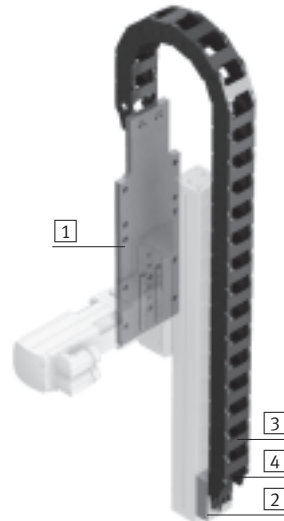
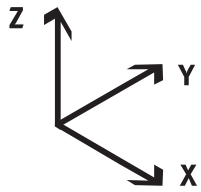
Parts list				
Type		HMBSZ-EGSA-2		
For drives		EGSA-50	EGSA-60	
System type		Mono 25	Mono 40 Duo 25	→ Page/ Internet
Item	Pieces	Part No.	Type	
1	1	560 021 HMVZ-7	560 021 HMVZ-7	91
2	1	193 124 HMZAS-PG21	193 124 HMZAS-PG21	104
3	1	177 599 MKM-PG-21	177 599 MKM-PG-21	102
4	1	177 572 MKRV-23-PG-21	177 572 MKRV-23-PG-21	
5	1 ¹⁾	177 567 MKR-23-PG-21	177 567 MKR-23-PG-21	109
6	1	192 290 MKRS-23-B	192 290 MKRS-23-B	106

1) Length depends on the stroke of the drive.

Three-dimensional gantries

Z modules

Mono/duo system
Cantilever axes DGEA



Parts list								→ Page/ Internet				
Type	HMBSZ-DGEA-1		HMBSZ-DGEA-2		HMBSZ-DGEA-3		HMBSZ-DGEA-4		HMBSZ-DL40-63/DA40			
For drives	DGEA-18		DGEA-25		DGEA-25		DGEA-40		DGEA-40			
System type	Mono 25 Mono 40 Duo 25		Duo 25		Duo 40		Duo 40		Duo 63			
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type	Part No.	Type	Part No.	Type	
1	1	539 374	HMVZ-3	539 375	HMVZ-4	539 377	HMVZ-6	539 377	HMVZ-6	566 876	HMVZ-9	91
2	1	539 370	HMIZF-E03-DA18	539 371	HMIZF-E03-DA25	539 371	HMIZF-E03-DA25	566 895	HMIZF-E03/E05/E07-DA40	566 877	HMIZW-E05/E07-DL40/63	121
3	1 ¹⁾	IGUS E2 medium 2400.05.100.0 and 211 or ENERGY CHAIN MC 0320.55-01-77 and TS O/η _T 2										-
4	1	IGUS E2 medium 2050.ZB or ENERGY CHAIN MC FA/MA										-
3	1 ¹⁾	IGUS E2 medium 2400.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01-77 and TS O/η _T 2										-
4	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA										-

1) Length depends on the stroke of the drive

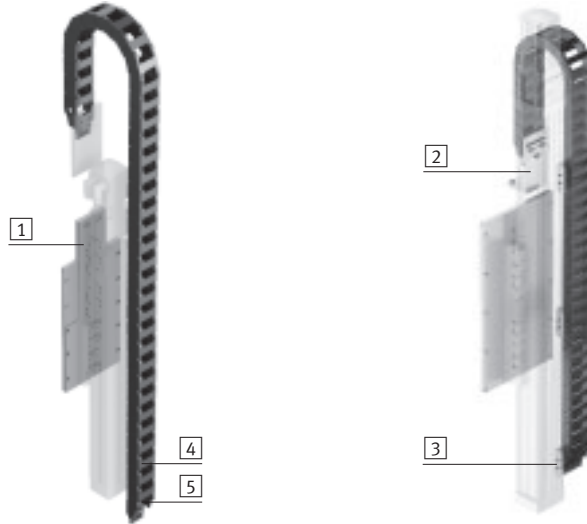
Three-dimensional gantries

Z modules

FESTO

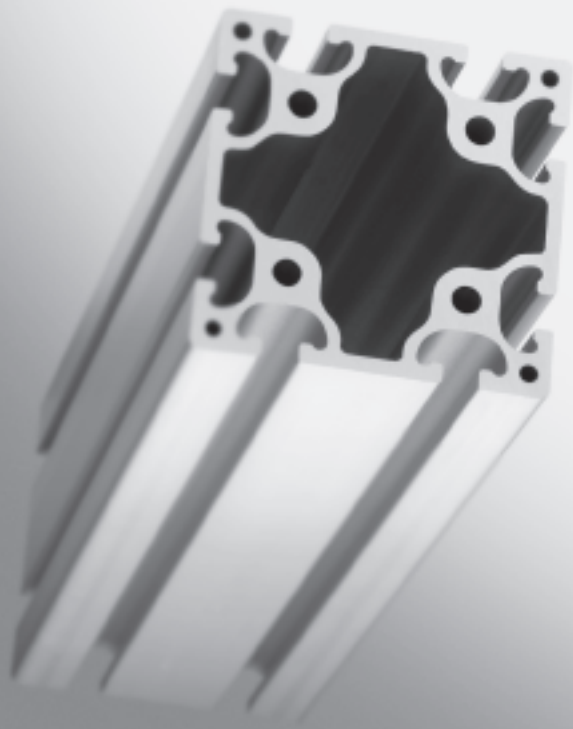
Mono/duo system

Spindle axes DGE



Parts list							→ Page/ Internet		
Type	HMBSZ-DGE-1	HMBSZ-DGE-2	HMBSZ-DGE-3	HMBSZ-DL40-63/DA40					
For drives	DGE-25-SP	DGE-40-SP	DGE-40-SP	DGE-40-SP DGE-63-SP					
System type	Mono 40 Duo 25	Duo 25	Duo 40	Duo 63					
Item	Pieces	Part No.	Type	Part No.	Type	Part No.	Type		
[1]	1	539 374 HMVZ-3		539 375 HMVZ-4		539 377 HMVZ-6		566 876 HMVZ-9	91
[2]	1	566 885 HMIW-E05/E07		566 885 HMIW-E05/E07		566 885 HMIW-E05/E07		566 885 HMIW-E05/E07	121
[3]	3 ¹⁾	–		–		–		566 877 HMIZW-E05/E07-DL40/63	121
[4]	1 ²⁾	IGUS E2 medium 240.05.100.0 and 211 or ENERGY CHAIN MC 0320.55-01-77 and TS O/n _T 2							–
[5]	1	IGUS E2 medium 2050.ZB or ENERGY CHAIN MC FA/MA							–
[4]	1 ²⁾	IGUS E2 medium 240.07.100.0 and 211 or ENERGY CHAIN MC 0320.75-01-77 and TS O/n _T 2							–
[5]	2	IGUS E2 medium 2070.ZB or ENERGY CHAIN MC FA/MA							–

- 1) The energy chain must be supported at least every 500 mm beyond the flexible bend. Increase the quantity accordingly if necessary.
 2) Length depends on the stroke of the drive

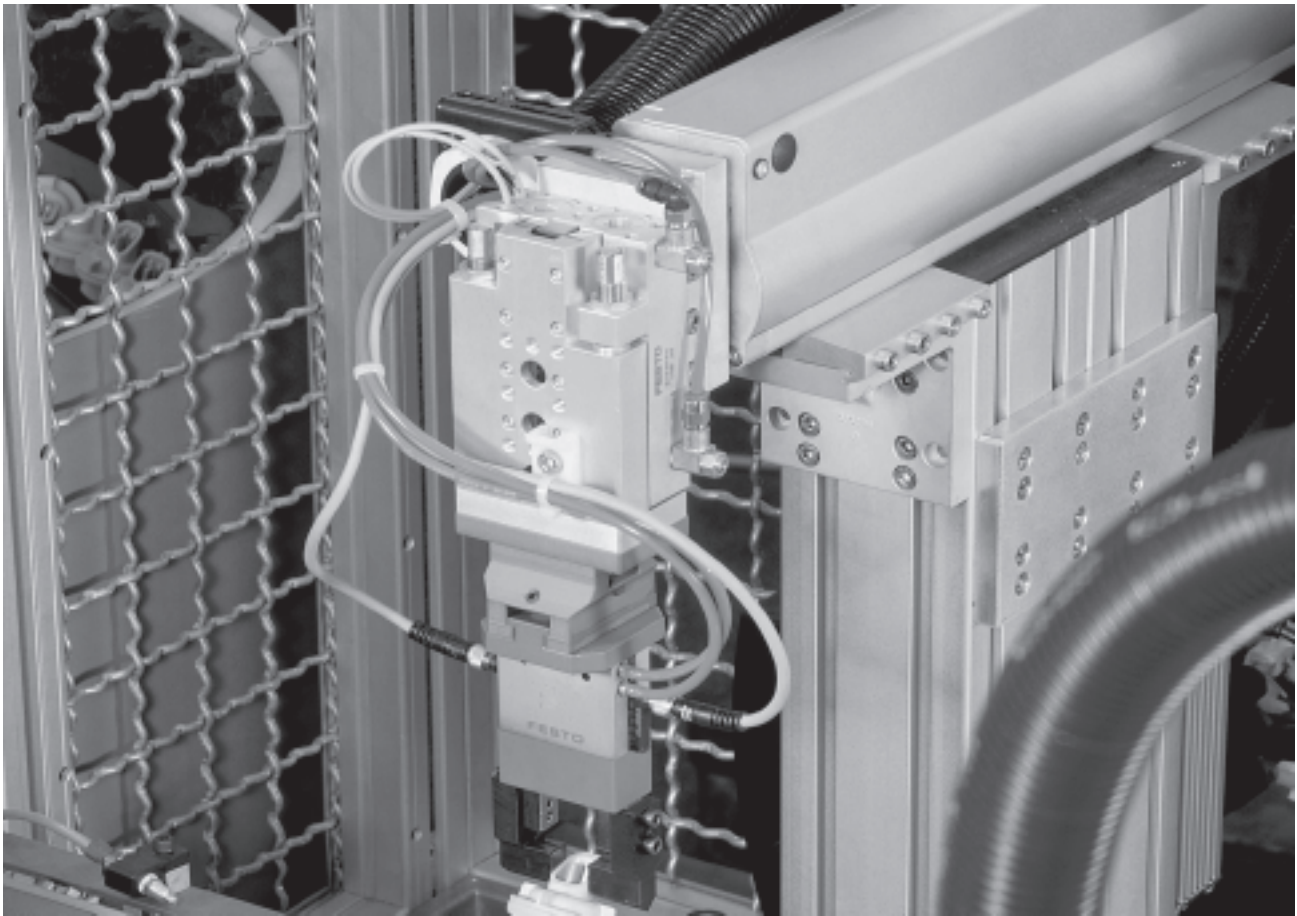


- Wide range of variants
- Heavy-duty
- Functional
- Flexible

Basic components

Key features

FESTO



Basic kits

Profile column HMBS

With slot width of 8 mm for mounting connecting and basic kits.

Cover cap HMBSA

For covering the end faces of profile columns HMBS.

Connecting kit HMBSV

For connecting 2 to 3 profile columns HMBS.

Connecting kit HMBSW

For connecting two profile columns HMBS or profile columns with 40 mm slot width.

Basic kit HMBF-DB

For direct mounting of profile columns on a base plate or on a machine rack.

Connecting kit HMBWS

For connecting one profile column (with 40 mm slot width) to another profile column (with a slot width other than 40 mm).

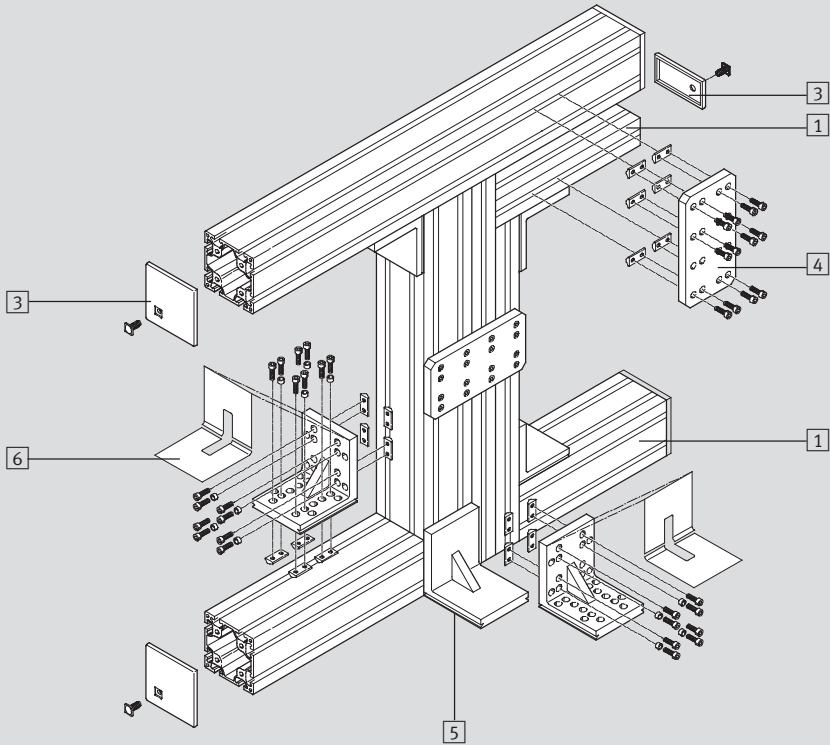
Connecting kit HMBV-ND

Interface for connecting basic components to Festo drives.

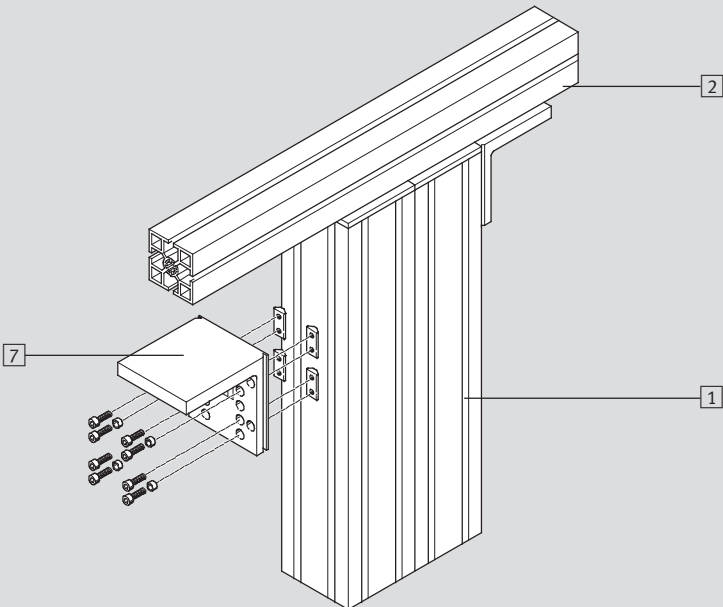
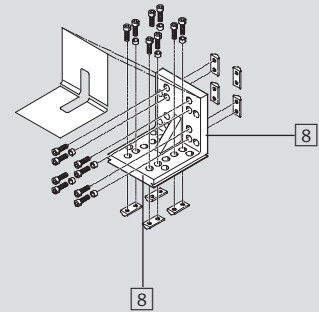
Basic components

Key features

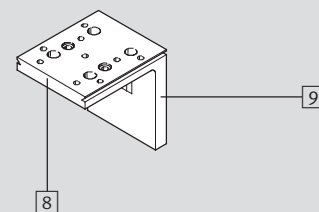
An optimum concept with multiple functionalities



6 Connecting kit HMBSW



7 Connecting kit HMBWS



- 1 Profile column HMBS
- 2 Bosch profile column
- 3 Cover cap HMBSA
- 4 Connecting kit HMBSV

- 5 Basic kit HMBF-DB
- 6 Connecting kit HMBSW
- 7 Connecting kit HMBWS

- 8 Angle bracket for mounting profile columns with a 40 mm hole pattern (Festo, item, May-Tec, Schuco, etc.)

- 9 Angle bracket for mounting profile columns with a hole pattern for slot widths ≠ 40 mm (Bosch, Norgren, etc.)

Basic components

Technical data



Profile column HMBS

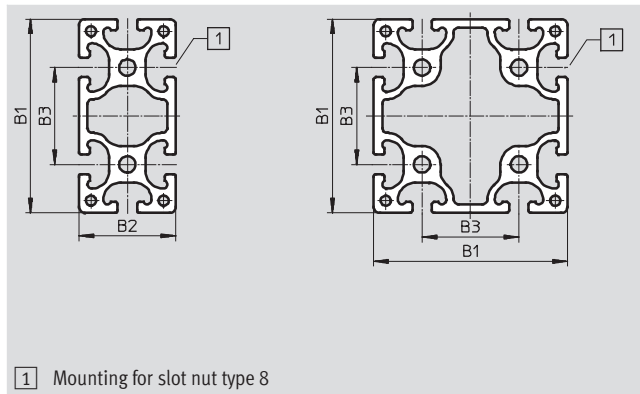
Scope of delivery:

1 column

Material:

Aluminium

Free of copper, PTFE and silicone



1 Mounting for slot nut type 8

Dimensions and ordering data							
Designation	B1	B2	B3	CRC ¹⁾	Part No.	Type	PU ²⁾
Profile column	80	40	40	2	175 964	HMBS-80/40	1
	80	–	40		175 958	HMBS-80/80	1
Accessories (to be ordered separately)							
Slot nut	–			2	186 567	HMBN-8-2M5	10

1) Corrosion resistance class 2 according to Festo standard 940 070

Components subject to moderate corrosion stress. 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.

2) Packaging unit. For HMBS: specify the desired length in mm ($L_{max.} = 6,000$ mm).

Cover cap HMBSA

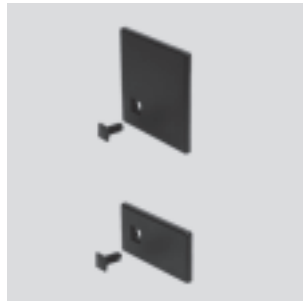
Scope of delivery:

1 cover, 1 plug

Material:

Polyacetal

Free of copper, PTFE and silicone



Dimensions and ordering data						
Designation	Dimensions	CRC ¹⁾	Part No.	Type	PU ²⁾	
Cover cap	80x40	2	175 966	HMBSA-80/40	1	
	80x80		175 965	HMBSA-80/80	1	

1) Corrosion resistance class 2 according to Festo standard 940 070

Components subject to moderate corrosion stress. 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.

2) Packaging unit.

Basic components

Technical data



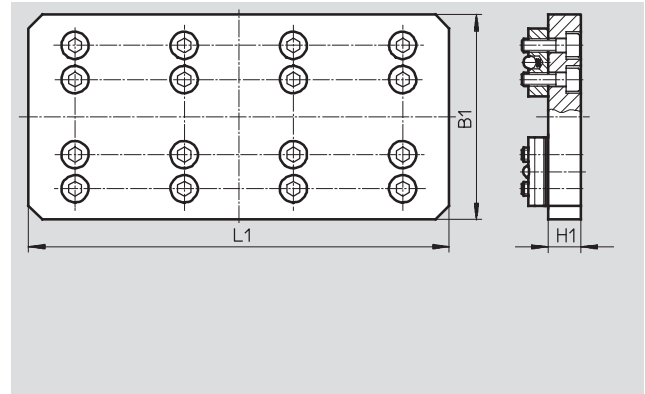
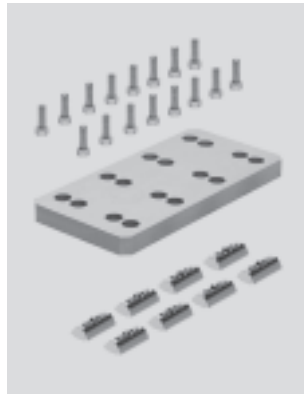
Connecting kit HMBSV

Scope of delivery:

- 1 mounting plate, 16 screws,
- 8 slot nuts

Material:

- Aluminium
- Free of copper, PTFE and silicone



Dimensions and ordering data								
Designation	B1	H1	L1	CRC ¹⁾	Part No.	Type	PU ²⁾	
Connecting kit	75	12	154	2	175 972	HMBSV	1	
Accessories (for reorder)								
Slot nut	-	-	-	2	186 567	HMBN-8-2M5	10	
Screw	-	-	-	-	-	M5x16	-	

- 1) Corrosion resistance class 2 according to Festo standard 940 070
 Components subject to moderate corrosion stress. 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.
- 2) Packaging unit.

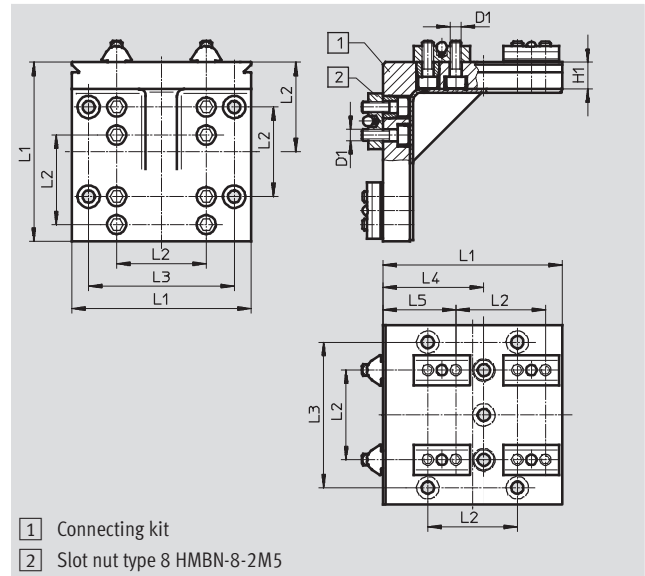
Connecting kit HMBSW

Scope of delivery:

- 1 bracket, 16 screws, 8 slot nuts,
- 8 spacer rings, 2 cover caps

Material:

- Aluminium
- Cover cap: Polyacetal
- Free of copper, PTFE and silicone



- 1) Connecting kit
 2) Slot nut type 8 HMBN-8-2M5

Dimensions and ordering data											
Designation	D1	H1	L1	L2	L3	L4	L5	CRC ¹⁾	Part No.	Type	PU ²⁾
Connecting kit	M5	12	80	40	65	45	32.5	2	178 228	HMBSW	1
Accessories (for reorder)											
Slot nut	-	-	-	-	-	-	-	2	186 567	HMBN-8-2M5	10
Spacer ring	-	-	-	-	-	-	-	-	186 563	HMBRD	10
Screw	-	-	-	-	-	-	-	-	-	M5x16	-

- 1) Corrosion resistance class 2 according to Festo standard 940 070
 Components subject to moderate corrosion stress. 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.
- 2) Packaging unit.

Basic components

Technical data



Basic kit HMBF-DB

Scope of delivery:

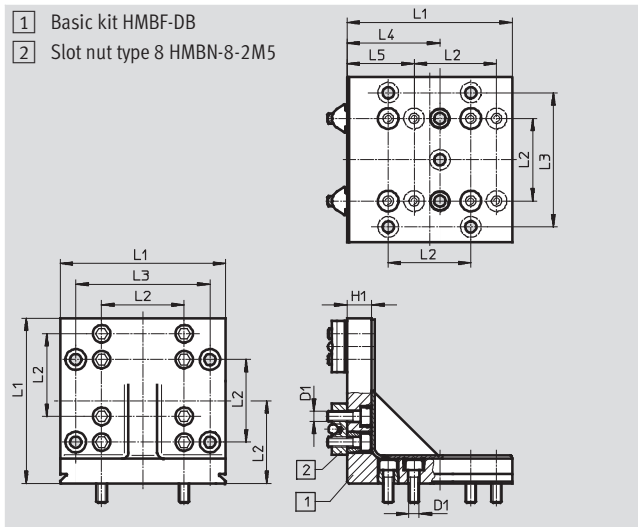
1 bracket, 16 screws, 4 slot nuts,
8 spacer rings, 2 cover caps

Material:

Aluminium

Cover cap: Polyacetal

Free of copper, PTFE and silicone



Dimensions and ordering data											
Designation	D1	H1	L1	L2	L3	L4	L5	CRC ¹⁾	Part No.	Type	PU ²⁾
Basic kit	M5	12	80	40	65	45	32.5	2	175 951	HMBF-DB	1
Accessories (for reorder)											
Slot nut	-							2	186 567	HMBN-8-2M5	10
Spacer ring	-								186 563	HMBRD	10
Screw	-								-	M5x16	-

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.
- 2) Packaging unit.

Connecting kit HMBWS

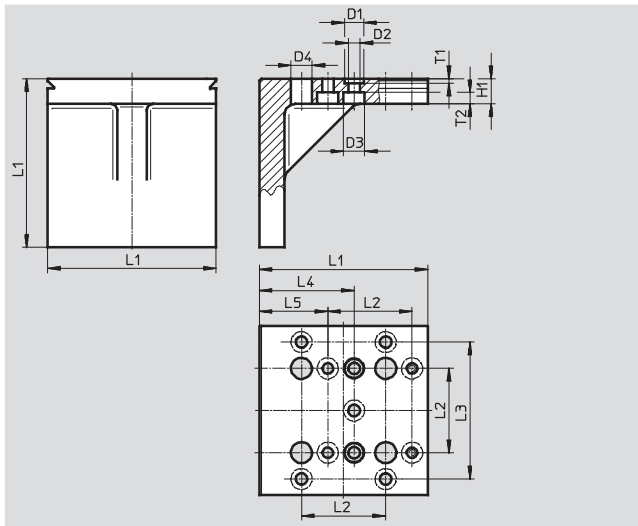
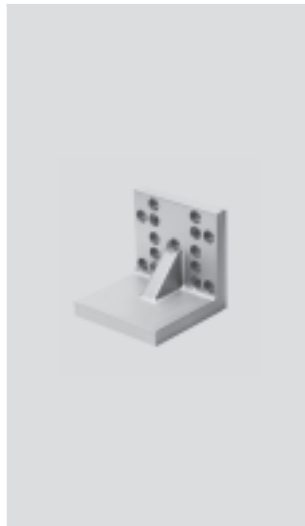
Scope of delivery:

1 bracket

Material:

Aluminium

Free of copper, PTFE and silicone



Dimensions and ordering data																
Designation	D1	D2	D3	D4	H1	L1	L2	L3	L4	L5	T1	T2	CRC ¹⁾	Part No.	Type	PU ²⁾
Connecting kit	9 ^{H7}	5.5	10	10 ^{H7}	12	80	40	65	45	32.5	2.1	5.5	2	189 486	HMBWS	1
Accessories (for reorder)																
Slot nut	-							2	186 567	HMBN-8-2M5	10					
Screw	-								-	M5x16	-					

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.
- 2) Packaging unit.

Basic components

Technical data

Connecting kit HMBV-ND

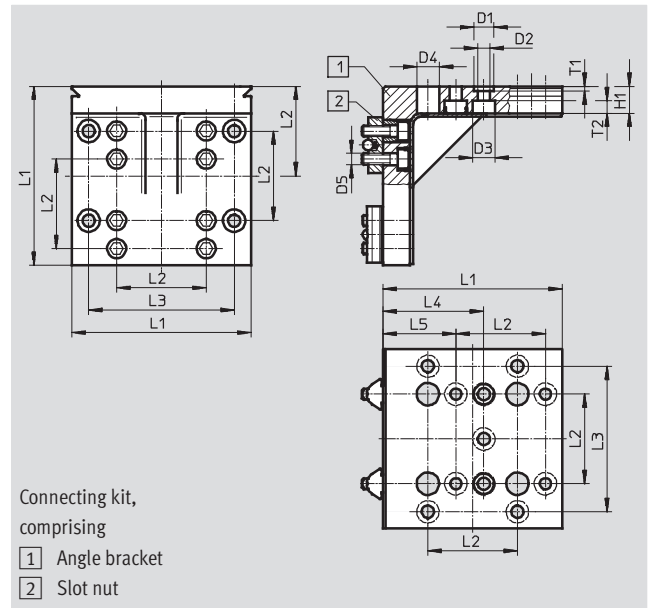
- for HMP, HMPL
- for SLT with HMBK-WS and HMSV-34 ... 37

Scope of delivery:

- 1 bracket, 8 screws, 4 slot nuts,
- 4 spacer rings, 2 cover caps

Material:

- Anodised aluminium
- Free of copper, PTFE and silicone



Dimensions													
Designation	D1	D2	D3	D4	D5	H1	L1	L2	L3	L4	L5	T1	T2
	∅	∅	∅	∅				±0.1	±0.1	±0.1	±0.1	±0.1	
	H7			H7									
Connecting kit	9	5.5	10	10	M5	12	80	40	65	45	32.5	2.1	5.5

Ordering data				
Designation	CRC ¹⁾	Part No.	Type	PU ²⁾
Connecting kit	2	175 967	HMBV-ND	1
Accessories (for reorder)				
Slot nuts	2	186 567	HMBN-8-2M5	10
Spacer rings		186 563	HMBRD	10
Screws		M5x16		-

1) Corrosion resistance class 2 according to Festo standard 940 070
 Components subject to moderate corrosion stress. 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.

2) Packaging unit.

Basic components

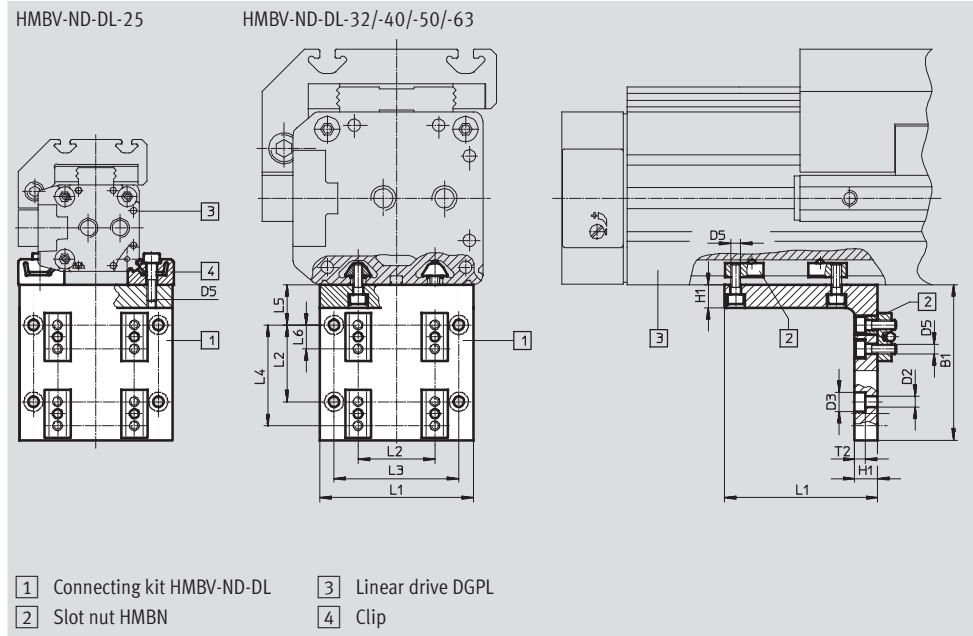
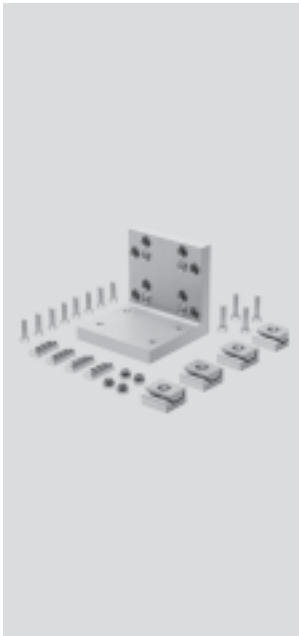
Technical data



Connecting kit HMBV-ND-DL
– for DGPL-25/-32/-40/-50/-63

Scope of delivery:
All individual parts required for mounting are included.

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions												
Designation	B1	D2 ∅	D3 ∅	D5	H1	L1	L2 ±0.2	L3 ±0.2	L4 ±0.2	L5	L6	T2
Connecting kit	81	5.5	10	M5	12	80	40	65	52.5	21	12.5	5.5

Ordering data				
For ∅	CRC ¹⁾	Part No.	Type	PU ²⁾
25	2	175 985	HMBV-ND-DL25	1
32		175 988	HMBV-ND-DL32	1
40		175 991	HMBV-ND-DL40	1
50		175 994	HMBV-ND-DL50	1
63		175 997	HMBV-ND-DL63	1

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.
- 2) Packaging unit.

Ordering data – Accessories (for reorder)									
For ∅	25	32	40	50	63	CRC ¹⁾	Part No.	Type	PU ²⁾
Slot nut	–	4	4	–	–	2	189 654	HMBN-5-M5	10
	–	–	–	4	4		189 655	HMBN-8-M5	10
	4	4	4	4	4		186 566	HMBN-8-2M5	10
Spacer rings	4	4	4	4	4		186 563	HMBRD	10
Central support	2	–	–	–	–		150 736	MUP-18/25	2
Screws	8	12	12	4	4		–	M5x16	–
	4	–	–	–	–		–	M5x20	–

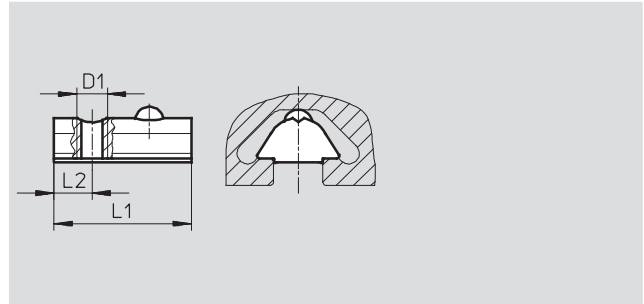
- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.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

Basic components

Technical data

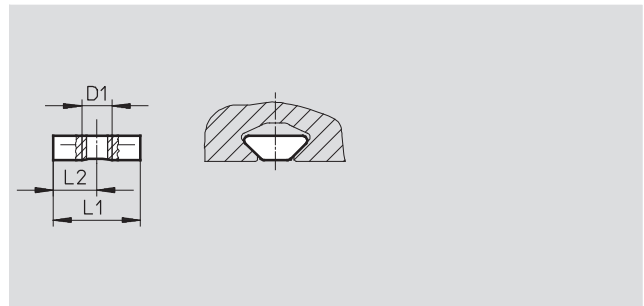
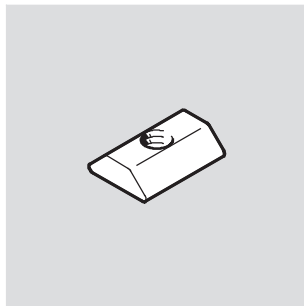
Slot nut HMBN-5-M5

Material:
Non-alloyed tempered steel
Free of copper, PTFE and silicone



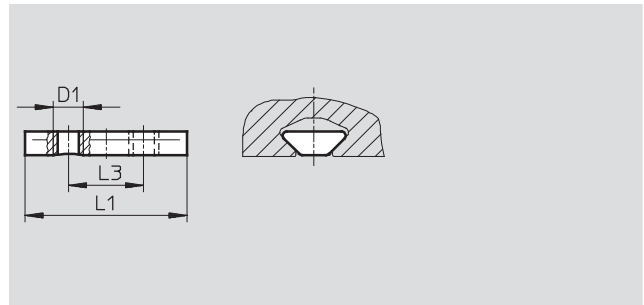
Slot nut HMBN-5-1M5

Material:
Non-alloyed tempered steel
Free of copper, PTFE and silicone



Slot nut HMBN-5-2M5

Material:
Non-alloyed tempered steel
Free of copper, PTFE and silicone



Dimensions and ordering data								
Type	D1	L1	L2	L3	CRC ¹⁾	Part No.	Type	PU ²⁾
HMBN-5-M5	M5	12	4	–	2	189 654	HMBN-5-M5	10
HMBN-5-1M5		14.5	7.25	–	2	547 264	HMBN-5-1M5	10
HMBN-5-2M5		27	–	12.5	2	186 566	HMBN-5-2M5	10

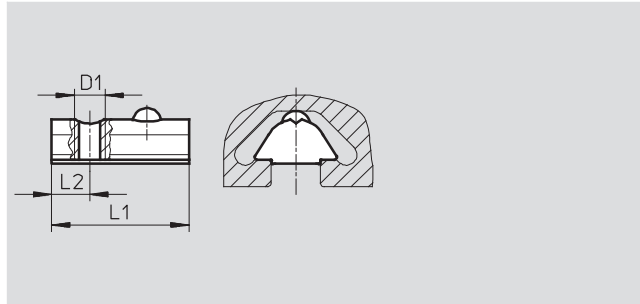
- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.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

Basic components

Technical data

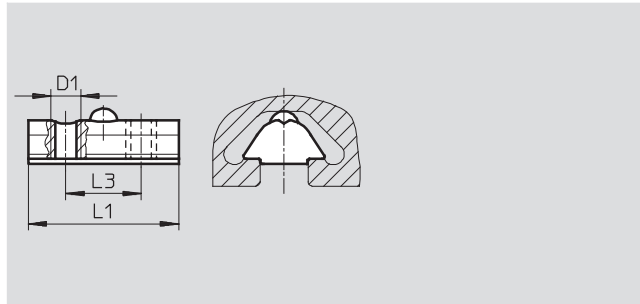
Slot nut HMBN-8-M5

Material:
Non-alloyed tempered steel
Free of copper, PTFE and silicone



Slot nut HMBN-8-2M5

Material:
Non-alloyed tempered steel
Free of copper, PTFE and silicone



Dimensions and ordering data								
Type	D1	L1	L2	L3	CRC ¹⁾	Part No.	Type	PU ²⁾
HMBN-8-M5	M5	22.5	6.25	–	2	189 655	HMBN-8-M5	10
HMBN-8-2M5		25	–	12.5				

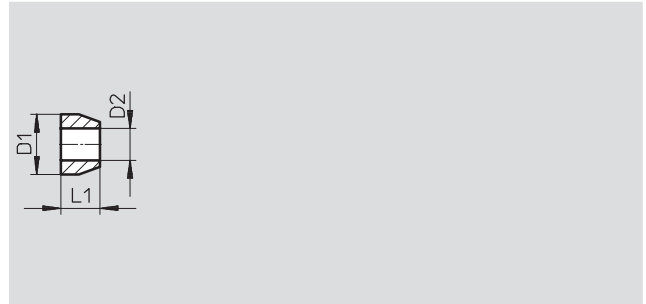
- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.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

Basic components

Technical data

Spacer ring HMBRD

Material:
Corrosion-resistant steel
Free of copper, PTFE and silicone

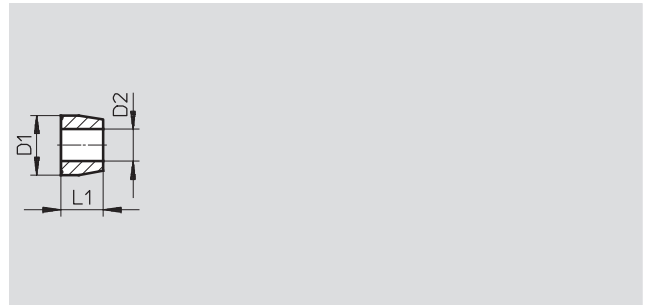
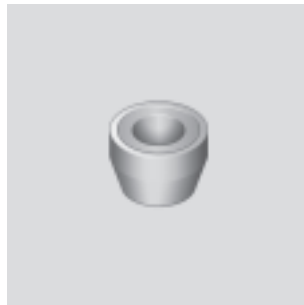


Dimensions and ordering data							
Type	D1	D2	L1	CRC ¹⁾	Part No.	Type	PU ²⁾
	∅	∅	±0.1				
	h8						
HMBRD	10	5.3	6.5	2	186 563	HMBRD	10

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.
- 2) Packaging unit.

Cutting ring HMBRS

Material:
Corrosion-resistant steel
Free of copper, PTFE and silicone



Dimensions and ordering data							
Type	D1	D2	L1	CRC ¹⁾	Part No.	Type	PU ²⁾
	∅	∅					
	+0.04						
HMBRS	9.9	5.3	7	2	186 564	HMBRS	10

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.
- 2) Packaging unit.

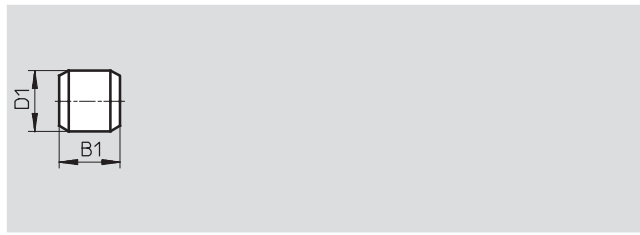
Basic components

Technical data

FESTO

Centring pin ZBS

Material:
Corrosion-resistant steel
Free of copper, PTFE and silicone

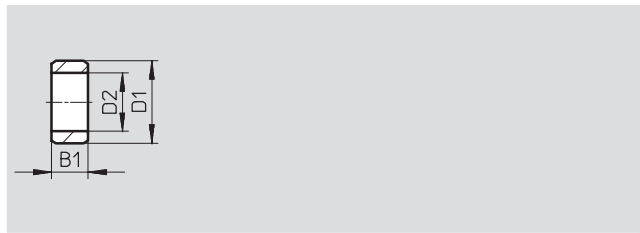


Dimensions and ordering data						
Type	B1	D1	CRC ¹⁾	Part No.	Type	PU ²⁾
	-0.2	∅ h8				
ZBS-2	5	2	2	525 273	ZBS-2	10
ZBS-5	5	5	2	150 928	ZBS-5	10

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.
- 2) Packaging unit.

Centring sleeve ZBH

Material:
Corrosion-resistant steel
Free of copper, PTFE and silicone



Dimensions and ordering data							
Type	B1	D1	D2	CRC ¹⁾	Part No.	Type	PU ²⁾
	-0.2	∅ h7	∅				
ZBH-5	2.4	5	3.2	2	189 652	ZBH-5	10
ZBH-7	3	7	5.3	2	186 717	ZBH-7	10
ZBH-9	4	9	6.4	2	150 927	ZBH-9	10
ZBH-12	5	12	10.3 +0.1	2	189 653	ZBH-12	10

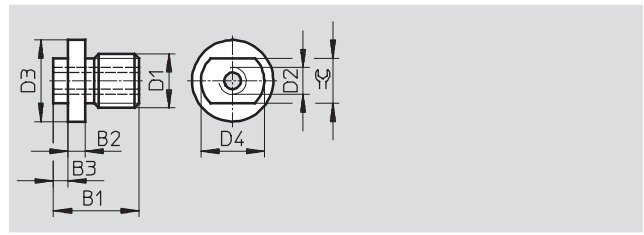
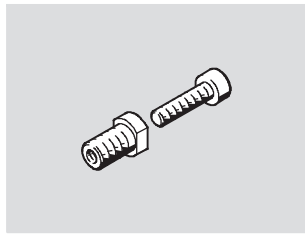
- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.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

Basic components

Technical data

Connector sleeve ZBV-M...

Material:
Corrosion-resistant steel
Free of copper, PTFE and silicone

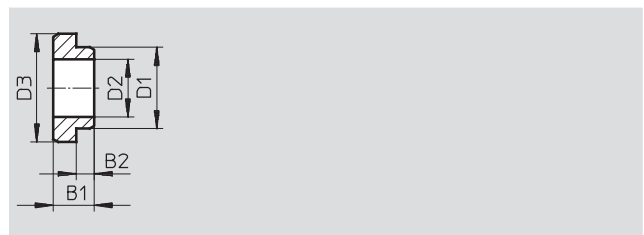
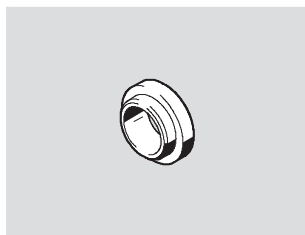


Dimensions and ordering data												
Type	B1	B2	B3	D1	D2	D3 ∅ h7	D4 ∅ h7	≡C	CRC ¹⁾	Part No.	Type	PU ²⁾
ZBV-M4-7	8.7	1.4 ^{+0.1}	1.3±0.05	M4	M2.5	7	5	4	2	548 802	ZBV-M4-7	3
ZBV-M5-7	11	-	3 ^{+0.1}	M5	M3	-	7	5.5	2	548 803	ZBV-M5-7	3
ZBV-M6-9	9.5	1.9 ^{+0.1}	1.6±0.05	M6	M3	9	7	5	2	548 804	ZBV-M6-9	3

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.
- 2) Packaging unit.

Connector sleeve ZBV

Material:
Corrosion-resistant steel
Free of copper, PTFE and silicone



Dimensions and ordering data									
Type	B1	B2	D1 ∅ h7	D2 ∅ H13	D3 ∅ h7	CRC ¹⁾	Part No.	Type	PU ²⁾
ZBV-9-7	3.4	1.5±0.05	7	5.5	9	2	548 805	ZBV-9-7	1
ZBV-12-9	4.5	2 _{-0.1}	9	6.4	12	2	548 806	ZBV-12-9	1

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.
- 2) Packaging unit.

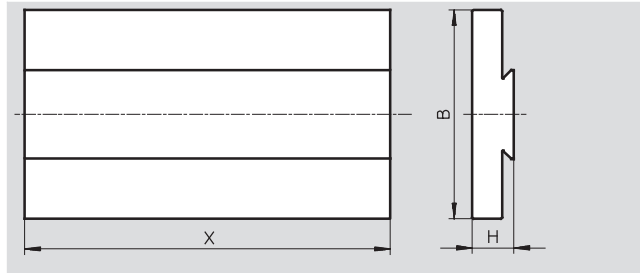
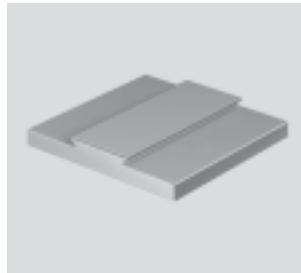
Basic components

Technical data

Adapter plate HMAV-...-X

Universal dovetail profile for attaching a base or mounting plate to linear modules HMP or HMPL

Material:
Anodised aluminium
Free of copper, PTFE and silicone

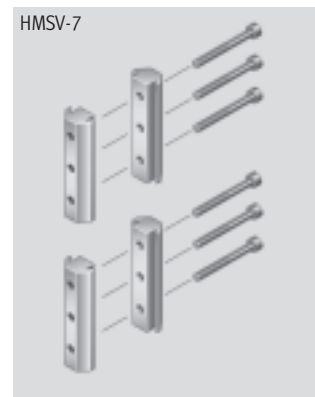
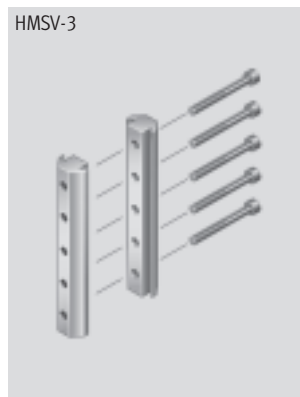
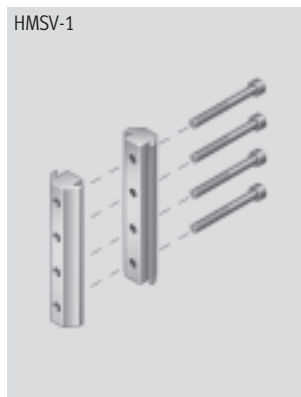


Dimensions and ordering data							
Type	H	B	X ¹⁾	CRC ²⁾	Part No.	Type	PU ³⁾
HMAV-80-X	16	80		2	189 451	HMAV-80-X	1
HMAV-90-X	13	90		2	189 450	HMAV-90-X	1

- 1) The length in mm must be quoted when ordering.
- 2) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.
- 3) Packaging unit.

Adapter kit HMSV

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data						
Type	Length	CRC ¹⁾	Part No.	Type	PU ²⁾	
HMSV-1	80	2	177 647	HMSV-1	1	
HMSV-3	100	2	177 649	HMSV-3	1	
HMSV-7	2x 60	2	177 653	HMSV-7	1	

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.
- 2) Packaging unit.

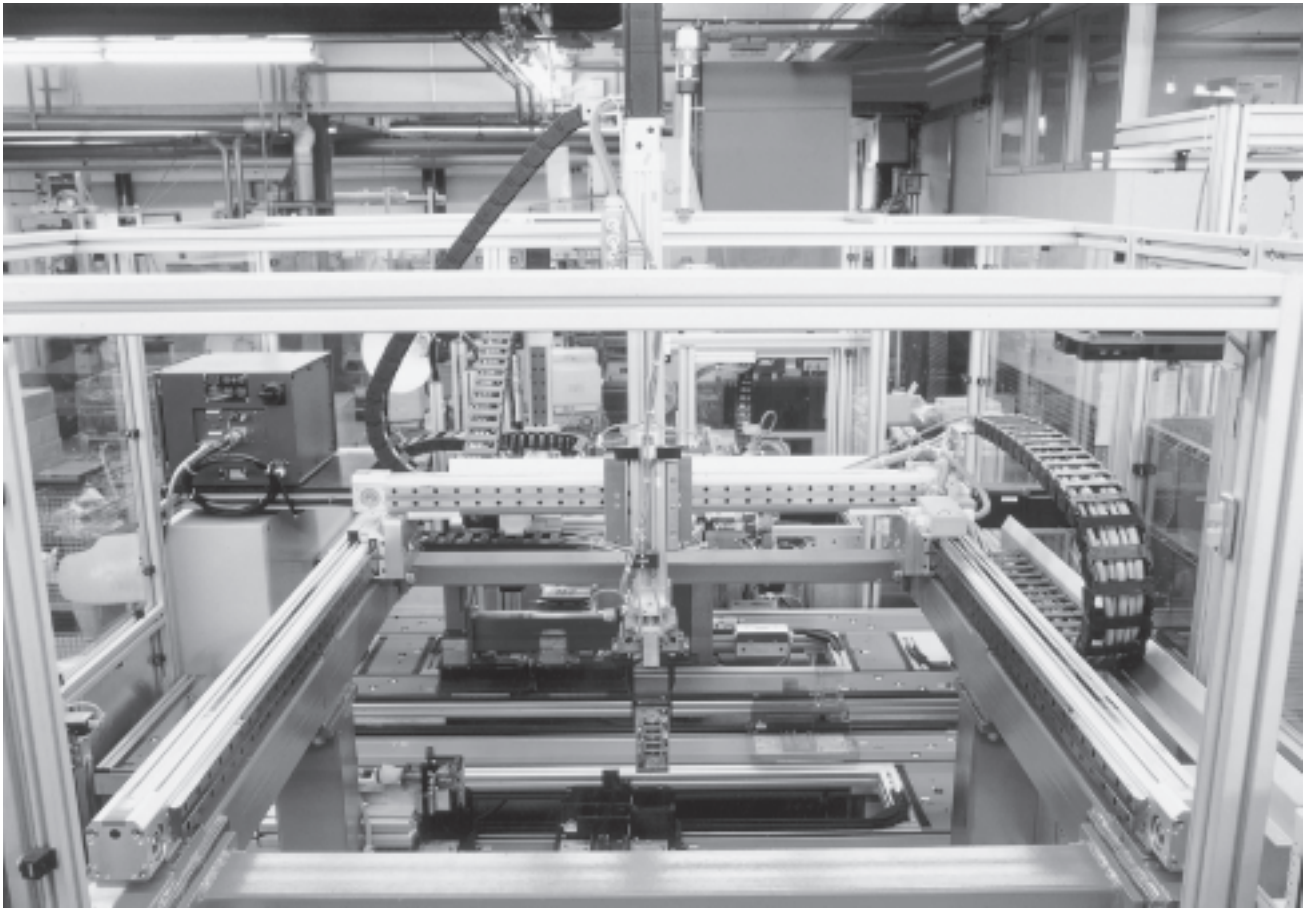


- Modular
- Functional
- Flexible

Connecting components

Key features

FESTO



Connecting kits

Basic kit

Kit that serves as the basis for the individual modules in a multi-axis system and as the interface to the surrounding machines.

Adapter kit

Kit for connecting drives to one another. Direct mounting or mounting via slot nuts.

Connecting kit


For connecting drives and basic components.

Reinforcing kit

Primarily used to reinforce an existing connection. Also used to mount the support profile for energy chains.

Mounting kit

For mounting accessories such as controllers on multi-axis systems.

-  - Note

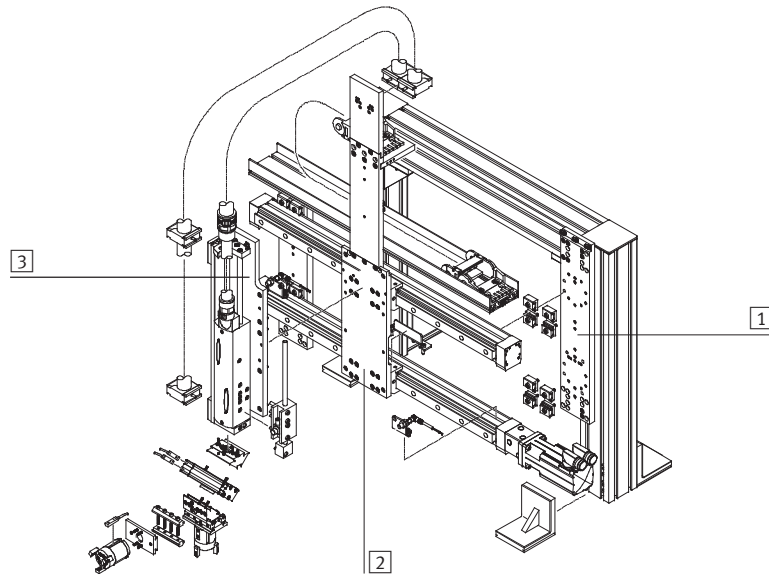
The kits look different depending on their size and combination. They contain all of the holes and threads needed for mounting.

Connecting components

Key features

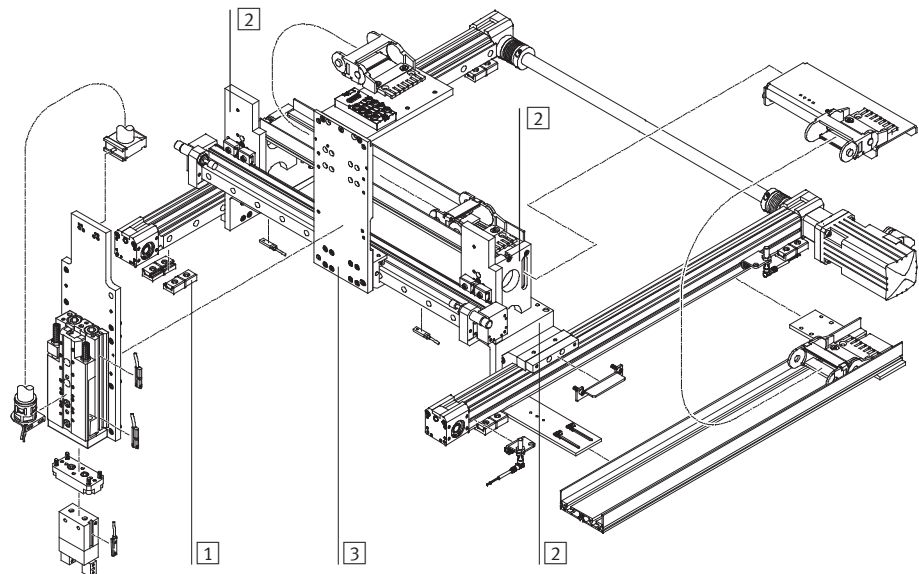
Linear gantry

- 1 Components for mounting basic axes (basic kit)
- 2 Components for connecting the drives (adapter kit)
- 3 Components for mounting the drives along the Z-axis in gantry designs



Three-dimensional gantry







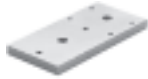
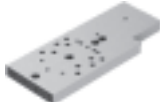
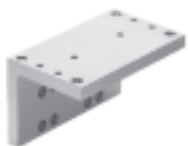

- 1 Components for mounting basic axes
- 2 Components for lateral mounting of an axis (adapter kit, reinforcing kit, basic kit)
- 3 Components for mounting the drives along the Z-axis in gantry designs



Connecting components



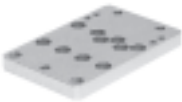




Product range overview

FESTO

Version	Brief description	→ Page/ Internet	Version	Brief description	→ Page/ Internet
Connecting kit HMBK-DB			Adapter kit HMVS-RF		
	<ul style="list-style-type: none"> • For pick & place • For direct mounting of linear modules HMP and HMPL 	86		<ul style="list-style-type: none"> • For three-dimensional gantries • For connecting X-axes and Y-axes • For toothed belt axis DGE-RF with roller guide • Mounting interface for reinforcing kit HMVV and basic kit HMVM 	89
Connecting kit HMBK-ND			Reinforcing kit HMVV-RP/FP		
	<ul style="list-style-type: none"> • For pick & place • For direct mounting of linear modules HMP 	86		<ul style="list-style-type: none"> • For three-dimensional gantries • For reinforcing the Y-axis • Mounting interface for basic kit HMVM/HMVD, installation components, etc. 	89
Connecting kit HMBK-WS			Basic kit HMVM-LP, HMVD-LP		
	<ul style="list-style-type: none"> • For pick & place • For dovetail mounting of linear modules HMP and HMPL and mini slides SLT 	87		<ul style="list-style-type: none"> • For linear gantries • For Y-axis • For mono and duo systems • Mounting interface for profiles, drives and displacement encoders 	90
Connecting kit HMVY			Basic kit HMVM-RP/FP, HMVD-RP/FP		
	<ul style="list-style-type: none"> • For pick & place • For connecting basic components and drives 	87		<ul style="list-style-type: none"> • For three-dimensional gantries • For Y-axis • For mono and duo systems • Mounting interface for drives 	90
Adapter kit HMVW-DL			Basic kit HMVZ		
	<ul style="list-style-type: none"> • For three-dimensional gantries • For connecting X-axes and Y-axes • Mounting interface for reinforcing kit HMVV and basic kit HMVM/HMVD 	88		<ul style="list-style-type: none"> • For linear and three-dimensional gantries • For Z-axis • For mono and duo systems • Mounting interface for drives, installation components, etc. 	91

Connecting components

Product range overview

Version	Brief description	→ Page/ Internet	Version	Brief description	→ Page/ Internet
Adapter kit HMVS-DL			Mounting kit HMVW-SPC		
	<ul style="list-style-type: none"> • For linear and three-dimensional gantries • For Z-axis • For mono and duo systems • Mounting interface for basic kit HMVZ 	92		<ul style="list-style-type: none"> • For mounting the axis interface on the end cap of the drive 	93
Adapter kit HMVA			Adjusting kit HMVE		
	<ul style="list-style-type: none"> • For linear and three-dimensional gantries • For Z-axis • For duo systems • Mounting interface for drives 	92		<ul style="list-style-type: none"> • For linear gantries • For aligning the Y-axis 	94
Connecting plate HMVO-POT			Reinforcing plate HMVD-DL		
	<ul style="list-style-type: none"> • For linear gantries • For Z-axis • Compensating component for compensating the difference in height between an axis and a displacement encoder 	93		<ul style="list-style-type: none"> • For three-dimensional gantries • For reinforcing the Y-axis beyond a certain length 	94
Connecting plate HMVO-RF					
	<ul style="list-style-type: none"> • For linear gantries • Compensating component for toothed belt axis DGE-RF for compensating the difference in height with the axes DGE-ZR-KF and DGE-SP-KF 	93			

Connecting components

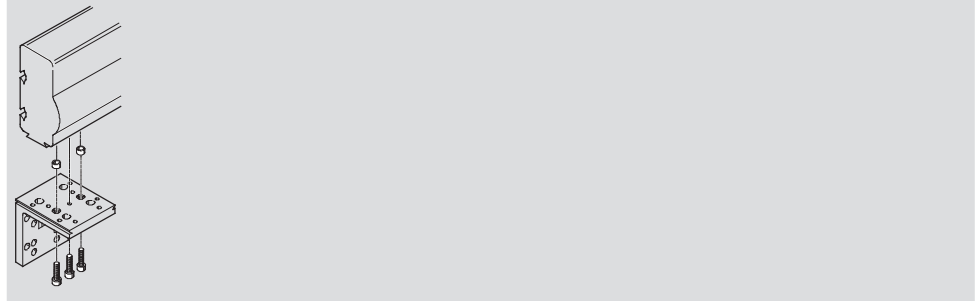
Technical data

Connecting kit
HMBK-DB

- For pick & place

- For direct mounting of linear modules HMP and HMPL

Material:
Steel
Free of copper, PTFE and silicone



Dimensions and ordering data				
Type	CRC ¹⁾	Weight [g]	Part No.	Type
HMBK-DB	2	15	175 973	HMBK-DB

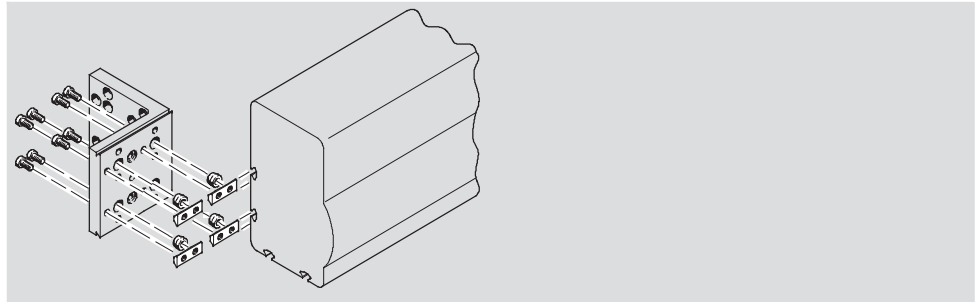
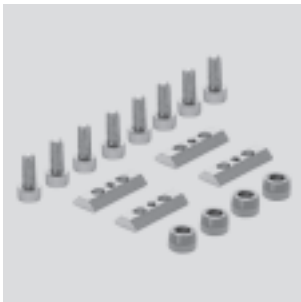
1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Connecting kit
HMBK-ND

- For pick & place

- For direct mounting of linear modules HMP

Material:
Non-alloyed tempered steel
Free of copper, PTFE and silicone



Dimensions and ordering data				
Type	CRC ¹⁾	Weight [g]	Part No.	Type
HMBK-ND	2	62	175 970	HMBK-ND

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Connecting components

Technical data

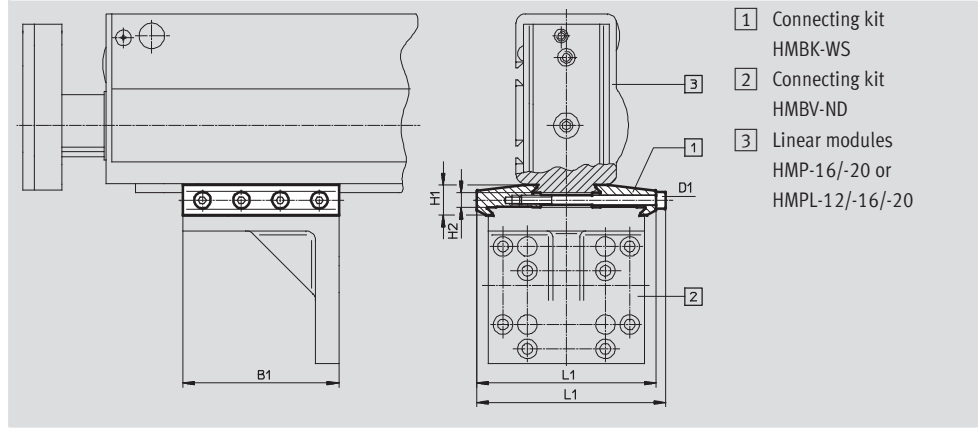


Connecting kit HMBK-WS

- For pick & place

- For dovetail mounting of linear modules HMP and HMPL and mini slides SLT

Material:
Anodised aluminium
Free of copper, PTFE and silicone



- 1) Connecting kit HMBK-WS
- 2) Connecting kit HMBV-ND
- 3) Linear modules HMP-16/-20 or HMPL-12/-16/-20

Dimensions and ordering data										
Type	B1	D1	H1	H2	L1	L2	CRC ¹⁾	Weight [g]	Part No.	Type
HMBK-WS	80	M5	15.5	7.5	97	92	2	453	175 975	HMBK-WS

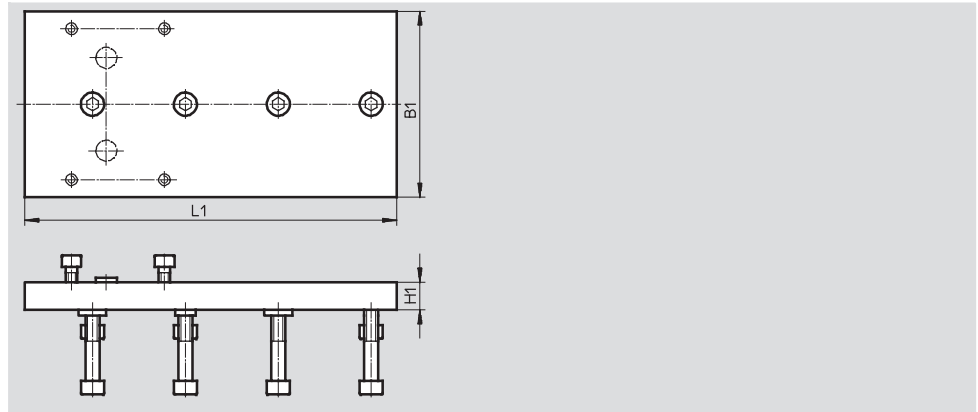
1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Connecting kit HMOV

- For pick & place

- For connecting basic components and drives
- Mounting accessories included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data										
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type			
HMOV-1	80	12	160	2	410	539 968	HMOV-1			
HMOV-2	80	12	160		420	539 969	HMOV-2			
HMOV-3	80	12	240		620	539 970	HMOV-3			
HMOV-4	80	12	240		720	560 020	HMOV-4			

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Connecting components

Technical data

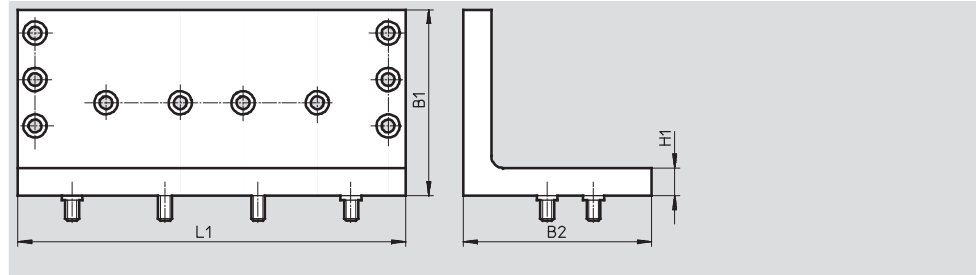


Adapter kit HMVW-DL

- For three-dimensional gantries
- For connecting X-axes and Y-axes

- Mounting interface for reinforcing kit HMVV and basic kit HMVM/HMVD
- Mounting accessories included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data									
Type	B1	B2	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type	
HMVW-DL25	80	81	12	135	2	640	539 651	HMVW-DL25	
HMVW-DL40	80	81	12	167		800	540 325	HMVW-DL40	
HMVW-DL63-1	80	100	12	230		1,250	566 897	HMVW-DL63-1	

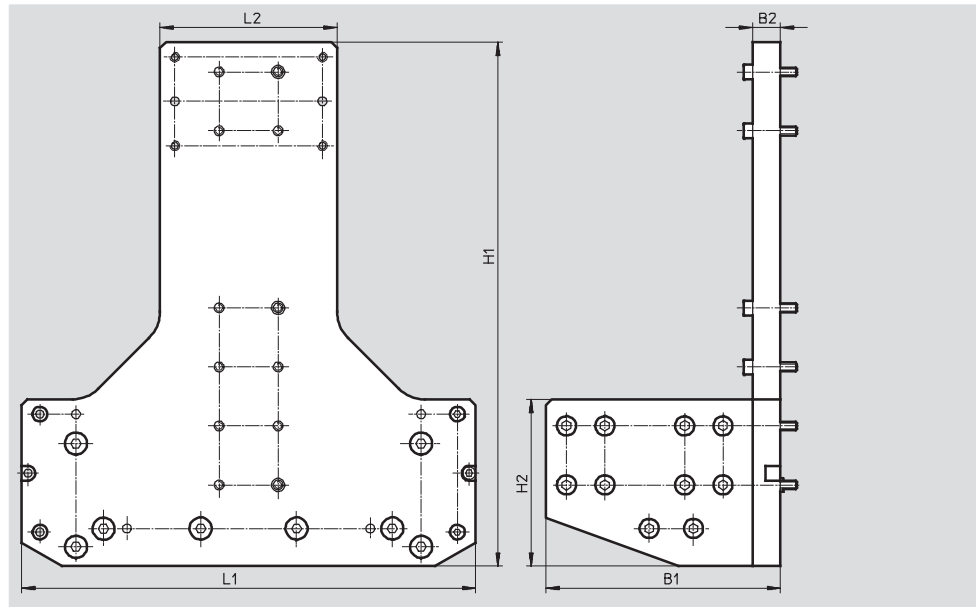
1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Mounting bracket HMVW-DL63-2

- For three-dimensional gantries
- For connecting X-axes and Y-axes

- Mounting interface for profile column HMBS and installation kit HMIX
- Mounting accessories included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data										
Type	B1	B2	H1	H2	L1	L2	CRC ¹⁾	Weight [g]	Part No.	Type
HMVW-DL63-2	159	19	355	113	308	120	2	5,700	566 890	HMVW-DL63-2

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Connecting components

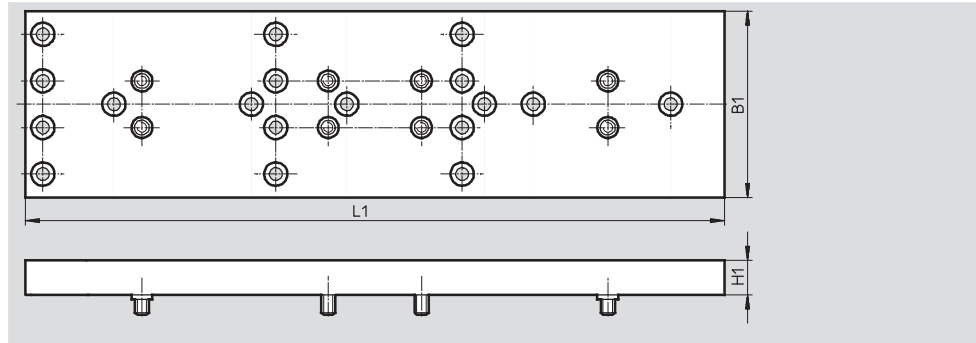
Technical data

Adapter kit HMVS-RF

- For three-dimensional gantries
- For connecting X-axes and Y-axes
- For toothed belt axis DGE-RF with roller guide

- Mounting interface for reinforcing kit HMVV and basic kit HMVM
- Mounting accessories included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMVS-RF25	80	15	190	2	600	539 652	HMVS-RF25
HMVS-RF40	80	15	300		930	539 653	HMVS-RF40
HMVS-RF63	90	15	260		950	566 898	HMVS-RF63

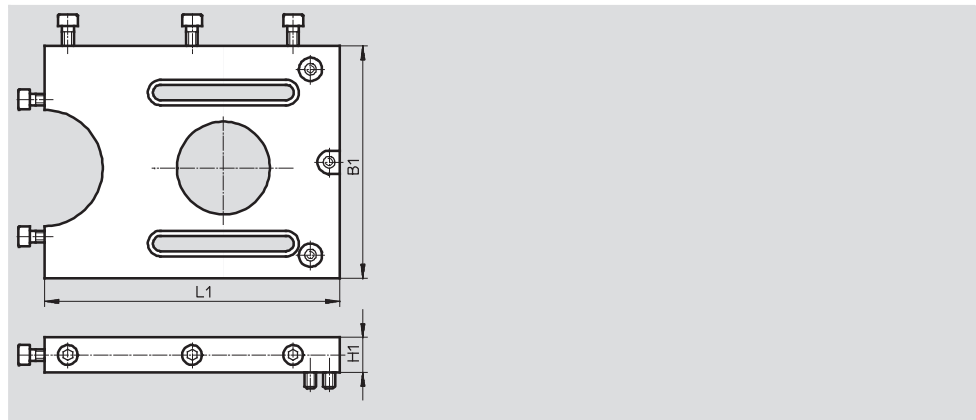
1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Reinforcing kit HMVV-RP/FP

- For three-dimensional gantries
- For reinforcing the Y-axis

- Mounting interface for basic kit HMVM/HMVD, installation components, etc.
- Mounting accessories included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMVV-RP/FP	100	15	127	2	400	539 657	HMVV-RP/FP

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Connecting components

Technical data

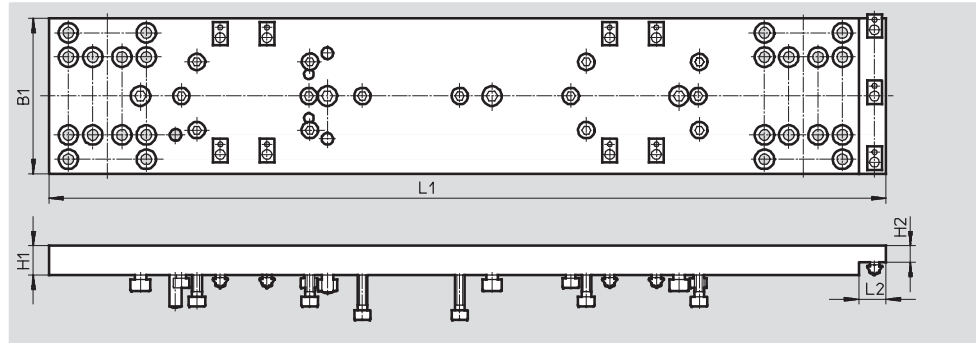


Basic kit
HMVM-LP
HMVD-LP

- For linear gantries
- For Y-axis
- For mono and duo systems

- Mounting interface for profiles, drives and displacement encoders
- Mounting accessories included in the scope of delivery

Material:
 Anodised aluminium
 Free of copper, PTFE and silicone



Dimensions and ordering data									
For system type	B1	H1	H2	L1	L2	CRC ¹⁾	Weight [g]	Part No.	Type
Mono	80	15	8.5	280	14	2	830	539 972	HMVM-LP-DL25/40
Duo	80	15	8.5	480	14		1,320	539 971	HMVD-LP-DL25/40
Duo	160	19	–	525	–		5,800	566 879	HMVD-LP-DL63

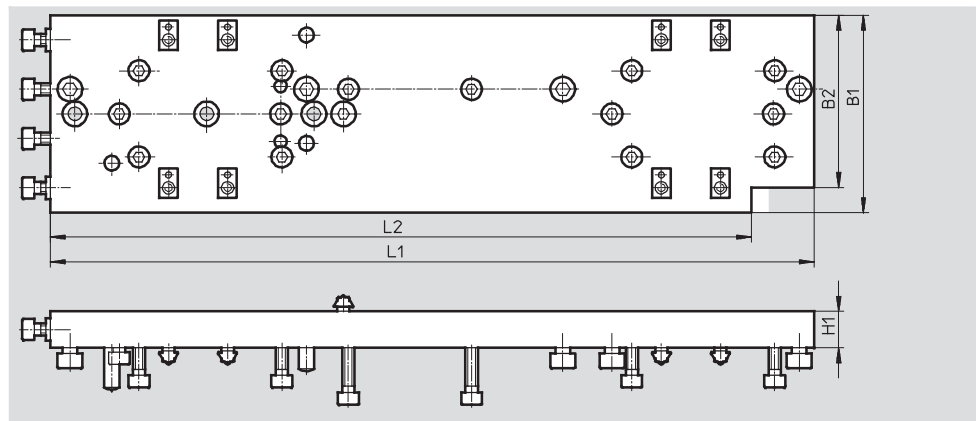
1) Corrosion resistance class 2 according to Festo standard 940 070
 Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Basic kit
HMVM-RP/FP
HMVD-RP/FP

- For three-dimensional gantries
- For Y-axis
- For mono and duo systems

- Mounting interface for drives
- Mounting accessories included in the scope of delivery

Material:
 Anodised aluminium
 Free of copper, PTFE and silicone



Dimensions and ordering data									
For system type	B1	B2	H1	L1	L2	CRC ¹⁾	Weight [g]	Part No.	Type
Mono	80	64.5	15	200	145.5	2	600	539 656	HMVM-RP/FP-DL25/40
Duo	80	–	15	310	–		1,000	539 655	HMVD-RP/FP-DL25/40
Duo	160	–	19	525	–		4,300	566 880	HMVD-RP/FP-DL63

1) Corrosion resistance class 2 according to Festo standard 940 070
 Components subject to moderate corrosion stress. 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.

Connecting components

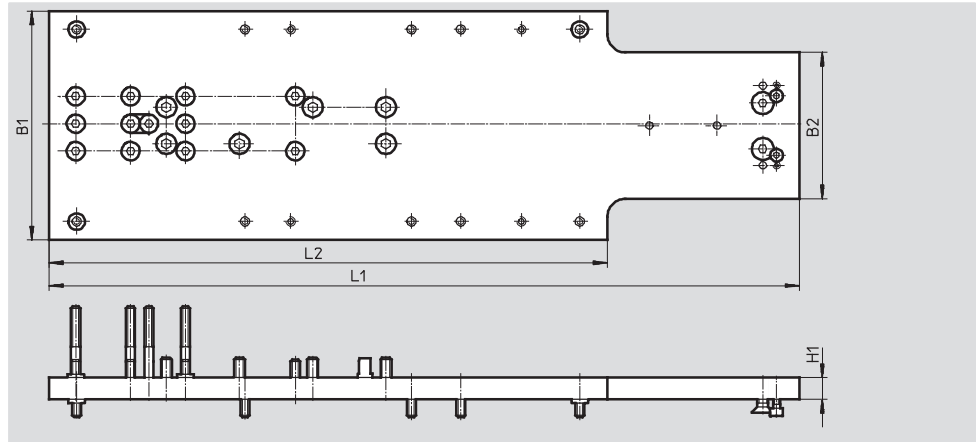
Technical data



Basic kit
HMVZ

- For linear and three-dimensional gantries
- For Z-axis
- For mono and duo systems
- Mounting interface for drives, installation components, etc.
- Mounting accessories and earthing kit included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data									
Type	B1	B2	H1	L1	L2	CRC ¹⁾	Weight [g]	Part No.	Type
HMVZ-1	125	80	12	410	305	2	1,520	539 372	HMVZ-1
HMVZ-2							1,510	539 373	HMVZ-2
HMVZ-3							1,490	539 374	HMVZ-3
HMVZ-4							1,450	539 375	HMVZ-4
HMVZ-7							1,470	560 021	HMVZ-7
HMVZ-5	167	80	12	422	342		2,080	539 376	HMVZ-5
HMVZ-6							1,900	539 377	HMVZ-6
HMVZ-8	300	-	15	590	-		7,300	566 875	HMVZ-8
HMVZ-9			14				6,900	566 876	HMVZ-9

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

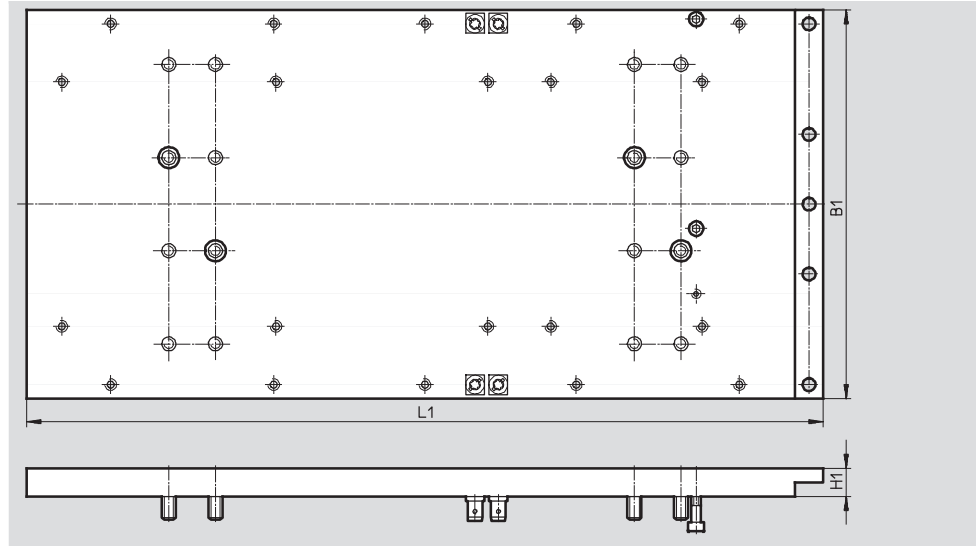
Connecting components

Technical data



Adapter kit HMVS-DL

- For linear and three-dimensional gantries
 - For Z-axis
 - For mono and duo systems
 - Mounting interface for basic kit HMVZ
 - Mounting accessories and earthing kits included in the scope of delivery
- Material:
Anodised aluminium
Free of copper, PTFE and silicone

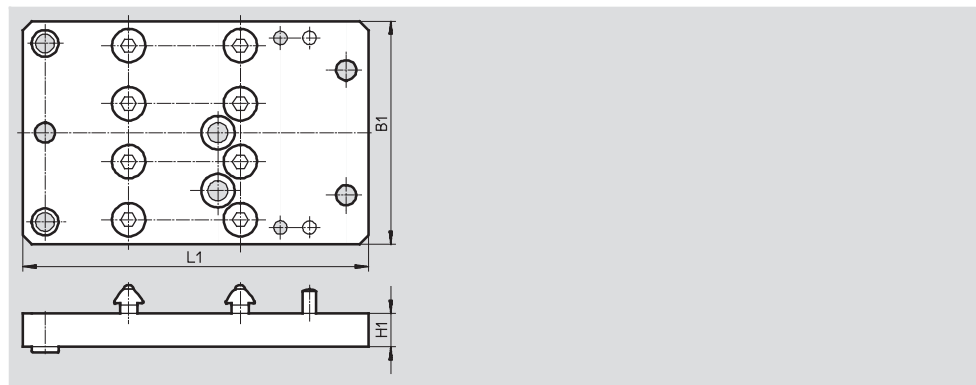


Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMVS-DL25	125	12	305	2	1,050	539 368	HMVS-DL25
HMVS-DL40	167	12	342		1,800	539 369	HMVS-DL40
HMVS-DL63	300	15	590		7,100	566 883	HMVS-DL63

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Adapter kit HMVA

- For linear and three-dimensional gantries
 - For Z-axis
 - For duo systems
 - Mounting interface for drives
 - Mounting accessories included in the scope of delivery
- Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMVA-63	100	15	155	2	600	566 878	HMVA-63

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Connecting components

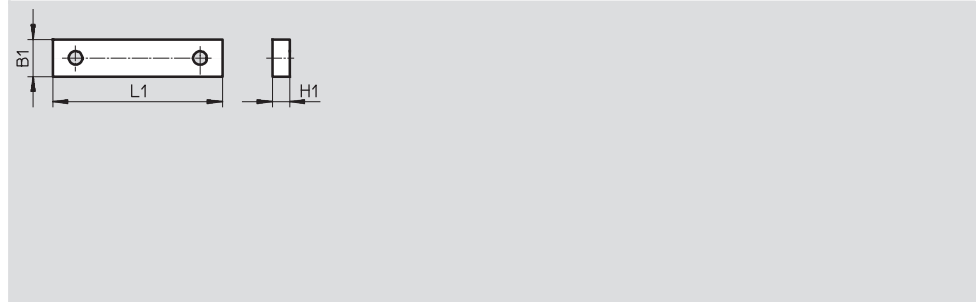
Technical data



Connecting plate HMVO-RF
Connecting plate HMVO-POT

- For linear gantries
- For Z-axis
- Mounting accessories included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



HMVO-RF25

Compensating component for toothed belt axis DGE-RF to compensate for the difference in height with the axes DGE-ZR-KF and DGE-SP-KF

HMVO-POT

Compensating component for displacement encoder MLO-POT-TLF to compensate the difference in height with the linear drive DGPL-25/-40

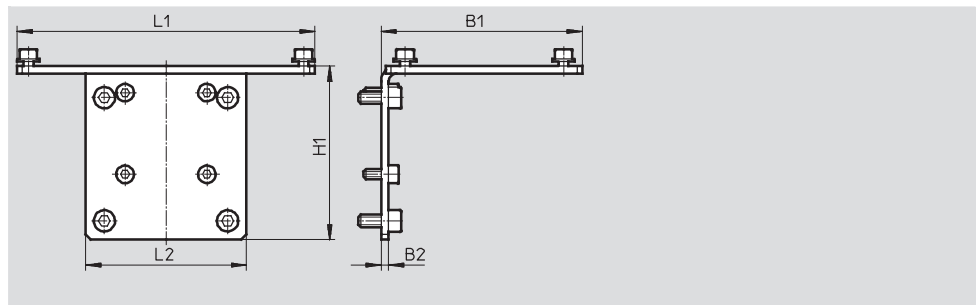
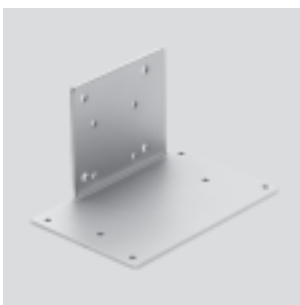
Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMVO-RF25	25	5.5	80	2	30	539 362	HMVO-RF25
HMVO-POT	15	7	68		20	539 973	HMVO-POT

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Mounting kit
HMVW-SPC

- For mounting the end-position controller SPC11 on the end cap of the drive
- Mounting accessories included in the scope of delivery

Material:
Galvanised steel
Free of copper, PTFE and silicone



Dimensions and ordering data									
Type	B1	B2	H1	L1	L2	CRC ¹⁾	Weight [g]	Part No.	Type
HMVW-SPC	80	3	69	118.4	64	2	310	539 367	HMVW-SPC

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Connecting components

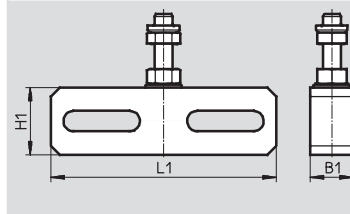
Technical data

FESTO

Adjusting kit HMVE

- For linear gantries
- For aligning the Y-axis

Material:
Galvanised steel
Free of copper, PTFE and silicone



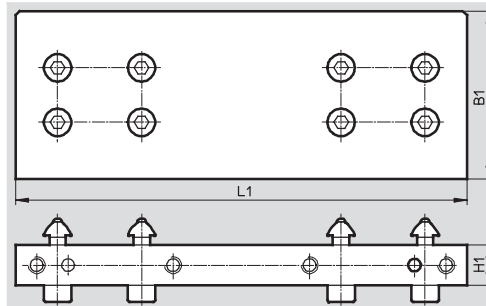
Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMVE	19	30	100	2	150	566 884	HMVE

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Reinforcing plate HMVD-DL

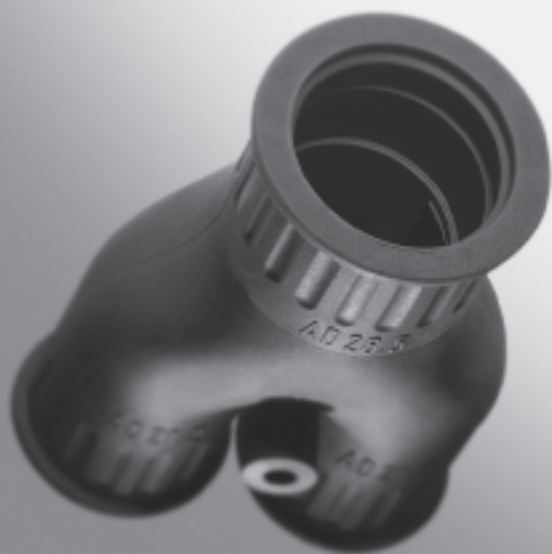
- For three-dimensional gantries
- For reinforcing the Y-axis beyond a certain length
- Mounting accessories included in the scope of delivery

Material:
Galvanised steel
Free of copper, PTFE and silicone



Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMVD	80	19	215	2	900	566 892	HMVD-DL-40/63

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

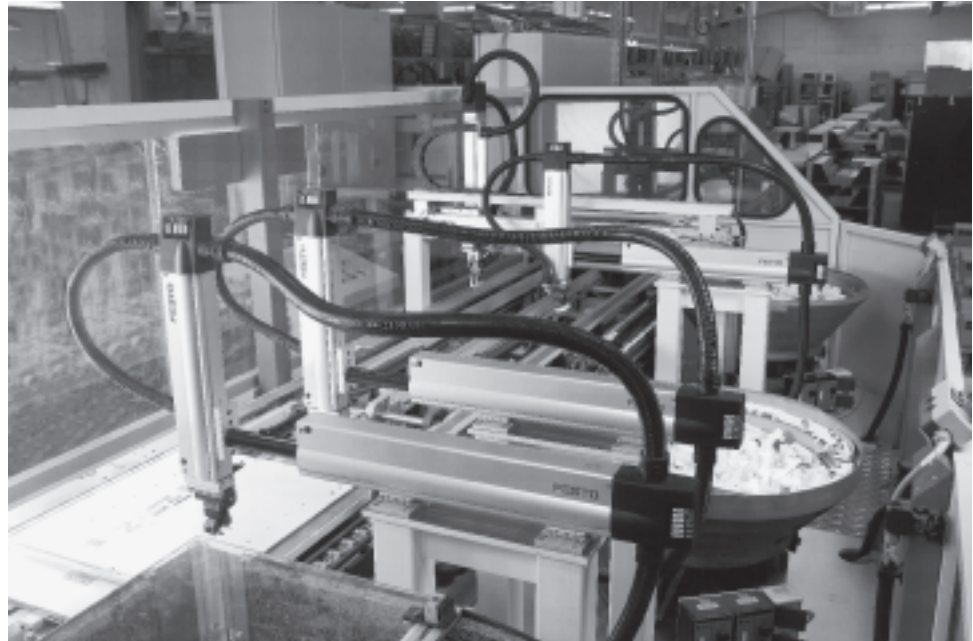


- Reliable guidance
- Rapid assembly and disassembly
- Low space requirement
- Low noise levels

Installation components for short strokes

Key features

Installation components facilitate a clear, safe layout of electrical cables and pneumatic tubing. They can be quickly dismantled and reassembled if servicing is required. They are mainly used for short strokes in pick & place systems and for installing drives along the Z-axis in gantry units.



Protective conduit MKR



Flexible conduit protects electrical cables and pneumatic tubing at machines and in installations. The conduit connector MKRT enables a protective conduit with a small diameter to be inserted and fastened into a protective conduit with a larger diameter. Intervention is thus possible at this point in the protective conduit system, for example for maintenance work.

Separable protective conduit MKG



With separable connector
Internal and external conduits can be separated from one another. Electrical cables and pneumatic tubing do not need to be pulled through the protective conduit, but can be laid in it. The matching connector can also be opened.

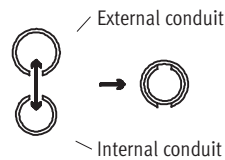
Junction box HMZV



Protection for electrical cables and pneumatic tubing, especially for multi-axis systems.

Accessories

- Fittings and connectors
MKRV, MKGV, MKA, MKRL, MKRT, MKY
- Lock nut
MKM
- Retaining clip
MKRS
- Installation kit
HMZAS

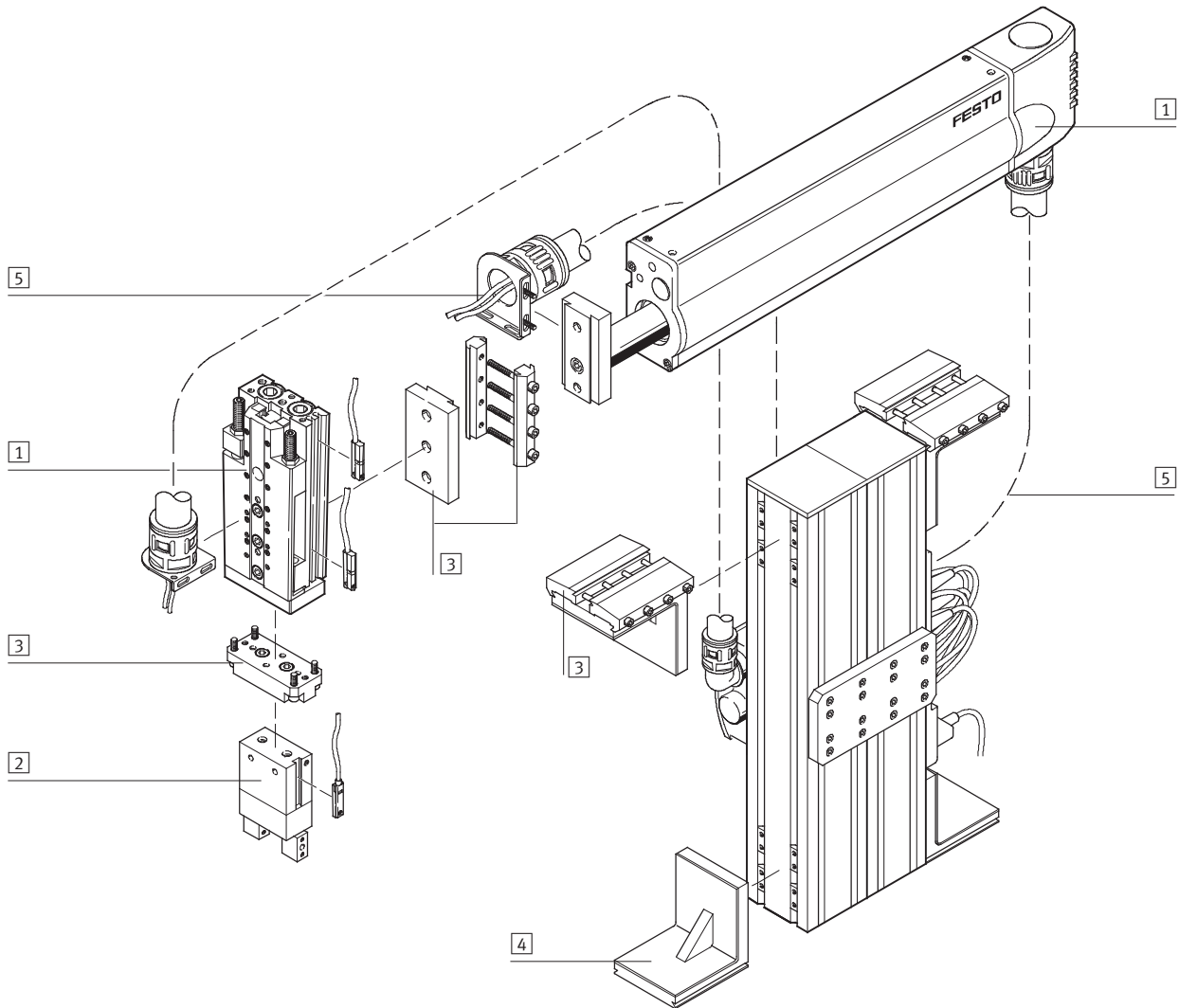


Installation components for short strokes

System example

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System product for handling and assembly technology

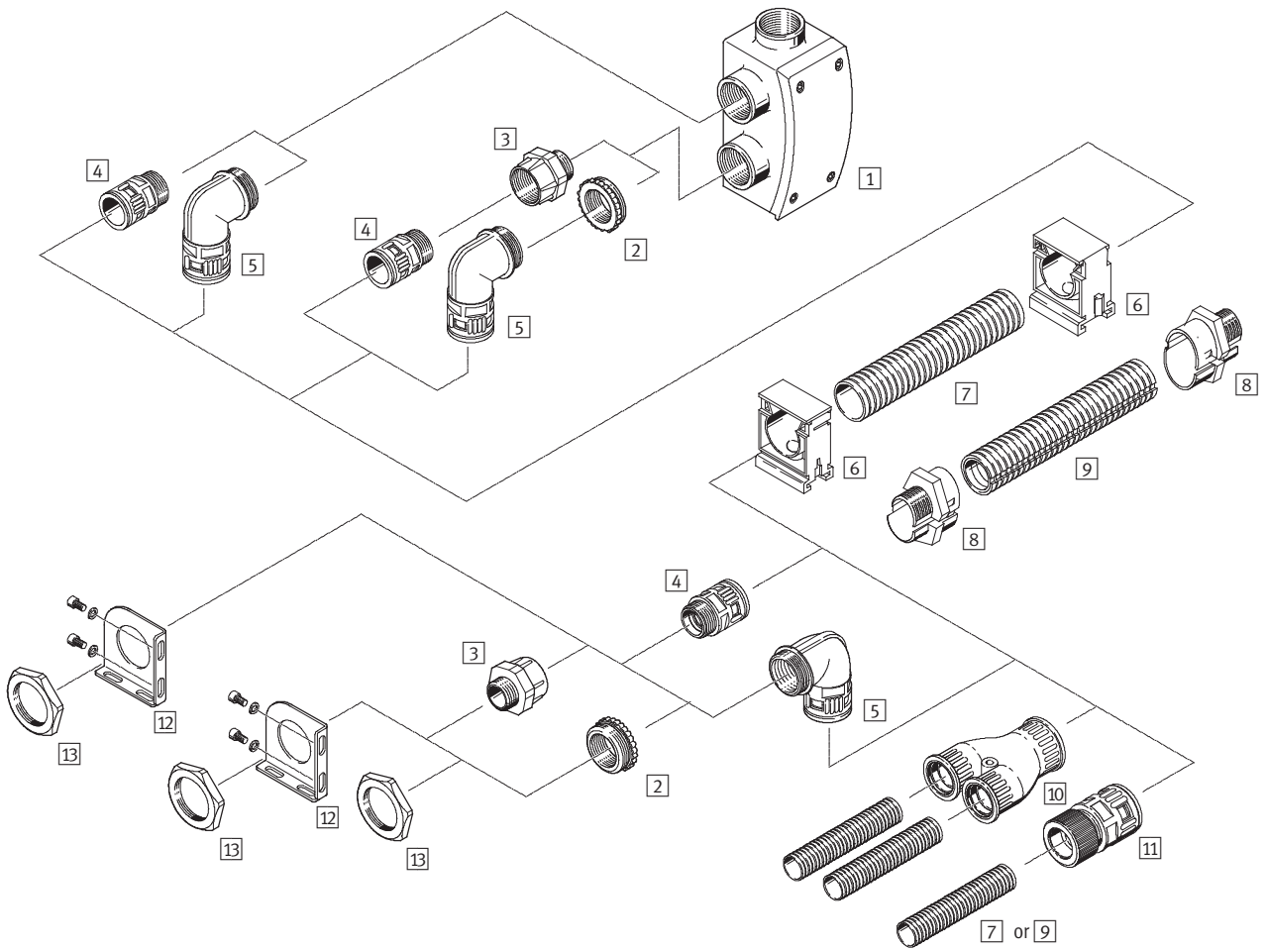


System components and accessories		
	Brief description	→ Page/Internet
1	Drives	Wide range of combinations possible within handling and assembly technology drive
2	Grippers	Wide range of variations possible within handling and assembly technology gripper
3	Adapters	For drive/drive and drive/gripper connections adapter kit
4	Basic components	Profiles and profile connections as well as profile/drive connections basic component
5	Installation components	For a clear, safe layout of electrical cables and tubing installation component
-	Axes	Wide range of combinations possible within handling and assembly technology axis
-	Motors	Servo and stepper motors, with or without gear unit motor

Installation components for short strokes

Peripherals overview

FESTO













Installation components for short strokes

Peripherals overview

Variants and accessories		
Type	Brief description	→ Page/Internet
1 Junction box HMZV	For bundling or distributing cables and tubing	103
2 Reducing connector MKA	For reducing thread size Material: Brass	107
3 Reducing connector MKA-KU	For reducing or enlarging thread size Material: Polyamide	108
4 Protective conduit fitting MKRV	For securing a protective conduit	104
5 Elbow connector for protective conduit MKRL	For securing a protective conduit	105
6 Retaining clip MKRS	For securing a protective conduit over long distances	109
7 Protective conduit MKR	For protecting cables and tubing	102
8 Protective conduit fitting MKGV	For securing a protective conduit. The connector can be separated so that cables and tubing in the system can be easily replaced.	107
9 Protective conduit MKG	For protecting cables and tubing. The conduit can be separated so that cables and tubing in the system can be easily replaced.	103
10 Y-distributor MKY	For distributing cables and tubing	106
11 Protective conduit connector MKRT	The protective conduits (different sizes) can be pushed into one another by releasing the connector. This permits easy replacement of cables and tubing.	106
12 Installation kit HMZAS	For securing protective conduit connectors at drives	110
13 Lock nut MKM	For securing connectors at adapter plates	109







Installation components for short strokes

Selection aid

Accessories		Protective conduit						Junction box		→ Page/ Internet
		MKR				MKG, separable		HMZV		
										
Connecting thread		Pg 9	Pg 11	Pg 16	Pg 21	Pg 29	Pg 21	Pg 29	Pg 29	
Protective conduit fitting MKRV										
	Pg 9	■	-	-	-	-	-	-	-	104
	Pg 11	-	■	-	-	-	-	-	-	
	Pg 16	-	-	■	-	-	-	-	-	
	Pg 21	-	-	-	■	-	-	-	-	
	Pg 29	-	-	-	-	■	-	-	■	
Elbow connector for protective conduit MKRL										
	Pg 9	■	-	-	-	-	-	-	-	105
	Pg 11	-	■	-	-	-	-	-	-	
	Pg 16	-	-	■	-	-	-	-	-	
	Pg 21	-	-	-	■	-	-	-	-	
	Pg 29	-	-	-	-	■	-	-	■	
Y distributor MKY										
	Pg 21	-	-	-	■	-	-	-	-	106
	Pg 29	-	-	-	-	■	-	-	-	
Protective conduit connector MKRT										
	Pg 16	-	-	■	■	-	-	-	-	106
	Pg 21	-	-	■	■	-	-	-	-	
Protective conduit connector MKGV, separable										
	Pg 21	-	-	-	-	-	■	-	-	107
	Pg 29	-	-	-	-	-	-	■	■	
Reducing connector MKA										
	Pg 29	-	-	-	-	-	-	-	■	107
Reducing connector MKA-KU										
	Pg 29	-	-	-	-	-	-	-	■	108
Technical data → Page/Internet		102				103		103		

Installation components for short strokes

Selection aid

Accessories		Protective conduit						Junction box		→ Page/ Internet	
		MKR				MKG, separable		HMZV			
											
Connecting thread		Pg 9	Pg 11	Pg 16	Pg 21	Pg 29	Pg 21	Pg 29	Pg 29		
Lock nut MKM											
	Pg 9	■	-	-	-	-	-	-	-	109	
	Pg 11	-	■	-	-	-	-	-	-		
	Pg 16	-	-	■	-	-	-	-	-		
	Pg 21	-	-	-	■	-	■	-	-		
	Pg 29	-	-	-	-	■	-	■	-		
Retaining clip MKRS											
	Pg 9	■	-	-	-	-	-	-	-	109	
	Pg 11	-	■	-	-	-	-	-	-		
	Pg 16	-	-	■	-	-	-	-	-		
	Pg 21	-	-	-	■	-	■	-	-		
	Pg 29	-	-	-	-	■	-	■	-		
Installation kit HMZAS											
	For connecting thread Pg 21 and Pg 29									110	
Technical data → Page/Internet		102					103		103		

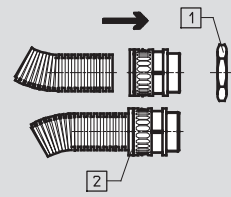
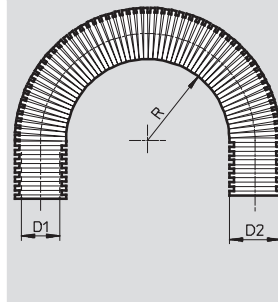
Installation components for short strokes

Technical data



Protective conduit MKR
for Pg connecting thread

Material:
Polyamide
Free of copper, PTFE and silicone



- 1 Lock nut MKM
- 2 Pull back the retaining sleeve in order to release the conduit

Dimensions and ordering data					
Pg connecting thread	D1 Ø	D2 Ø	R min.		Protection class
			Static	Dynamic	
Pg 9	10	13	15	45	IP 68
Pg 11	12	15.8	22	55	
Pg 16	16.5	21.2	35	75	
Pg 21	23	28.5	45	100	
Pg 29	29	34.5	50	120	

Pg connecting thread	Temperature range [°C]	Mounting position	CRC ¹⁾	Weight [g/m]	Part No.	Type
Pg 9	-50 ... +100	Any	2	24	177 564	MKR-10-PG-9
Pg 11				34	177 565	MKR-12-PG-11
Pg 16				56	177 566	MKR-16,5-PG-16
Pg 21				90	177 567	MKR-23-PG-21
Pg 29				120	177 568	MKR-29-PG-29

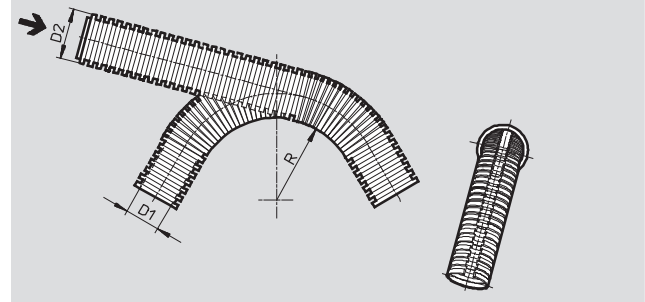
1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Installation components for short strokes

Technical data

Protective conduit MKG, separable for Pg connecting thread

Material:
Polypropylene
Free of copper, PTFE and silicone



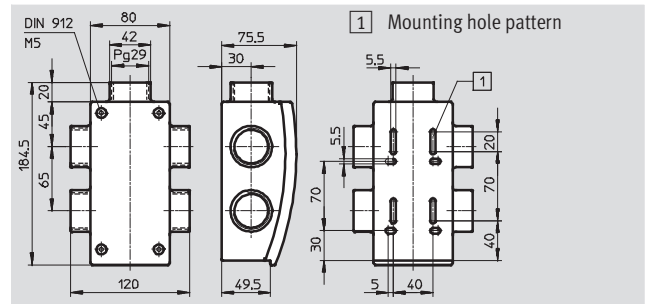
Dimensions and ordering data					
Pg connecting thread	D1 Ø	D2 Ø	R	Temperature range [°C]	Protection class
Pg 21	19.5	25.5	≥ 130	-20 ... +90	IP 50
Pg 29	24.2	31	≥ 155		
	31	41.4	≥ 205		

Pg connecting thread	Mounting position	CRC ¹⁾	Weight [g/m]	Part No.	Type
Pg 21	Any	2	82	177 588	MKG-20-PG-21
Pg 29			123	177 589	MKG-23-PG-29
			195	177 590	MKG-37-PG-29

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Junction box HMZV with mounting kit for profile column HMBS

Material:
Polyamide
Free of copper, PTFE and silicone



Dimensions and ordering data						
Pg connecting thread	Temperature range [°C]	Protection class	Mounting position	CRC ¹⁾	Weight [g]	Part No. Type
Pg 29	-10 ... +60	IP 50	Any	2	280	175 126 HMZV

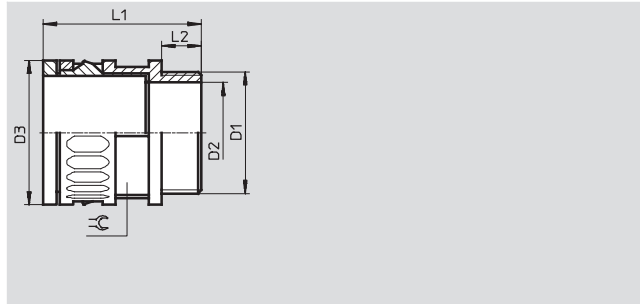
1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Installation components for short strokes

Technical data

Protective conduit fitting MKRV

Material:
Polyamide
Free of copper, PTFE and silicone



Dimensions and ordering data						
Pg connecting thread D1 Ø	D2 Ø	D3 Ø	L1	L2	⌀	Temperature range [°C]
Pg 9	10	20	35	10	18	-30 ... +100
Pg 11	12.5	23	37		21	
Pg 16	17	29.5	43.5	12	27	
Pg 21	23.5	37	46		34	
Pg 29	30.5	44	48		40	

Pg connecting thread D1 Ø	Protection class	Mounting position	CRC ¹⁾	Weight [g]	Part No.	Type
Pg 9	IP 67	Any	2	5	177 569	MKRV-10-PG-9
Pg 11				6	177 570	MKRV-21-PG-11
Pg 16				10	177 571	MKRV-16,5-PG-16
Pg 21				14	177 572	MKRV-23-PG-21
Pg 29				22	177 573	MKRV-29-PG-29

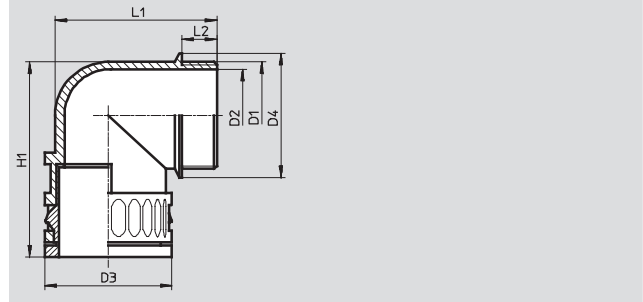
1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Installation components for short strokes

Technical data

Elbow connector for protective conduit MKRL

Material:
Polyamide
Free of copper, PTFE and silicone



Dimensions and ordering data						
Pg connecting thread D1 Ø	D2 Ø	D3 Ø	D4 Ø	H1	L1	L2
Pg 9	12	20	20	36	34	10
Pg 11	15.5	23	23	42	37.5	
Pg 16	18	29.5	27	49.5	47	12
Pg 21	24	37	34	57	55	
Pg 29	32	44	43	68	63	

Pg connecting thread D1 Ø	Temperature range [°C]	Protection class	Mounting position	CRC ¹⁾	Weight [g]	Part No.	Type
Pg 9	-30 ... +100	IP 67	Any	2	6	177 574	MKRL-10-PG-9
Pg 11					8	177 575	MKRL-12-PG-11
Pg 16					16	177 576	MKRL-16,5-PG-16
Pg 21					24	177 577	MKRL-23-PG-21
Pg 29					36	177 578	MKRL-29-PG-29

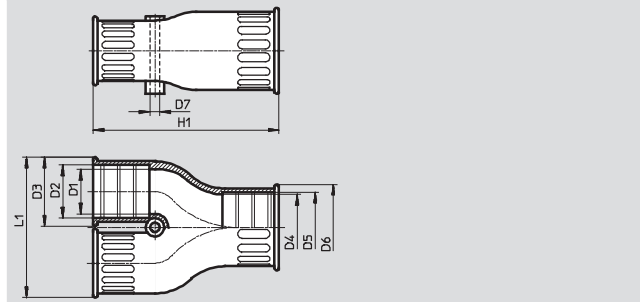
1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Installation components for short strokes

Technical data

Y-distributor MKY

Material:
Thermoplastic rubber
Free of copper, PTFE and silicone



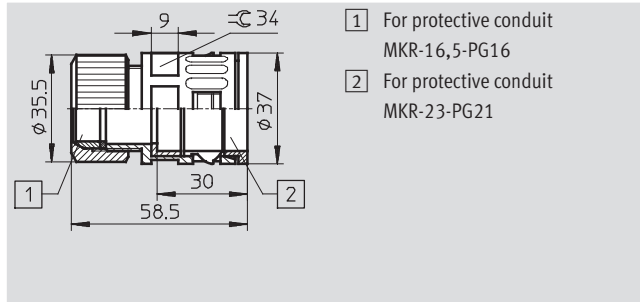
Dimensions and ordering data							
Pg connecting thread D1		D2	D3	D4	D6	D7	H1
D1	D5	∅	∅	∅	∅	∅	
Pg 16	Pg 21	21.2	29.5	25.5	36.5	4	81.5
Pg 21	Pg 29	28.5	36.5	31.5	42.5		86

Pg connecting thread		L1	Temperature range	Protection class	Mounting position	CRC ¹⁾	Weight	Part No.	Type
D1	D5		[°C]				[g]		
Pg 16	Pg 21	61	-30 ... +80	IP 67	Any	2	34	193 946	MKY-PG-21-2PG-16
Pg 21	Pg 29	79					50		

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Protective conduit connector MKRT

Material:
Polyamide
Free of copper, PTFE and silicone



- 1) For protective conduit MKR-16,5-PG16
- 2) For protective conduit MKR-23-PG21

Dimensions and ordering data							
Pg connecting thread	Temperature range	Protection class	Mounting position	CRC ¹⁾	Weight	Part No.	Type
	[°C]				[g]		
Pg 16/Pg 21	-10 ... +60	IP67	Any	2	40	194 321	MKRT-23-16,5

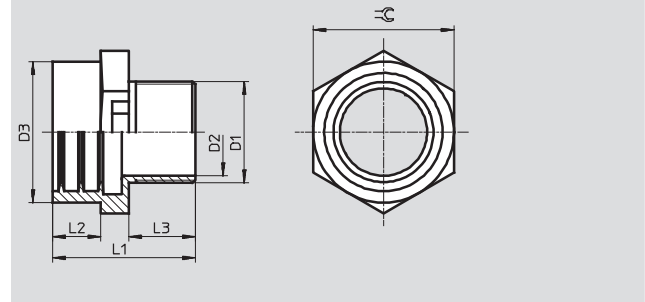
1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Installation components for short strokes

Technical data

Protective conduit connector MKGV, separable

Material:
Polyamide
Free of copper, PTFE and silicone



Dimensions and ordering data						
Pg connecting thread D1	D2	D3	L1	L2	L3	⊕
∅		∅				
Pg 21	20	26	34	12	17	32
Pg 29	31	32	42	13	21	41
		42	50	17	22	50

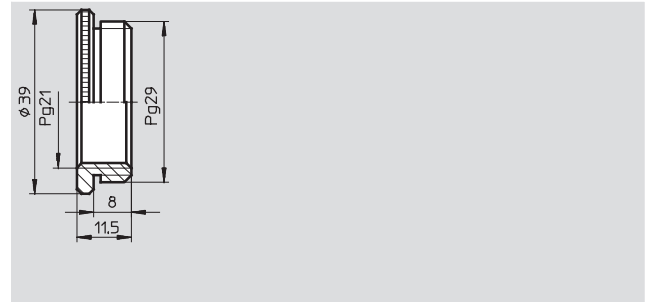
Pg connecting thread D1	Temperature range [°C]	Protection class	Mounting position	CRC ¹⁾	Weight [g]	Part No.	Type
∅							
Pg 21	-20 ... +100	IP 50	Any	2	11	177 591	MKGV-20-PG-21
Pg 29					19	177 592	MKGV-23-PG-29
					27	177 593	MKGV-37-PG-29

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Reducing connector MKA

For reducing Pg 29 to Pg 21

Material:
Nickel-plated brass
Free of copper, PTFE and silicone



Dimensions and ordering data							
Pg connecting thread	Temperature range [°C]	Protection class	Mounting position	CRC ¹⁾	Weight [g]	Part No.	Type
Pg 29/Pg 21	-30 ... +80	IP 50	Any	2	41	177 595	MKA-PG-29-PG-21

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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 short strokes

Technical data

Reducing connector MKA-KU

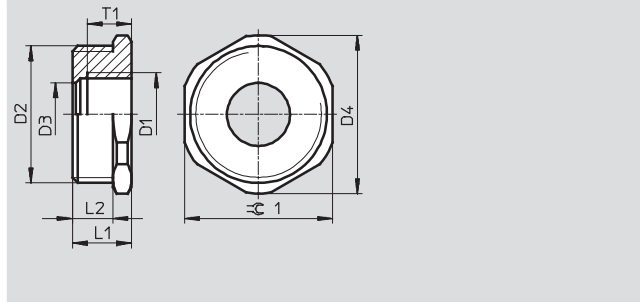
For reducing Pg 21 to Pg 16

For reducing Pg 29 to Pg 16

Material:

Polyamide

Free of copper, PTFE and silicone



Dimensions and ordering data							
Pg connecting thread	D1	D2	D3 ∅	D4 ∅	L1	L2	T1 ∅
Pg 21/Pg 16	Pg 16	Pg 21	16	35.5	16	11	12
Pg 29/Pg 16		Pg 29	17	42.8	17		

Pg connecting thread	⊖	Temperature range [°C]	Protection class	Mounting position	CRC ¹⁾	Weight [g]	Part No.	Type
Pg 21/Pg 16	81.5	-30 ... +80	IP 50	Any	2	8	193 948	MKA-PG-21-PG-16-KU
Pg 29/Pg 16	86					12	193 949	MKA-PG-29-PG-16-KU

1) Corrosion resistance class 2 according to Festo standard 940 070

Components subject to moderate corrosion stress. 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.

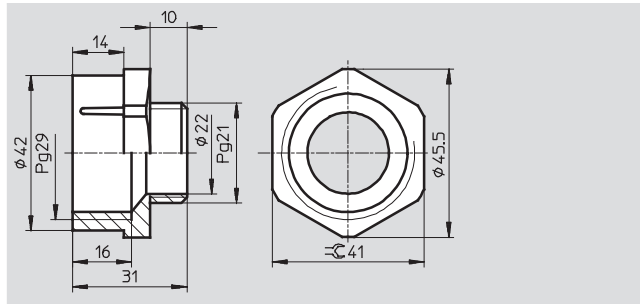
Reducing connector MKA-KU

For enlarging Pg 21 to Pg 29

Material:

Polyamide

Free of copper, PTFE and silicone



Dimensions and ordering data							
Pg connecting thread	Temperature range [°C]	Protection class	Mounting position	CRC ¹⁾	Weight [g]	Part No.	Type
Pg 21/Pg 29	-30 ... +80	IP 50	Any	2	36	177 594	MKA-PG-21-PG-29-KU

1) Corrosion resistance class 2 according to Festo standard 940 070

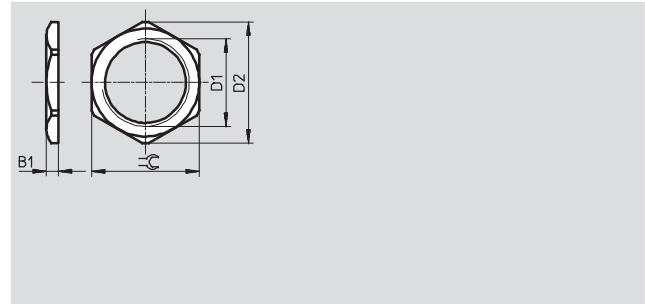
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Installation components for short strokes

Technical data

Lock nut MKM

Material:
Nickel-plated brass
Free of copper, PTFE and silicone

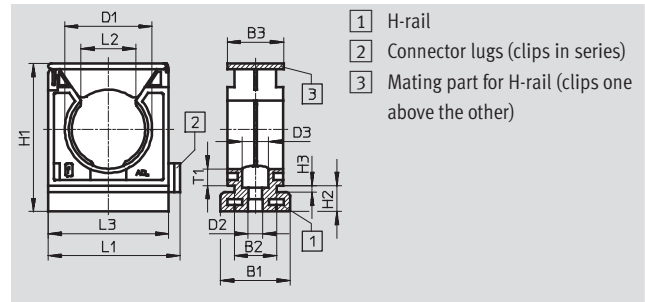


Dimensions and ordering data									
Pg connecting thread D1	D2	B1	⌀	Mounting position	CRC ¹⁾	Weight [g]	Part No.	Type	
Pg 9	20	2.8	18	Any	2	2	177 596	MKM-PG-9	
Pg 11	23.5	3	21			3	177 597	MKM-PG-11	
Pg 16	29		26			5	177 598	MKM-PG-16	
Pg 21	35.5	3.5	32			8	177 599	MKM-PG-21	
Pg 29	45	4	41			14	177 600	MKM-PG-29	

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Retaining clip MKRS

Material:
Polyamide
Free of copper, PTFE and silicone



- 1 H-rail
- 2 Connector lugs (clips in series)
- 3 Mating part for H-rail (clips one above the other)

Dimensions and ordering data											
Pg connecting thread	B1	B2	B3	D1	D2	D3	H1	H2	H3	L1	
Pg 9	25	15	20	13	4.2	8	29	6.3	2.3	30	
Pg 11				15.8							37
Pg 16				21.2							
Pg 21				28.5			47.5				
Pg 29				34.5							

Pg connecting thread	L2	L3	T1	Temperature range [°C]	CRC ¹⁾	Weight [g]	Part No.	Type	
Pg 9	8.5	26	5.7	-30 ... +80	2	5	192 287	MKRS-10-B	
Pg 11	10					6	192 288	MKRS-12-B	
Pg 16	16.6	32.5	6.8			8	192 289	MKRS-16,5-B	
Pg 21	20	43.5				12	192 290	MKRS-23-B	
Pg 29	25.5		14			192 291	MKRS-29-B		

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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 short strokes

Technical data



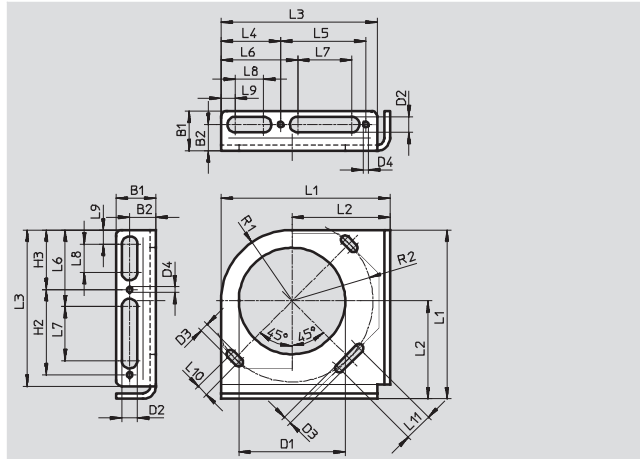
Installation kit HMZAS

For attaching a protective conduit to the front plate of linear modules

Material:

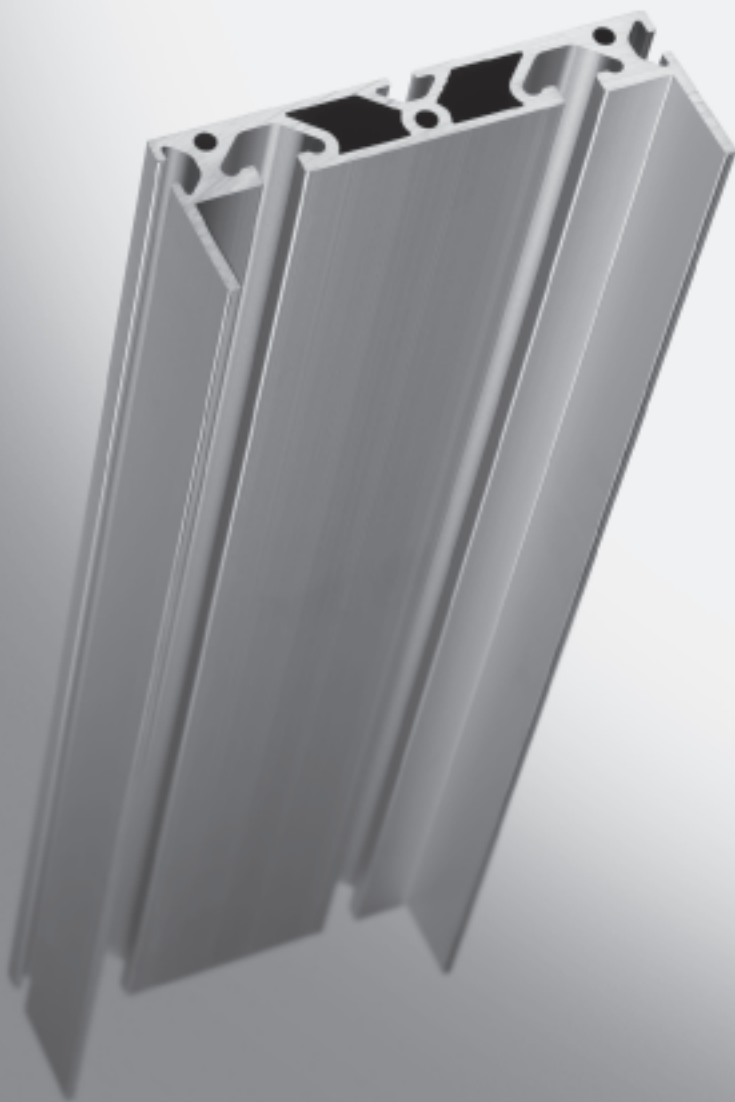
Powder-coated steel

Free of copper, PTFE and silicone



Dimensions and ordering data									
For linear module	B1	B2	D1 ∅	D2 ∅	D3 ∅	D4 ∅	H2	H3	L1
HMPL	14	9.25	28.6	5.3	3	–	–	–	54.5
HMP			37.5			2	30	21	59.5
For linear module	L2	L3	L4	L5	L6	L7	L8	L9	L10
HMPL	33.5	50	–	–	19	26	4.5	5	4
HMP	34.5	55	21	30	27	19	10	5	4
For linear module	L11	R1	R2	Mounting position	CRC ¹⁾	Weight [g]	Part No.	Type	
HMPL	10	21	22	Any	1	35	193 124	HMZAS-PG-21	
HMP	10	25	28.5			44	177 603	HMZAS-PG-29	

1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.



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

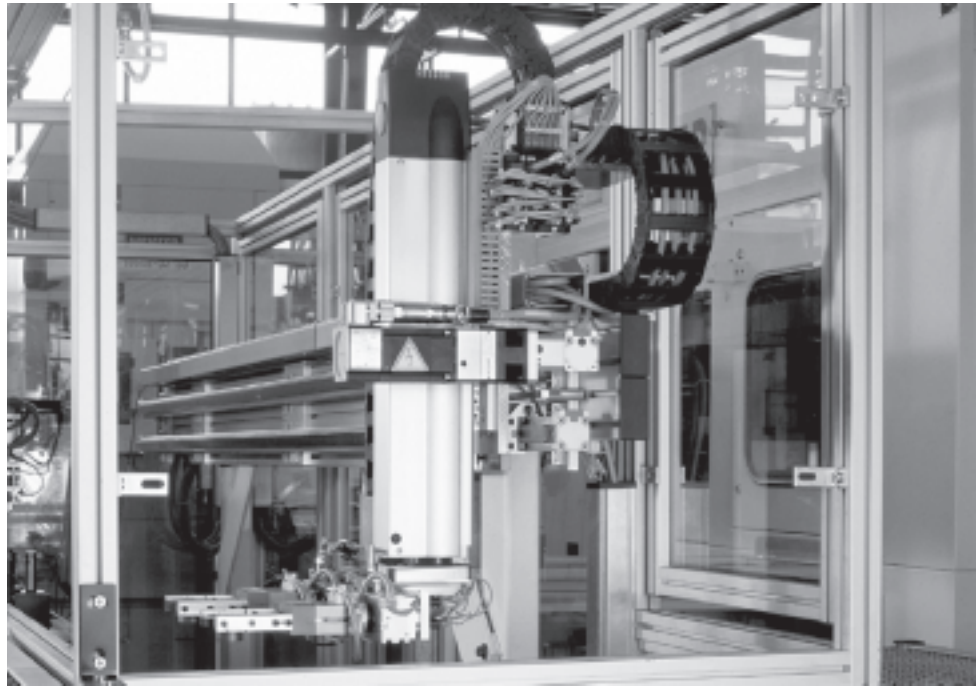
Installation components for long strokes

Key features

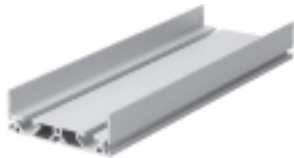
Installation components facilitate a clear, safe layout of electrical cables and pneumatic tubing.

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 energy chains for the drives along the X and Y-axes.

All the parts required for connection are included in the scope of delivery.



Support profile HMIA



The support profile for energy chains 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 energy chains and profile via slot nut connections.

Installation kits HMIXB-RP/FP HMIXF-RP/FP



The installation kits permit easy and fast attachment of the energy chains 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 energy chain is always horizontal.



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

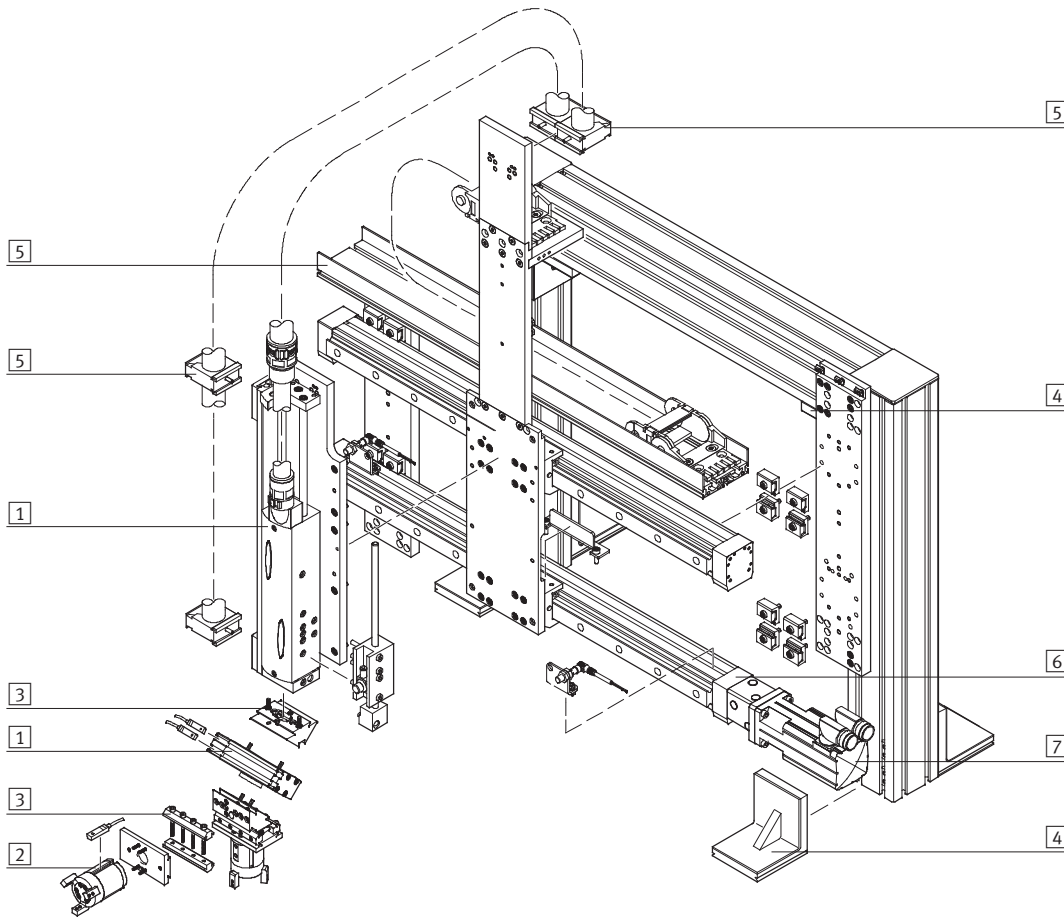
Accessories

- Slot nuts
- Energy chains (IGUS/ENERGY CHAIN)

Installation components for long strokes

System example






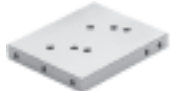

System product for handling and assembly technology



System components and accessories			
	Brief description	→ Page/Internet	
1	Drives	Wide range of combinations possible within handling and assembly technology	drive
2	Grippers	Wide range of variations possible within handling and assembly technology	gripper
3	Adapters	For drive/drive and drive/gripper connections	adapter kit
4	Basic components	Profiles and profile connections as well as profile/drive connections	basic component
5	Installation components	For a clear, safe layout of electrical cables and tubing	installation component
6	Axes	Wide range of combinations possible within handling and assembly technology	axis
7	Motors	Servo and stepper motors, with or without gear unit	motor








Installation components for long strokes

Selection aid

Version	Brief description	→ Page/Internet
Installation kit HMIXB-RP/FP		
	<ul style="list-style-type: none"> • For three-dimensional gantries • For X-axis • For mounting the support profile HMIA-E07, HMIA-E10 	116
Installation kit HMIXF-RP/FP		
	<ul style="list-style-type: none"> • For three-dimensional gantries • For X-axis • For mounting the energy chain 	116
Installation kit HMIX-RP/FP-E07/E10		
	<ul style="list-style-type: none"> • For three-dimensional gantries • For X-axis • For mounting the energy chain 	117
Installation kit HMIM-LP		
	<ul style="list-style-type: none"> • For linear gantries • For Z-axis • Extension plate for height compensation in mono systems 	117
Installation kit HMID-LP		
	<ul style="list-style-type: none"> • For linear gantries • For Z-axis • Extension plate for height compensation in duo systems 	118
Installation kit HMIO-AP		
	<ul style="list-style-type: none"> • For linear gantries • For Y-axis • For mounting the energy chain 	118
Installation kit HMIYF-RF		
	<ul style="list-style-type: none"> • For three-dimensional gantries • For Y-axis • For mounting the energy chain 	119

Installation components for long strokes

Selection aid

Version	Brief description	→ Page/Internet
Installation kit HMIY-LP-E07		
	<ul style="list-style-type: none"> • For linear gantries • For Y-axis • For mounting the energy chain 	119
Installation kit HMIY-RP/FP-E07		
	<ul style="list-style-type: none"> • For three-dimensional gantries • For Y-axis • For mounting the energy chain 	120
Installation kit HMIZB-E03		
	<ul style="list-style-type: none"> • For linear gantries • For Z-axis • For connecting energy chains and protective conduits 	120
Installation kit HMIW-E05/E07		
	<ul style="list-style-type: none"> • For linear and three-dimensional gantries • For Z-axis • For mounting the energy chain 	121
Installation kit HMIZF-E03		
	<ul style="list-style-type: none"> • For linear and three-dimensional gantries • For Z-axis • For mounting the energy chain 	121
Mounting kit HMIZW-E05/E07-DL40/63		
	<ul style="list-style-type: none"> • For linear and three-dimensional gantries • For Z-axis • For mounting the energy chain 	122
Support profile HMIA		
	<ul style="list-style-type: none"> • For linear and three-dimensional gantries • For X and Y-axes • For mounting and guiding the energy chains 	122

Installation components for long strokes

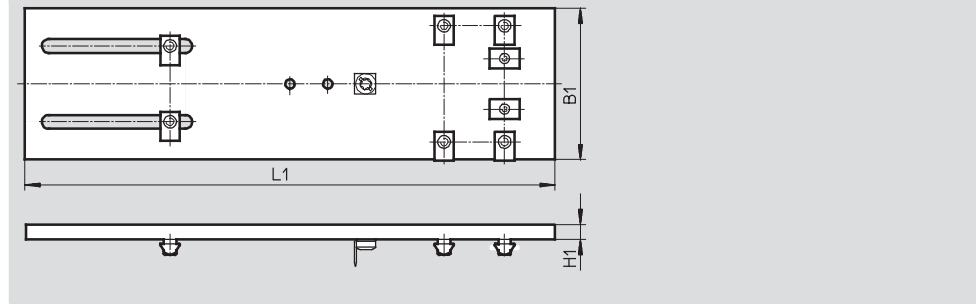
Technical data



Installation kit HMIXB-RP/FP

- For three-dimensional gantries
- For X-axis
- For mounting the support profile
HMIA-E07, HMIA-E10
- Mounting accessories and earthing
kit included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



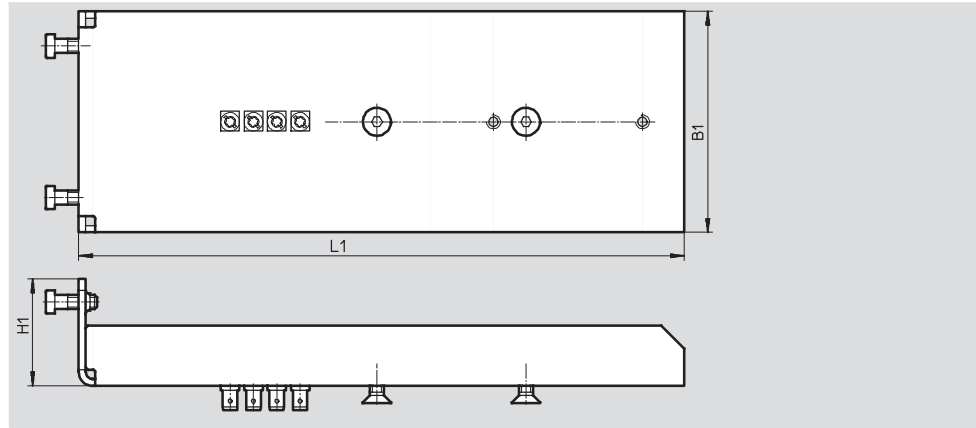
Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMIXB-RP/FP	60	6	210	2	200	539 654	HMIXB-RP/FP
HMIXB-RP/FP-2	50	14	245		400	566 893	HMIXB-RP/FP-2

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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 three-dimensional gantries
- For X-axis
- For mounting the energy chain
- Mounting accessories and earthing
kits included in the scope of
delivery

Material:
Galvanised steel
Free of copper, PTFE and silicone



Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMIXF-RP/FP	95	46	260	2	330	539 658	HMIXF-RP/FP
HMIXF-RP/FP-2	95	46	314		1,050	566 896	HMIXF-RP/FP-2

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

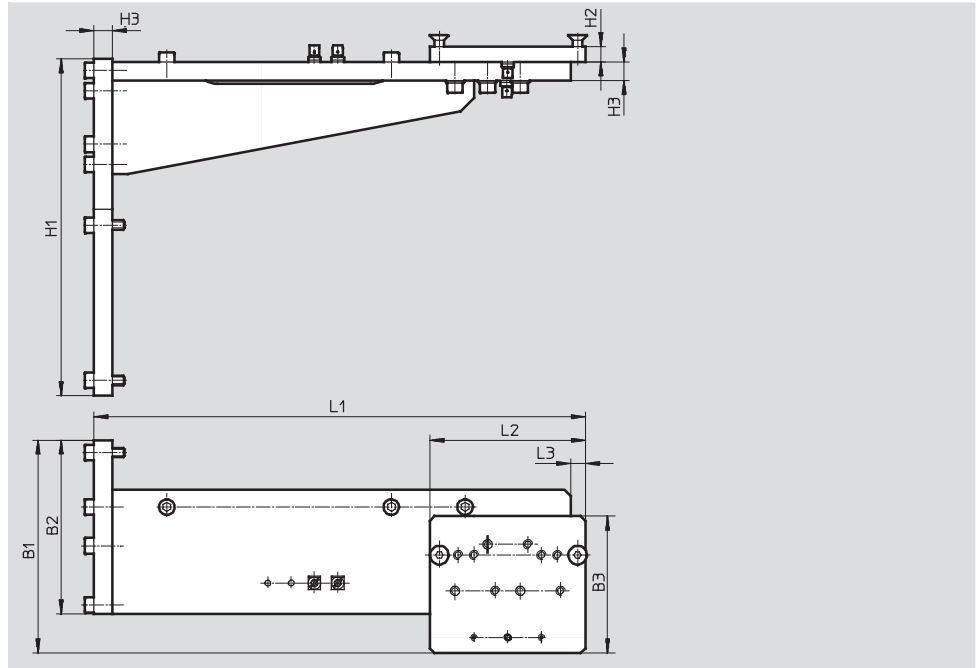
Installation components for long strokes

Technical data

Installation kit
HMIX-RP/FP-E07/E10

- For three-dimensional gantries
- For X-axis
- For mounting the energy chain
- Mounting accessories and earthing kit included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



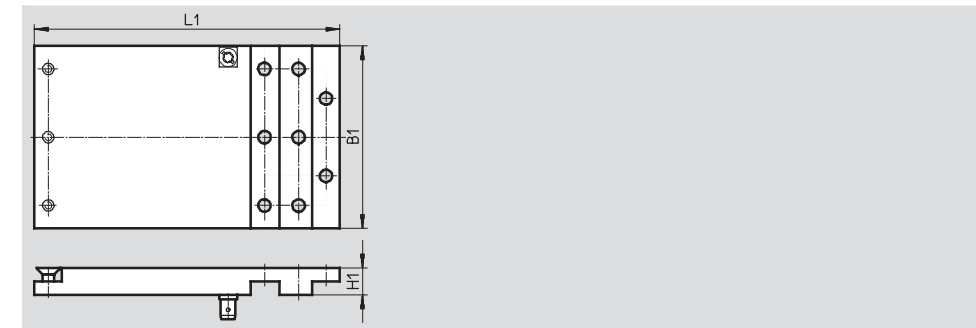
Dimensions and ordering data													
Type	B1	B2	B3	H1	H2	H3	L1	L2	L3	CRC ¹⁾	Weight [g]	Part No.	Type
HMIX	137	112	88	217	10	12	316.5	100	9.5	2	1,900	566 891	HMIX-RP/FP-E07/E10

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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
HMIM-LP

- For linear gantries
- For Z-axis
- Extension plate for height compensation in mono systems
- Mounting accessories and earthing kit included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data						
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No. Type
HMIM-LP	80	12	134	2	300	539 364 HMIM-LP

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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

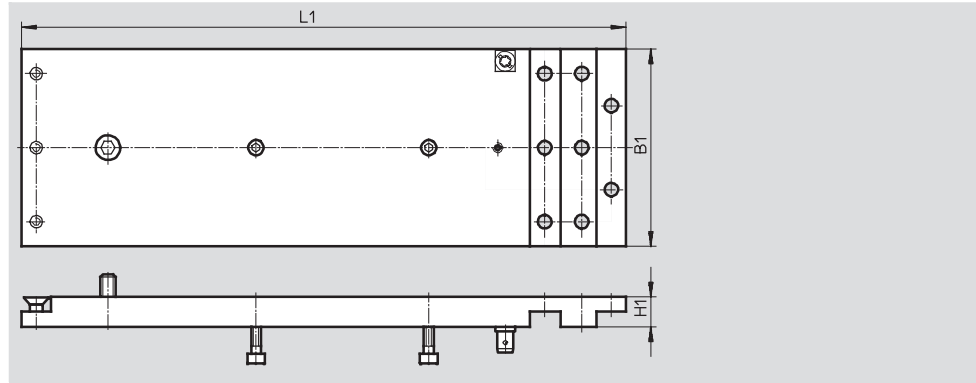
Technical data



Installation kit HMID-LP

- For linear gantries
- For Z-axis
- Extension plate for height compensation in duo systems
- Mounting accessories and earthing kit included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



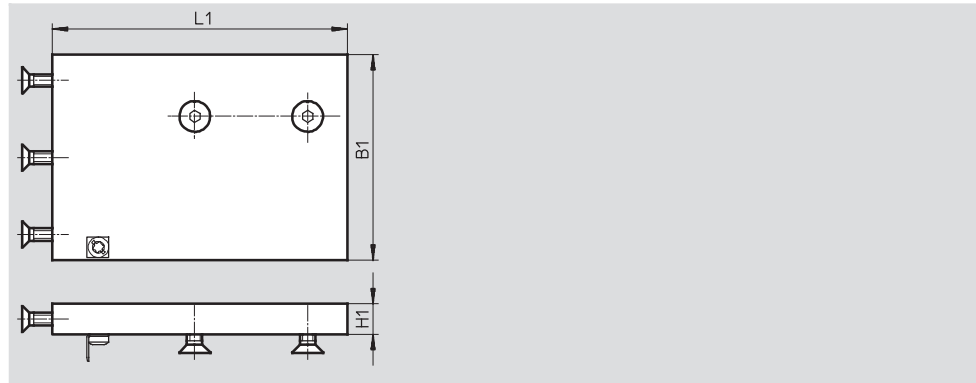
Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMID-LP	80	12	285	2	700	539 363	HMID-LP

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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 linear gantries
- For Y-axis
- For mounting the energy chain
- Mounting accessories and earthing kit included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMIO-AP-1	80	12	95	2	240	539 366	HMIO-AP-1
HMIO-AP-2	80	12	115		300	540 121	HMIO-AP-2

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

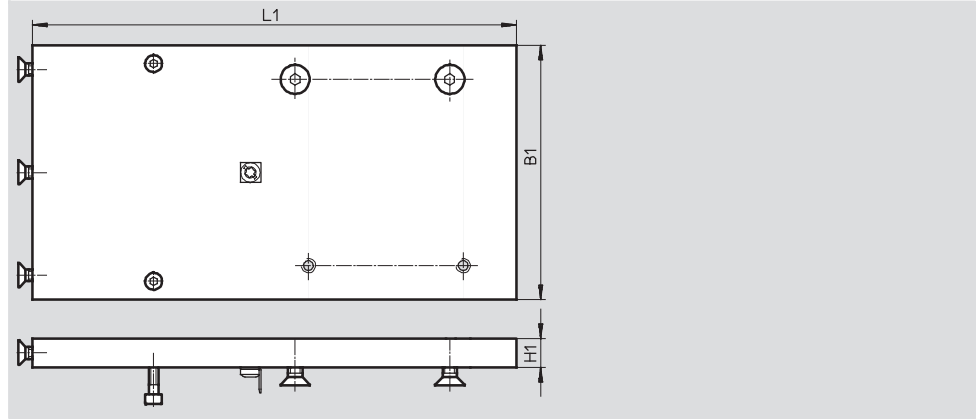
Installation components for long strokes

Technical data

Installation kit
HMIYF-RF/DL

- For three-dimensional gantries
- For Y-axis
- For mounting the energy chain
- Mounting accessories and earthing kit included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



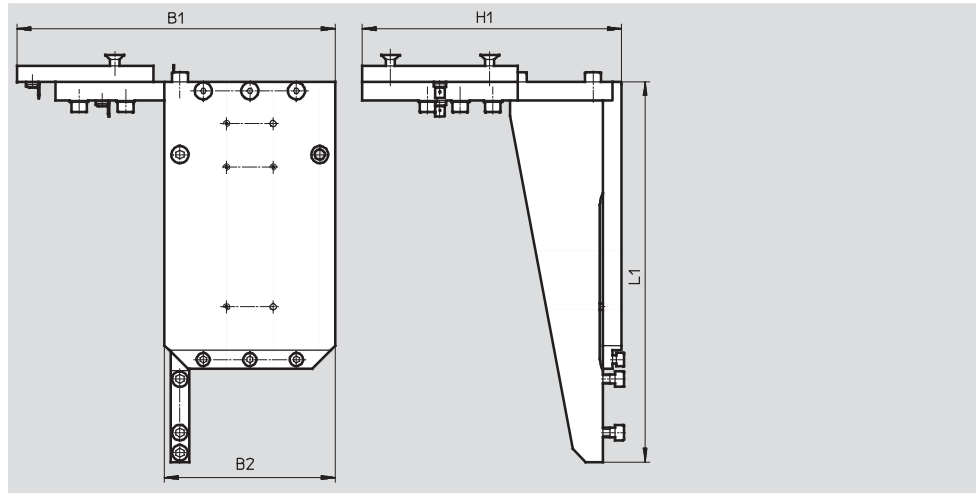
Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMIYF-RF/DL25	105	12	200	2	700	539 659	HMIYF-RF/DL25
HMIYF-RF/DL40	167	12	227		1,200	539 660	HMIYF-RF/DL40

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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
HMIY-LP-E07

- For linear gantries
- For Y-axis
- For mounting the energy chain
- Mounting accessories and earthing kit included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data								
Type	B1	B2	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMIY	205	110	167	245	2	1,950	566 886	HMIY-LP-E07

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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

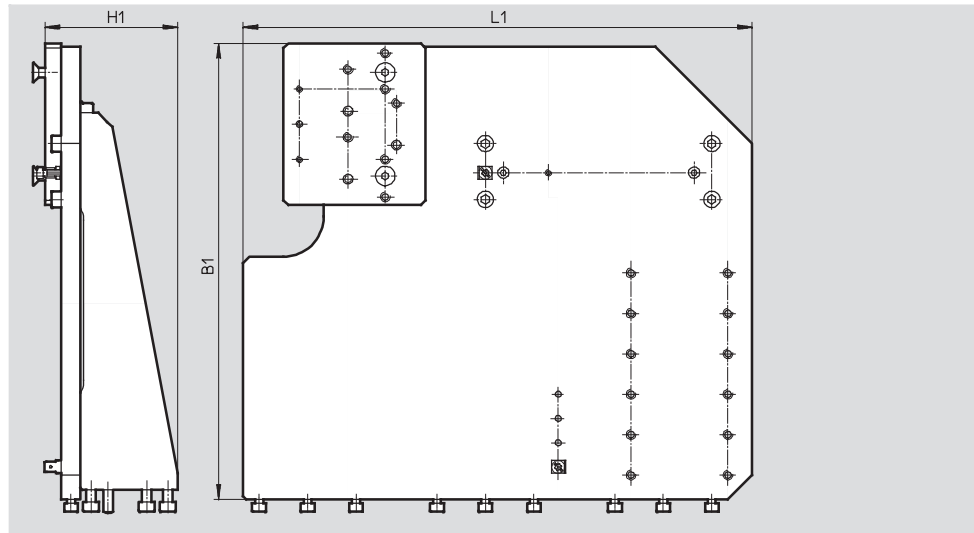
Technical data



Installation kit HMIY-RP/FP-E07

- For three-dimensional gantries
- For Y-axis
- For mounting the energy chain
- Mounting accessories and earthing kit included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



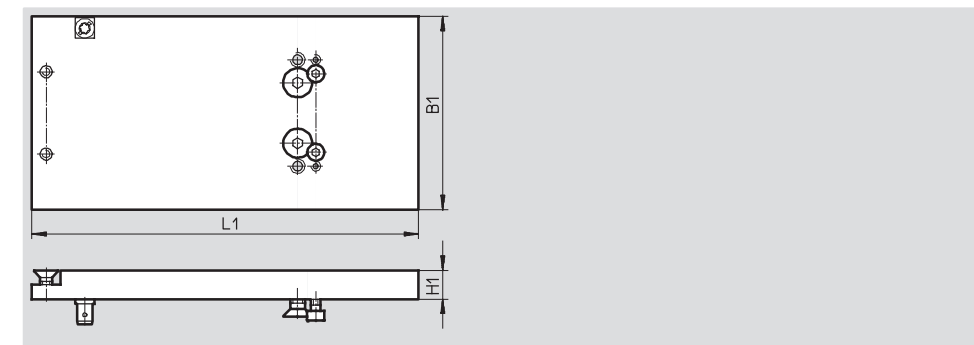
Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMIY	282	82	315	2	3,450	566 889	HMIY-RP/FP-E07

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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 HMIZB-E03

- For linear gantries
- For Z-axis
- For connecting energy chains and protective conduits
- Cantilever axes DGEA
- Spindle axes DGE
- Linear modules HMP and HMPL
- Mini slides SLT
- Mounting accessories and earthing kit included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data							
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMIZB-E03	80	12	160	2	410	539 365	HMIZB-E03

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

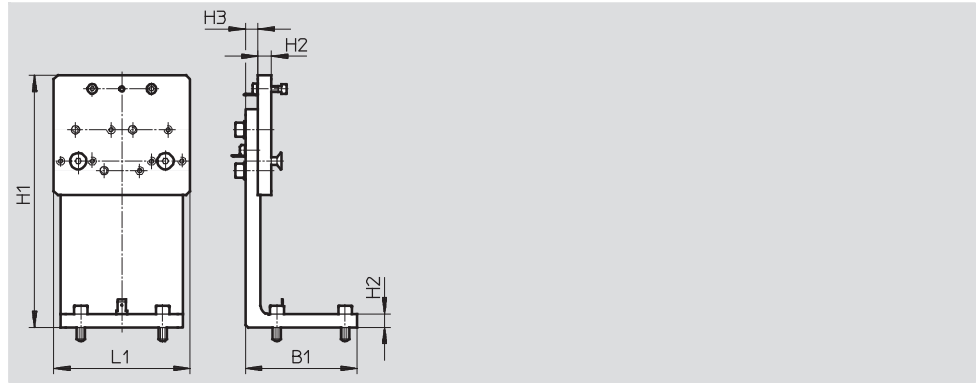
Installation components for long strokes

Technical data

Installation kit HMIW-E05/E07

- For linear and three-dimensional gantries
- For Z-axis
- For mounting the energy chain
- Mounting accessories included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



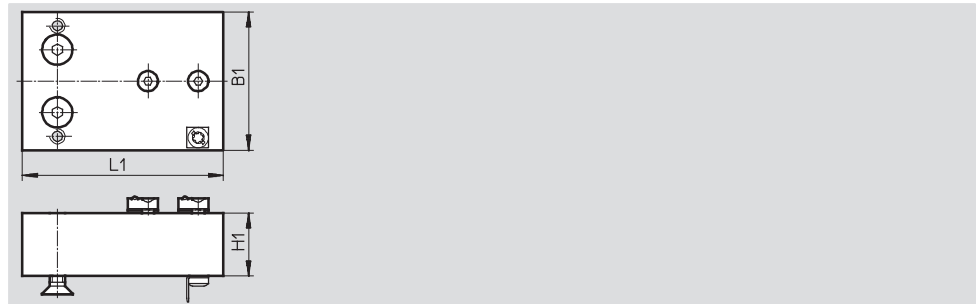
Dimensions and ordering data										
Type	B1	H1	H2	H3	L1	CRC ¹⁾	Weight [g]	Part No.	Type	
HMIW	82	185	10	9	100	2	900	566 885	HMIW-E05/E07	

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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 linear and three-dimensional gantries
- For Z-axis
- For mounting the energy chain
- Cantilever axes DGEA
- Mounting accessories and earthing kit included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data										
Type	B1	H1	L1	CRC ¹⁾	Weight [g]	Part No.	Type			
HMIZF-...-DA18	60	10	80	2	130	539 370	HMIZF-E03-DA18			
HMIZF-...-DA25	55	25	80		300	539 371	HMIZF-E03-DA25			
HMIZF-...-DA40	80	10	120		300	566 895	HMIZF-E03/E05/E07-DA40			

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

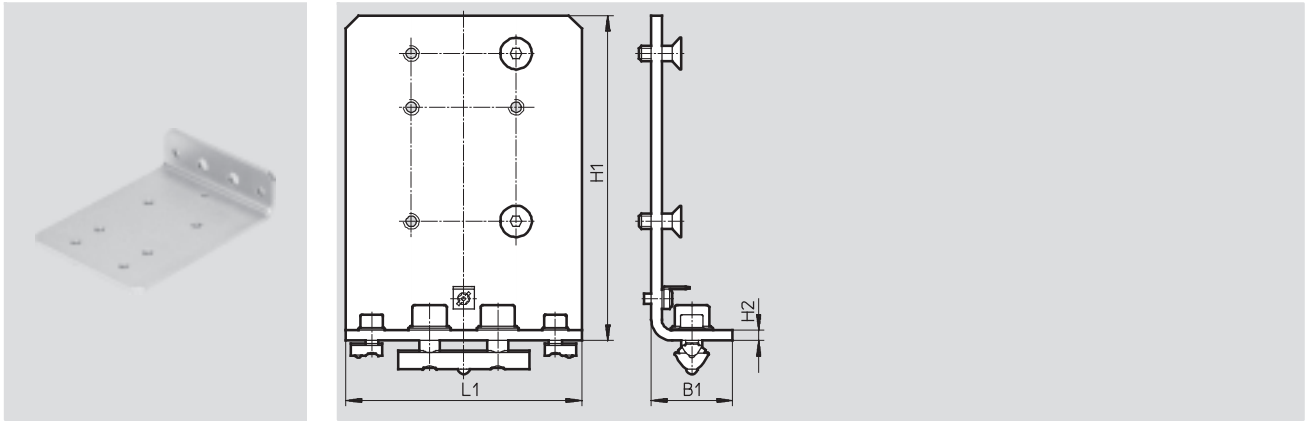
Installation components for long strokes

Technical data

Mounting kit HMIZW-E05/E07-DL40/63

- For linear and three-dimensional gantries
- For Z-axis
- For mounting the energy chain
- Mounting accessories and earthing kit included in the scope of delivery

Material:
Galvanised steel
Free of copper, PTFE and silicone



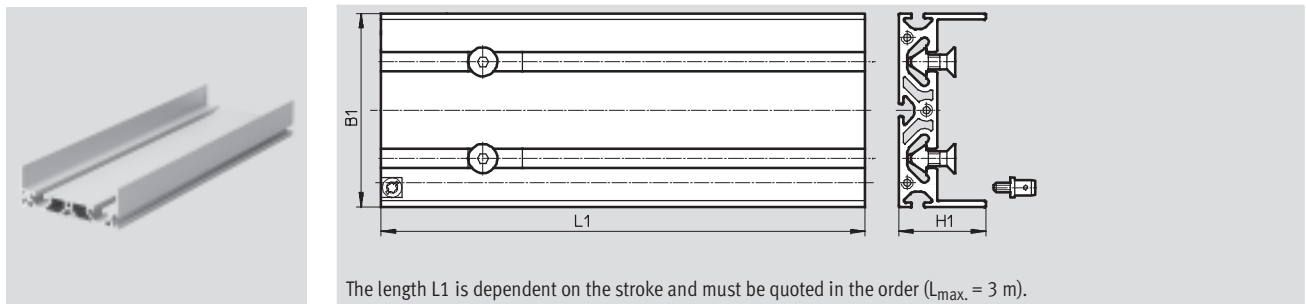
Dimensions and ordering data								
Type	B1	H1	H2	L1	CRC ¹⁾	Weight [g]	Part No.	Type
HMIZW	31	124	4	90	2	400	566 877	HMIZW-E05/E07-DL40/63

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

Support profile HMIA

- For linear and three-dimensional gantries
- For X and Y-axes
- For mounting and guiding the energy chains
- Mounting accessories and earthing kit included in the scope of delivery

Material:
Anodised aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data						
Type	B1	H1	CRC ¹⁾	Weight per metre [g]	Part No.	Type
HMIA-E03	60	36	2	1,510	567 061	HMIA-E03-...
HMIA-E05	80	36		2,120	539 378	HMIA-E05-...
HMIA-E07	100	36		2,340	539 379	HMIA-E07-...
HMIA-E10	130	36		3,200	566 894	HMIA-E10-...

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.