

## Adjusting units HMX

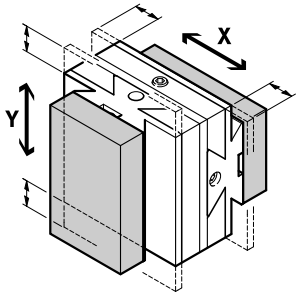
**FESTO**



## Key features

### At a glance

#### Types of mounting



- Precision adjusting unit in X and Y directions
- Allows easy adjustment of grippers to obtain precise gripping position
- Versatile precision interfaces using centring sleeves
- Wide choice of mounting options:
  - Direct mounting
  - Dovetail mounting

### Combination with drives and grippers

#### Mounting on the basic components

#### Adapter kits

- Direct mounting
- Dovetail mounting

#### Adjusting unit HMX

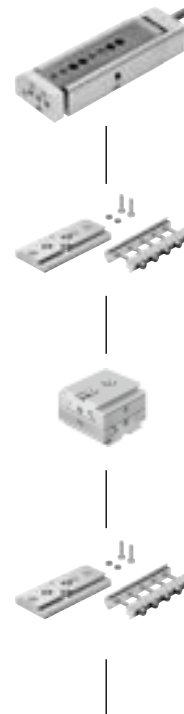
- Interface between basic component and attachment component

#### Adapter kits

- Direct mounting
- Dovetail mounting

#### Mounting the attachment components

#### Mini slide DGSL



Mini slide  
DGSL



Grippers  
DHPS, DHRS; DHDS; DHWS, HGDT, HGDD,  
HGPP

# Data sheet

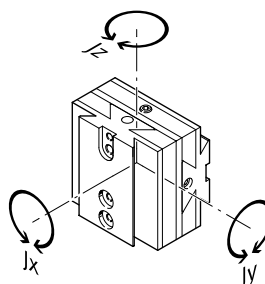
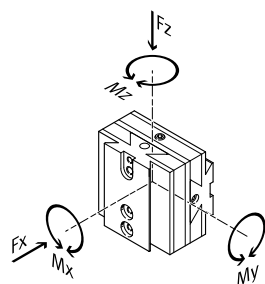
Adjusting unit



General technical data		HMX-1	HMX-3
Positioning distance	y [mm]	7.5	7.5
	z [mm]	7.5	7.5
Max. static characteristic load values → Figure 1	Forces		
	$F_x$ [N]	50	160
	$F_z$ [N]	50	160
	Torque		
	$M_x$ [Nm]	1.4	20
	$M_y$ [Nm]	1.4	20
Mass moment of inertia → Figure 2	$J_x$ [ $\text{kgm}^2 \times 10^{-4}$ ]	0.499	8.650
	$J_y$ [ $\text{kgm}^2 \times 10^{-4}$ ]	0.361	5.121
	$J_z$ [ $\text{kgm}^2 \times 10^{-4}$ ]	0.361	5.121
	Weight	[g]	155
Ambient temperature	[°C]	5 ... 60	
Corrosion resistance class CRC <sup>1)</sup>		2	
Materials		Anodised aluminium	
Note on materials		Free of copper and PTFE	

1) Corrosion resistance class CRC 2 to Festo standard FN 940070  
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

<b>Max. permissible static characteristic load values</b>	<b>Mass moments of inertia</b>
Figure 1	Fig. 2

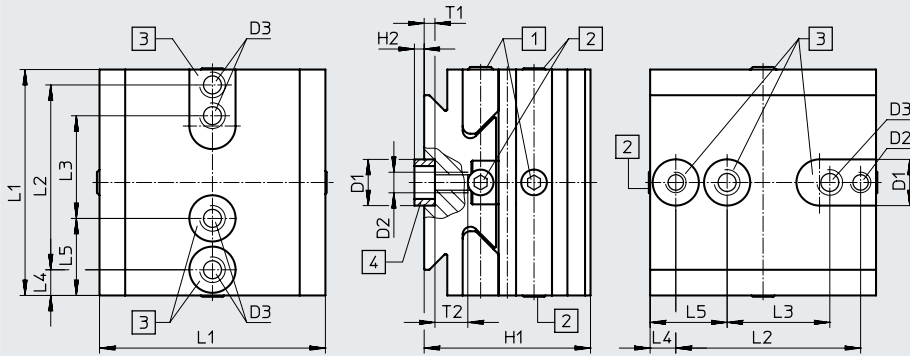


Data sheet

Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

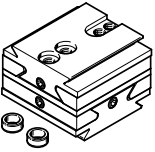
HMX-1



- [1] Locking screw
- [2] Adjusting screw
- [3] Centring hole/slot
- [4] For centring sleeve ZBH-9  
(2 included in scope of delivery)
- T2 For M4 and M5 threads

	D1	D2	D3	H1	H2	L1	L2	L3	L4	L5	T1	T2
	∅ H7					+1	±0.1	±0.1			+0.1	
HMX-1	9	M4	M5	32.4	1.9	44	36	20	5	15	2.1	6.4

Ordering data

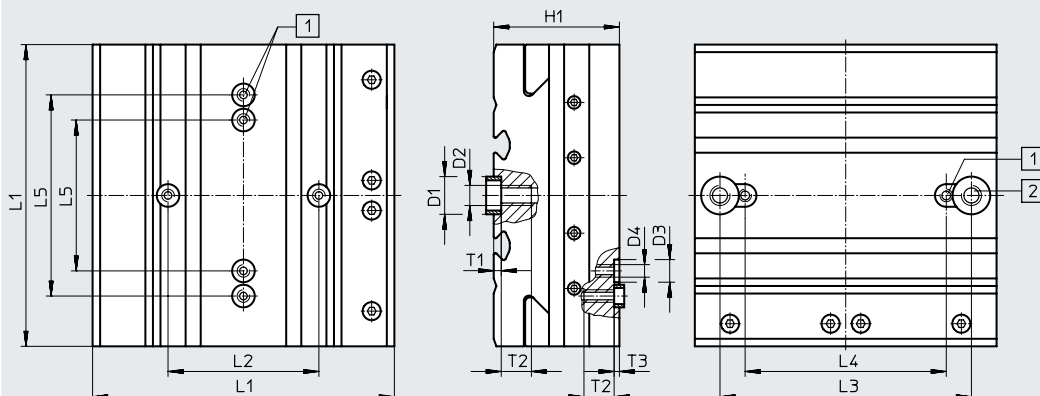
	Part no.	Type
		<b>187582</b>

Data sheet

Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

HMX-3



- [1] For centring sleeve ZBH-9  
(2 included in scope of delivery)
- [2] For centring sleeve ZBH-15  
(2 included in scope of delivery)

	D1	D2	D3	D4	H1	L1	L2	L3	L4	L5	T1	T2	T3
	∅		∅										
	H7		H7			+1	±0.1				+0.1		+0.1
HMX-3	15	M8	9	M5	50	120	60	100	80	60	3	12	2.1

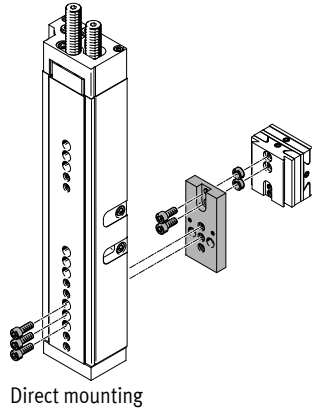
Ordering data

	Part no.	Type
	526030	HMX-3

## Data sheet – Mounting the attachment components

### Mounting on mini slide DGSL

Material:  
 Adapter kit HMSV:  
 Wrought aluminium alloy  
 Free of copper and PTFE

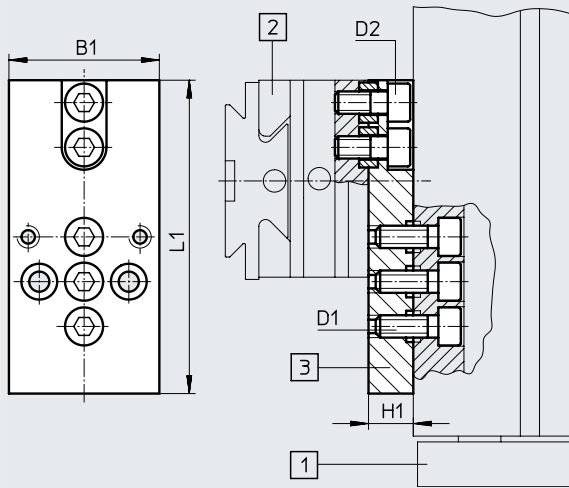


Direct mounting

### Dimensions and ordering data

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Direct mounting



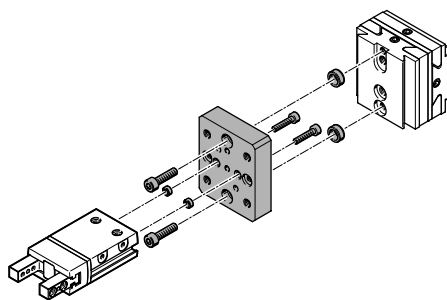
- [1] Mini slide DGSL
- [2] Adjusting unit HMX
- [3] Adapter kit HMSV

Attachment component	Adjusting unit	B1	D1	D2	H1	L1	Part no.	Type
DGSL-4/6	HMX-1	33.6	M3	M5	10	87	<b>548787</b>	HMSV-57
DGSL-8/10	HMX-1	33.6	M4	M5	10	87		
DGSL-12/16	HMX-1	33.6	M5	M5	10	70	<b>548782</b>	HMSV-52
DGSL-20/25	HMX-3	40	M6	M5	10	100	<b>548929</b>	HMSV-60

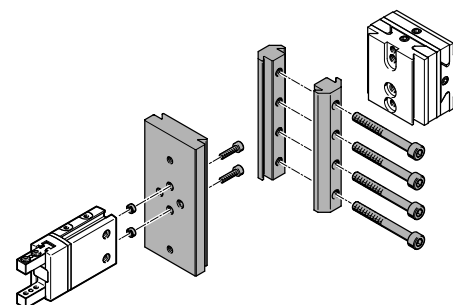
## Data sheet – Mounting the attachment components

### Mounting on grippers DHDS, DHPS, DHRS, DHWS

Material:  
 Adapter kit HAPG:  
 Wrought aluminium alloy  
 Free of copper and PTFE



Direct mounting

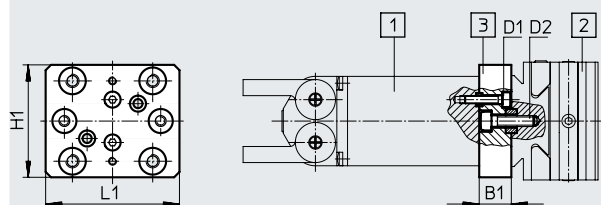


Dovetail mounting

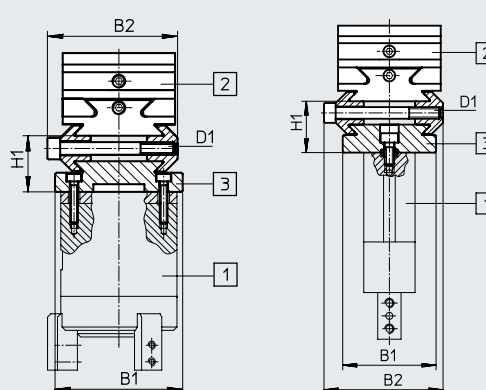
### Dimensions and ordering data

Download CAD data → [www.festo.com](http://www.festo.com)

#### Direct mounting



#### Dovetail mounting



- [1] Gripper
- [2] Adjusting unit HMXY
- [3] Adapter kit HAPG

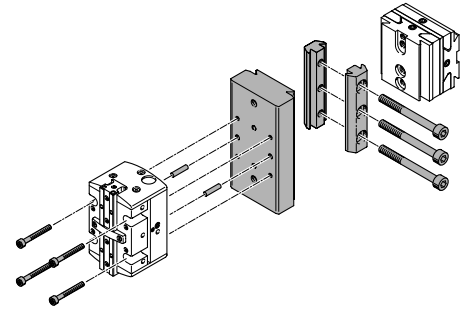
- [1] Gripper
- [2] Adjusting unit HMXY
- [3] Adapter kit HMSV

Attachment component	Adjusting unit	B1	B2	H1	L1	Screws D1	Screws D2	Part no.	Type
<b>Direct mounting</b>									
DHPS-06, DHRS-10, DHWS-10	HMXY-1	-	-	42	50	M3x14	M4x16	192706	HAPG-37-S1
DHDS-16		-	-	42	50	M3x20	M4x16	193921	HAPG-36-S3
DHPS-06, DHRS-16, DHWS-16		-	-	42	50	M3x14	M4x16	192705	HAPG-36-S1
DHPS-16, DHRS-25, DHWS-25		-	-	42	50	M4x14	M4x16	193922	HAPG-37-S4
<b>Dovetail mounting</b>									
DHPS-10, DHRS-16, DHWS-16	HMXY-1/3	40	51	22	-	-	-	177767	HMSV-27
DHPS-16, DHRS-25, DHWS-25		40	51	22	-	-	-	177768	HMSV-28
DHPS-25, DHRS-32, DHWS-32		50	51	24	-	-	-	177769	HMSV-29
DHDS-32	HMXY-3	50	51	22	-	-	-	178212	HMSV-32
DHPS-35, DHRS-40, DHWS-40		60	51	28	-	-	-	177770	HMSV-30
DHDS-50		70	51	24	-	-	-	178213	HMSV-33

## Data sheet – Mounting the attachment components

### Mounting on parallel gripper HGPP

Material:  
 Adapter kit HAVB, HMSV, HAPG:  
 Wrought aluminium alloy  
 Free of copper and PTFE

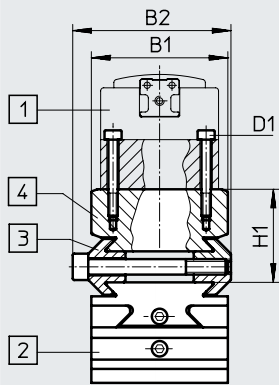


Dovetail mounting

### Dimensions and ordering data

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Dovetail mounting



- [1] Parallel gripper HGPP
- [2] Adjusting unit HMXY
- [3] Adapter kit HMSV; HAVB
- [4] Adapter kit HAPG

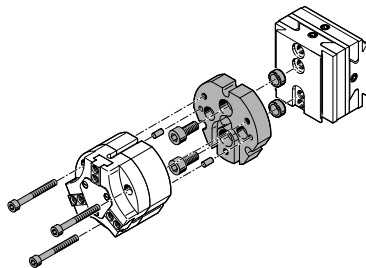
Attachment component	Adjusting unit	B1	B2	H1	Screws D1	Part no.	Type	Part no.	Type
HGPP-12	HMXY-1	44	51	27.5	M5x30	163239	HAVB-3	191262	HAPG-44
	HMXY-3	44	51	30	M5x30	177649	HMSV-3	191262	HAPG-44
HGPP-16	HMXY-1	44	51	27.5	M5x30	163239	HAVB-3	191263	HAPG-45
	HMXY-3	44	51	30	M5x30	177649	HMSV-3	191263	HAPG-45
HGPP-20	HMXY-1	50	51	19.5	M5x30	163239	HAVB-3	191265	HAPG-47
	HMXY-3	50	51	22	M5x30	177649	HMSV-3	191265	HAPG-47
HGPP-25	HMXY-1	60	51	25.5	M5x40	163239	HAVB-3	529019	HAPG-59
	HMXY-3	60	51	28	M5x40	177649	HMSV-3	529019	HAPG-59
HGPP-32	HMXY-3	60	51	28	M5x50	177653	HMSV-7	529020	HAPG-61



## Data sheet – Mounting the attachment components

### Mounting on three-point grippers HGDT, HGDD

Material:  
 Adapter kit HAPG:  
 Wrought aluminium alloy  
 Free of copper and PTFE

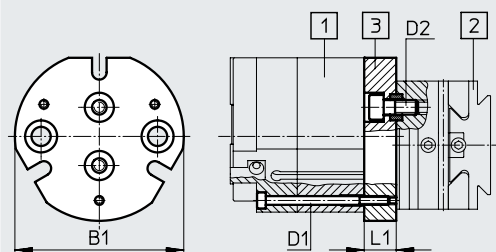


Direct mounting

### Dimensions and ordering data

Download CAD data → [www.festo.com](http://www.festo.com)

Direct mounting



- [1] Three-point gripper
- [2] Adjusting unit HMXY
- [3] Adapter kit HMSV

Attachment component	Adjusting unit	B1	D1	D2	L1	Part no.	Type
HGDT-25	HMXY-1	48	M3	M5	10	542439	HAPG-SD2-32
HGDT-35, HGDD-35		58	M3	M5	11	542436	HAPG-94