

Angle adapters HMSVS



- Versatile precision interfaces
- Wide choice of mounting options

Angle adapters HMSVS

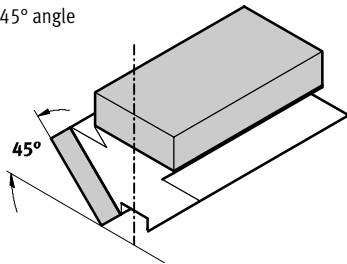
Key features



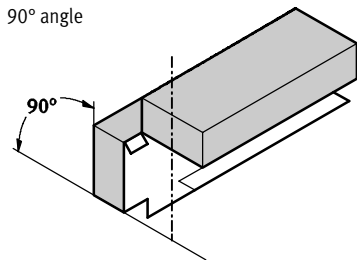
System product for handling and assembly technology

Mounting options

45° angle



90° angle



■ Facilitates the mounting of grippers to semi-rotary drives for turret operation

■ Versatile precision interfaces using centring sleeves

■ Wide choice of mounting options:

- Dovetail mounting
- Direct mounting

Angle adapters HMSVS

Key features

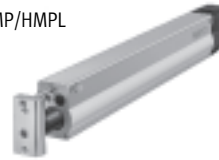
Combination with drives and grippers

Mounting on the basic component → 5 / 3.3-7

Semi-rotary drives
DRQD



Linear modules
HMP/HMPL



Mini slides
SLT



Adapter kits

- Direct mounting
- Dovetail mounting



Angle adapter HMSVS

- Interface between basic component and attachment component



Adjusting unit
HMX Y



Adjusting unit
HMX Y



Adjusting unit HMX Y

→ 5 / 3.3-20

Adapter kits

- Direct mounting
- Dovetail mounting



Mounting the attachment component → 5 / 3.3-11



Semi-rotary drives
DRQD



Standard grippers
HG D/HGP/HGR/HGW
Micro grippers
HGPM/HGWM
Precision parallel grippers
HGPP
T-slot grippers
HGPT

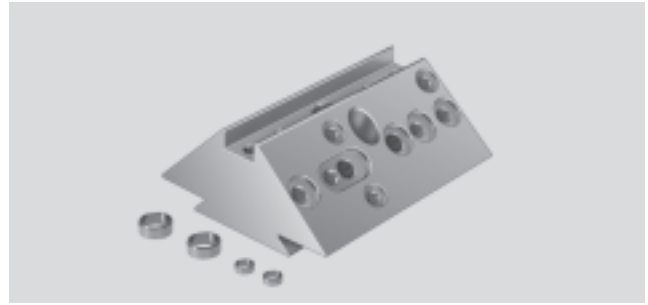


Mini slides
SLT

Angle adapters HMSVS

Technical data

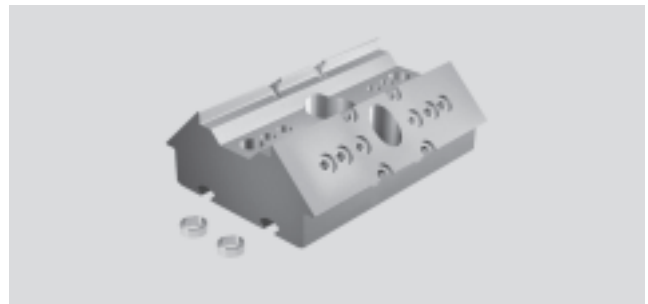
Angle adapter HMSVS-1



Angle adapter HMSVS-2



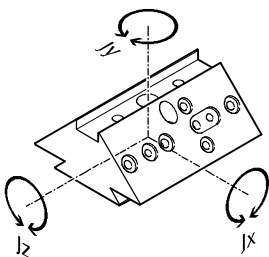
Angle adapter HMSVS-3



General technical data		HMSVS-1	HMSVS-2	HMSVS-3
→ Fig. 1	J_x [$\text{kgm}^2 \times 10^{-4}$]	0.774	0.630	1.056
	J_y [$\text{kgm}^2 \times 10^{-4}$]	0.968	0.957	1.427
	J_z [$\text{kgm}^2 \times 10^{-4}$]	0.342	0.457	0.520
Temperature range	[°C]	-20 ... +60		
Weights	[g]	156	647	769
Materials		Anodised aluminium		

Mass moments of inertia

Fig. 1



Angle adapters HMSVS

Technical data

Dimensions Download CAD data → www.festo.com/en/engineering

HMSVS-1

1 For centring sleeve ZBH-7
(2 pieces included in scope of delivery)

2 For centring sleeve ZBH-9
(2 pieces included in scope of delivery)

* Tolerances apply to countersinks.
The tolerance ± 0.1 applies to threads and drilled holes.

HMSVS-2

1 For centring sleeve ZBH-9
(2 pieces included in scope of delivery)

* Tolerances apply to countersinks.
The tolerance ± 0.1 applies to threads and drilled holes.

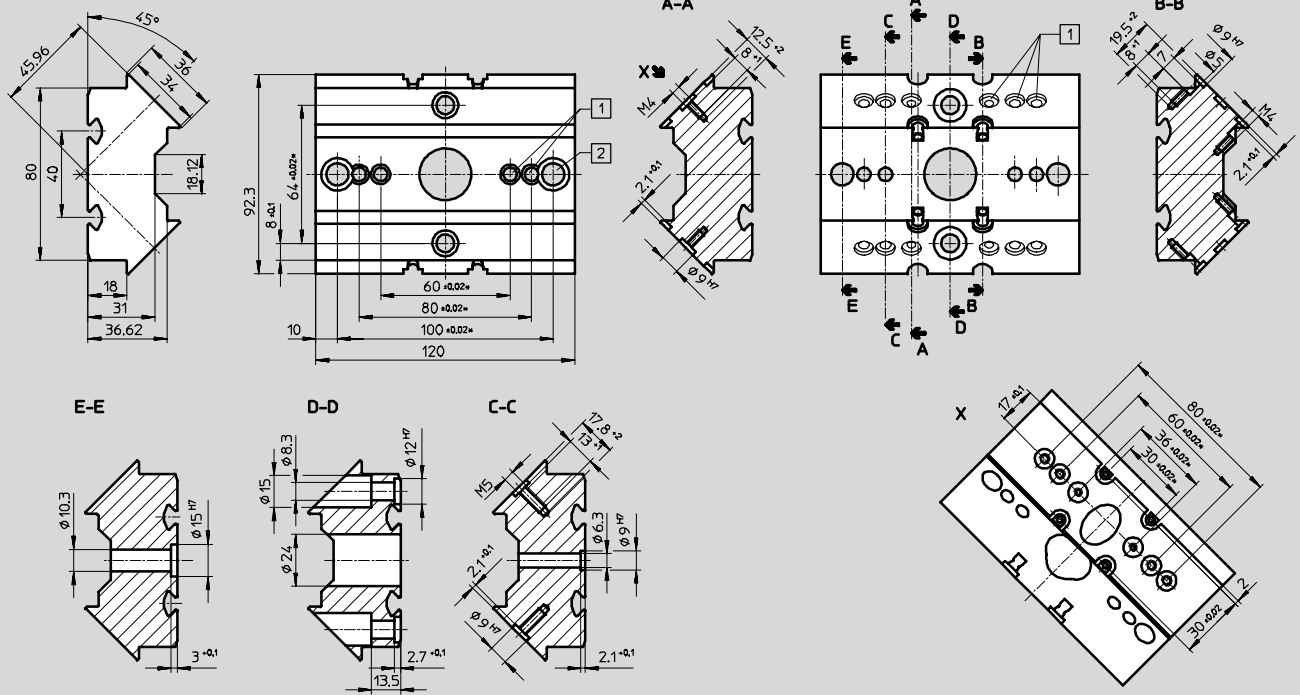
Angle adapters HMSVS

Technical data

Dimensions

Download CAD data → www.festo.com/en/engineering

HMSVS-3



1 For centring sleeve ZBH-9

2 For centring sleeve ZBH-15
(2 pieces of each included in scope of delivery)

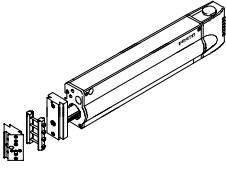
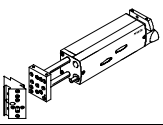
* Tolerances apply to countersinks.
The tolerance ± 0.1 applies to threads and drilled holes.

Ordering data

Part No.	Type	Part No.	Type	Part No.	Type
189 487	HMSVS-1	526 028	HMSVS-2	526 029	HMSVS-3

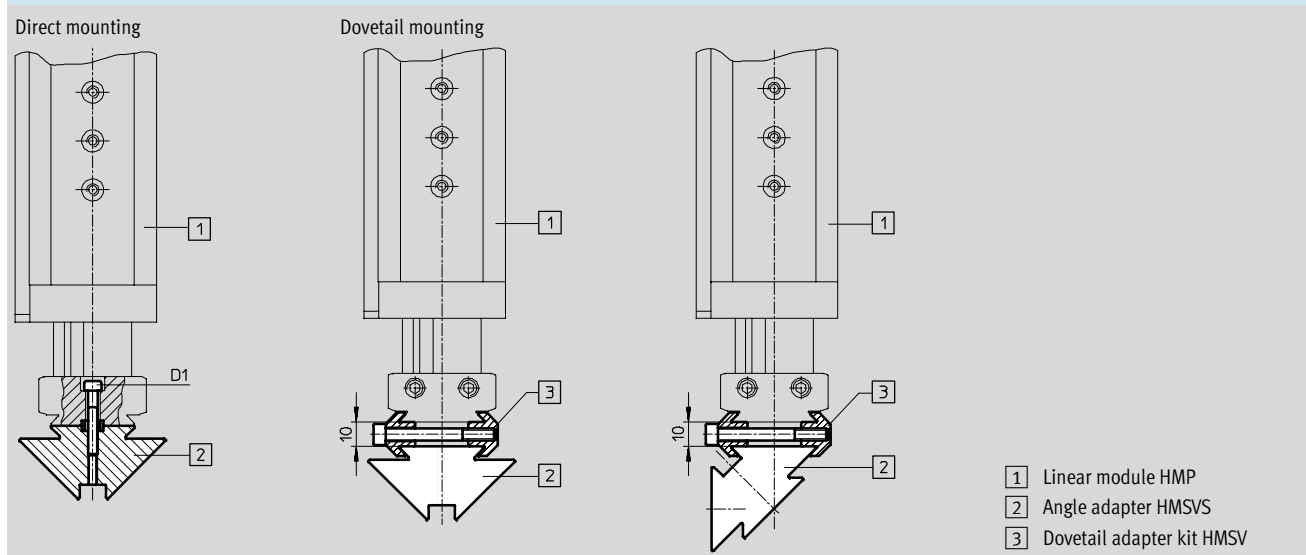
Angle adapters HMSVS

Technical data – Mounting on the basic component

Ordering data							
Basic component	Direct mounting ¹⁾			Dovetail mounting			Part No. Type HMSVS-3
	Part No. Type HMSVS-1	Part No. Type HMSVS-2	Part No. Type HMSVS-3	Part No. Type HMSVS-1	Part No. Type HMSVS-2		
Linear module HMP							
	16	2x M5x25	2x M6x45	2x M6x45	177 647 HMSV-1	177 649 HMSV-3	177 649 HMSV-3
	20	2x M5x25	2x M6x45	2x M6x45	177 647 HMSV-1	177 649 HMSV-3	177 649 HMSV-3
	25	2x M5x30	2x M6x45	2x M6x45	177 647 HMSV-1	177 649 HMSV-3	177 649 HMSV-3
	32	–	2x M6x45	2x M6x45	177 647 HMSV-1	177 649 HMSV-3	177 649 HMSV-3
Linear module HMPL							
	16	2x M5x18	–	–	–	–	–
	20	2x M5x18	–	–	–	–	–

1) The screws listed are not included with the angle adapter.

Dimensions Download CAD data → www.festo.com/en/engineering

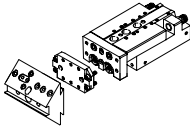


Basic component	Angle adapter	Dovetail adapter kit	Screws ¹⁾ DIN912 D1
HMP-16/-20	HMSVS-1	HMSV-1	M5x25
HMP-25			M5x30
HMP-32			–
HMP-...	HMSVS-2	HMSV-3	M6x45
HMP-...	HMSVS-3		
HMPL-...	–	–	M5x18

1) The screws listed are not included in the scope of delivery.

Angle adapters HMSVS

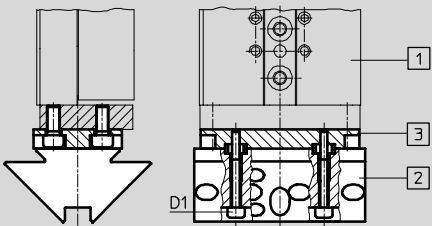
Technical data – Mounting on the basic component

Ordering data							
Basic component	Direct mounting ¹⁾			Dovetail mounting			
	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type	
	HMSVS-1	HMSVS-2	HMSVS-3	HMSVS-1	HMSVS-2	HMSVS-3	
Mini slide SLT							
	10	178 448 HAPS-2 + 2x M4x32	–	–	–	–	
	16	178 449 HAPS-3 + 2x M4x32	–	–	–	–	
	20	178 450 HAPS-4 + 2x M4x32	178 450 HAPS-4²⁾ + 2x M4x40	178 450 HAPS-4²⁾ + 2x M4x40	–	–	–
	25	178 451 HAPS-5 + 2x M4x32	178 451 HAPS-5²⁾ + 2x M4x40	178 451 HAPS-5²⁾ + 2x M4x40	–	–	–

- 1) The screws listed are not included with the angle adapter.
2) The following are additionally required: 2 screws to DIN 125 A 4.3

Dimensions Download CAD data → www.festo.com/en/engineering

Mini slide SLT



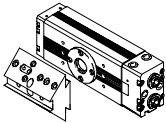
1 Mini slide SLT
2 Angle adapter HMSVS
3 Adapter kit HAPS

Basic component	Angle adapter	Adapter kit	Screws ¹⁾ DIN912 D1
SLT-10	HMSVS-1	HAPS-2	M4x32
SLT-16		HAPS-3	
SLT-20		HAPS-4	
SLT-25		HAPS-5	
SLT-20	HMSVS-2/-3	HAPS-4 ²⁾	M4x40
SLT-25		HAPS-5 ²⁾	

- 1) The screws listed are not included in the scope of delivery.
2) The following are additionally required: 2 screws to DIN 125 A 4.3

Angle adapters HMSVS

Technical data – Mounting on the basic component

Ordering data							
Basic component	Direct mounting ¹⁾			Dovetail mounting			
	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type	
	HMSVS-1	HMSVS-2	HMSVS-3	HMSVS-1	HMSVS-2	HMSVS-3	
Semi-rotary drive DRQD							
	16	2x 186 717 ZBH-7²⁾ + 2x M4x20	–	–	–	–	
	20	2x 186 717 ZBH-7²⁾ + 2x M4x20	–	–	–	–	
	25	–	2x 150 927 ZBH-9²⁾ + 2x M6x40	–	–	–	
	32	–	2x 150 927 ZBH-9²⁾ + 2x M6x40	–	–	–	
	40	–	–	2x 189 653 ZBH-12²⁾ + 2x M8x25	–	–	–
	50	–	–	2x 189 653 ZBH-12²⁾ + 2x M8x25	–	–	–

1) The screws listed are not included with the angle adapter.

2) Scope of delivery: 10 per pack

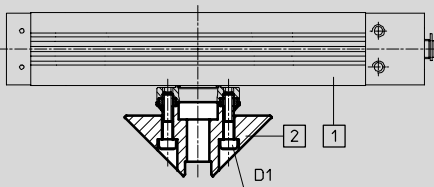
Dimensions

Download CAD data → www.festo.com/en/engineering

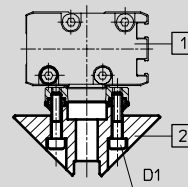
Semi-rotary drive DRQD

Direct mounting

Variant 1



Variant 2



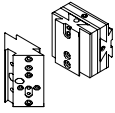
- 1 Semi-rotary drive DRQD
2 Angle adapter HMSVS

Basic component	Angle adapter	Screws ¹⁾ DIN912 D1
DRQD-16	HMSVS-1	M4x20
DRQD-20		
DRQD-25	HMSVS-2	M6x40
DRQD-32		
DRQD-40	HMSVS-3	M8x25
DRQD-50		

1) The screws listed are not included in the scope of delivery.

Angle adapters HMSVS

Technical data – Mounting on the basic component

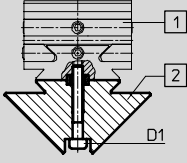
Ordering data						
Basic component	Direct mounting ¹⁾			Dovetail mounting		
	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type
	HMSVS-1	HMSVS-2	HMSVS-3	HMSVS-1	HMSVS-2	HMSVS-3
Adjusting unit HMXV						
	1	2x M4x32	–	–	177 647 HMSV-1	177 647 HMSV-1
	3	–	–	–	177 649 HMSV-3	177 649 HMSV-3

1) The screws listed are not included with the angle adapter.

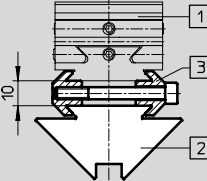
Dimensions Download CAD data → www.festo.com/en/engineering

Adjusting unit HMXV

Direct mounting



Dovetail mounting



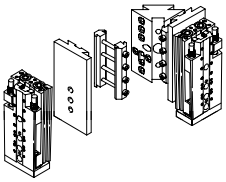
1 Adjusting unit HMXV
2 Angle adapter HMSVS
3 Dovetail adapter kit HMSV

Basic component	Angle adapter	Dovetail adapter kit	Screws ¹⁾
HMXV-1	HMSVS-1	HMSV-1	DIN912
HMXV-3			D1
HMXV-1	HMSVS-2	HMSV-3	M4x32
HMXV-3			–
HMXV-3	HMSVS-3		

1) The screws listed are not included in the scope of delivery.

Angle adapters HMSVS

Technical data – Mounting on the attachment component

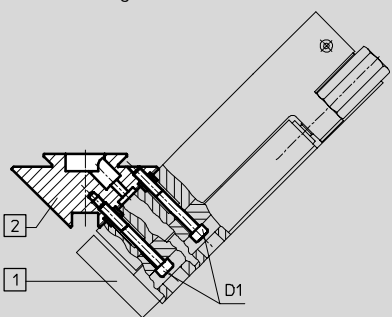
Ordering data						
Attachment component	Direct mounting ¹⁾			Dovetail mounting		
	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type
	HMSVS-1	HMSVS-2	HMSVS-3	HMSVS-1	HMSVS-2	HMSVS-3
Mini slide SLT						
	6	–	–	–	178 329 HMSV-34	178 329 HMSV-34
	10	2x 186 717 ZBH-7 ²⁾ + 2x M4x30	–	–	178 330 HMSV-35	178 330 HMSV-35
	16	–	–	–	178 331 HMSV-36	178 331 HMSV-36
	20	–	–	–	178 332 HMSV-37	178 332 HMSV-37
	25	–	–	–	–	178 332 HMSV-37

- 1) The screws listed are not included with the angle adapter.
2) Scope of delivery: 10 per pack

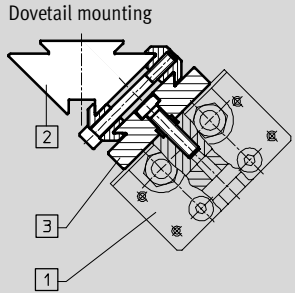
Dimensions Download CAD data → www.festo.com/en/engineering

Mini slide SLT

Direct mounting



Dovetail mounting



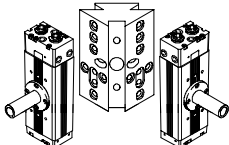
1 Mini slide SLT
2 Angle adapter HMSVS
3 Dovetail adapter kit HMSV

Attachment component	Angle adapter	Dovetail adapter kit	Screws ¹⁾ DIN912 D1
SLT-6	HMSVS-1/-2/-3	HMSV-34	–
SLT-10	HMSVS-1	HMSV-35	M4x30
	HMSVS-2/-3		–
SLT-16	HMSVS-1/-2/-3	HMSV-36	
SLT-20		HMSV-37	
SLT-25	HMSVS-2/-3		

- 1) The screws listed are not included in the scope of delivery.

Angle adapters HMSVS

Technical data – Mounting the attachment component

Ordering data							
Attachment component	Direct mounting ¹⁾			Dovetail mounting			
	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	
	Type	Type	Type	Type	Type	Type	
	HMSVS-1	HMSVS-2	HMSVS-3	HMSVS-1	HMSVS-2	HMSVS-3	
Semi-rotary drive DRQD							
	6	193 920 HAPG-36-S2	193 920 HAPG-36-S2	193 920 HAPG-36-S2	–	–	
	8	2x M4x20	2x M4x20	2x M4x20	–	–	
	12	2x M4x25	2x M4x25	2x M4x25	–	–	
	16	2x M4x35	2x M4x35	192 707 HAPG-38	177 656 HMSV-10	177 656 HMSV-10	177 656 HMSV-10
	20	2x M4x35	2x M4x40	192 707 HAPG-38	177 656 HMSV-10	177 656 HMSV-10	177 656 HMSV-10
	25	2x 150 927 ZBH-9²⁾ + 2x M5x45	2x 150 927 ZBH-9²⁾ + 2x M6x40	2x M5x50 or 2x 150 927 ZBH-9²⁾ + 2x M6x 40	–	177 660 HMSV-14	177 660 HMSV-14
	32	–	2x 150 927 ZBH-9²⁾ + 2x M6x40	2x M5x55 or 2x 150 927 ZBH-9²⁾ + 2x M6x40	–	177 665 HMSV-19	177 665 HMSV-19
	40	–	–	2x 191 409 ZBH-15²⁾ + 2x M10x50	–	–	–
	50	–	–	2x 191 409 ZBH-15²⁾ + 2x M10x50	–	–	–
	Dimensions → 5 / 3.3-13						

- 1) The screws listed are not included with the angle adapter.
2) Scope of delivery: 10 per pack

Angle adapters HMSVS

Technical data – Mounting the attachment component

Dimensions Download CAD data → www.festo.com/en/engineering

Semi-rotary drive DRQD

Direct mounting

Dovetail mounting

1 Semi-rotary drive DRQD
2 Angle adapter HMSVS
3 Dovetail adapter kit HMSV

Attachment component	Angle adapter	Adapter kit		Screws ¹⁾
		Dovetail mounting	Adapter plate	DIN912 D1
DRQD-6	HMSVS-1/-2/-3	-	HAPG-36-S2	-
DRQD-8			-	M4x20
DRQD-12			-	M4x25
DRQD-16/-20	HMSVS-1/-2	HMSV-10	-	M4x35
	HMSVS-3		HAPG-38	-
DRQD-25	HMSVS-2	HMSV-14	-	M5x50
	HMSVS-3			
DRQD-32	HMSVS-2	HMSV-19	-	-
	HMSVS-3			M5x55

1) The screws listed are not included in the scope of delivery.

Dimensions Download CAD data → www.festo.com/en/engineering

Semi-rotary drive DRQD

Direct mounting
HMSVS-1

HMSVS-2/3

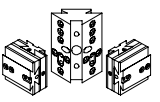
1 Semi-rotary drive DRQD
2 Angle adapter HMSVS

Attachment component	Angle adapter	Screws ¹⁾
		DIN912 D1
DRQD-25	HMSVS-1	M5x45
DRQD-25	HMSVS-2	M6x40
DRQD-32		
DRQD-25	HMSVS-3	M6x40
DRQD-32		
DRQD-40	HMSVS-3	M10x50
DRQD-50		

1) The screws listed are not included in the scope of delivery.

Angle adapters HMSVS

Technical data – Mounting the attachment component

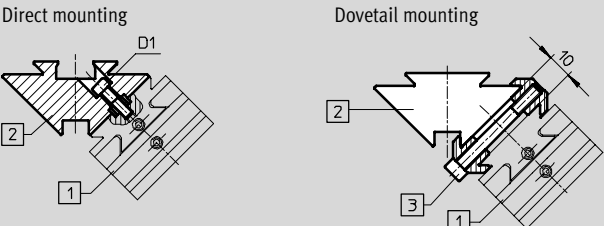
Ordering data						
Attachment component	Direct mounting ¹⁾			Dovetail mounting		
	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type
	HMSVS-1	HMSVS-2	HMSVS-3	HMSVS-1	HMSVS-2	HMSVS-3
Adjusting unit HMXY						
	1	2x M5 x 16	–	–	177 647 HMSV-1	177 647 HMSV-1
	3	–	–	–	177 649 HMSV-3	177 649 HMSV-3

1) The screws listed are not included with the angle adapter.

Dimensions

Adjusting unit HMXY

Direct mounting Dovetail mounting



Download CAD data → www.festo.com/en/engineering

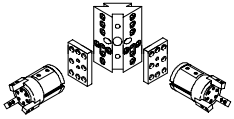
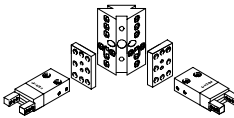
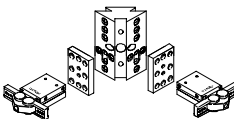
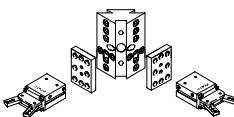
1 Adjusting unit HMXY
2 Angle adapter HMSVS
3 Dovetail adapter kit HMSV

Attachment component	Angle adapter	Dovetail adapter kit	Screws ¹⁾ DIN912 D1
HMXY-1	HMSVS-1	HMSV-1	M5x16
	HMSVS-2/-3		–
HMXY-3	HMSVS-1/-2/-3	HMSV-3	–

1) The screws listed are not included in the scope of delivery.

Angle adapters HMSVS

Technical data – Mounting the attachment component

Ordering data						
Attachment component	Direct mounting			Dovetail mounting		
	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type
	HMSVS-1	HMSVS-2	HMSVS-3	HMSVS-1	HMSVS-2	HMSVS-3
3-point gripper HGD						
 Dimensions → 5 / 3.3-16	16	193 921 HAPG-36-S3	193 921 HAPG-36-S3	193 921 HAPG-36-S3	–	–
	32	–	–	–	178 212 HMSV-32	178 212 HMSV-32
	50	–	–	–	–	178 213 HMSV-33
Parallel gripper HGP						
 Dimensions → 5 / 3.3-16	6	192 706 HAPG-37-S1 ¹⁾	192 706 HAPG-37-S1 ¹⁾	192 706 HAPG-37-S1 ¹⁾	–	–
	10	192 705 HAPG-36-S1 ¹⁾	192 705 HAPG-36-S1 ¹⁾	192 705 HAPG-36-S1 ¹⁾	177 767 HMSV-27	177 767 HMSV-27
	16	193 922 HAPG-37-S4 ¹⁾	193 922 HAPG-37-S4 ¹⁾	193 922 HAPG-37-S4 ¹⁾	177 768 HMSV-28	177 768 HMSV-28
	20	193 922 HAPG-37-S4 ¹⁾	193 922 HAPG-37-S4 ¹⁾	193 922 HAPG-37-S4 ¹⁾	177 768 HMSV-28	177 768 HMSV-28
	25	–	–	–	177 769 HMSV-29	177 769 HMSV-29
	35	–	–	–	–	177 770 HMSV-30
Radial gripper HGR						
 Dimensions → 5 / 3.3-16	10	192 706 HAPG-37-S1 ¹⁾	192 706 HAPG-37-S1 ¹⁾	192 706 HAPG-37-S1 ¹⁾	–	–
	16	192 705 HAPG-36-S1 ¹⁾	192 705 HAPG-36-S1 ¹⁾	192 705 HAPG-36-S1 ¹⁾	177 767 HMSV-27	177 767 HMSV-27
	25	193 922 HAPG-37-S4 ²⁾	193 922 HAPG-37-S4 ²⁾	193 922 HAPG-37-S4 ²⁾	177 768 HMSV-28	177 768 HMSV-28
	32	–	–	–	177 769 HMSV-29	177 769 HMSV-29
	40	–	–	–	–	177 770 HMSV-30
Angle gripper HGW						
 Dimensions → 5 / 3.3-16	10	192 706 HAPG-37-S1 ¹⁾	192 706 HAPG-37-S1 ¹⁾	192 706 HAPG-37-S1 ¹⁾	–	–
	16	192 705 HAPG-36-S1 ¹⁾	192 705 HAPG-36-S1 ¹⁾	192 705 HAPG-36-S1 ¹⁾	177 767 HMSV-27	177 767 HMSV-27
	25	193 922 HAPG-37-S4 ²⁾	193 922 HAPG-37-S4 ²⁾	193 922 HAPG-37-S4 ²⁾	177 768 HMSV-28	177 768 HMSV-28
	32	–	–	–	177 769 HMSV-29	177 769 HMSV-29
	40	–	–	–	–	177 770 HMSV-30

1) The following are additionally required: 4x M4x25 screws.

2) Only mountable in one gripping direction.

Angle adapters HMSVS

Technical data – Mounting the attachment component

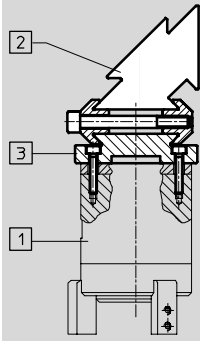
Dimensions

Download CAD data → www.festo.com/en/engineering

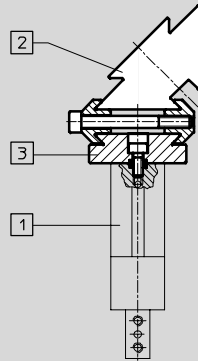
Standard gripper

Dovetail mounting

HGD



HGP/HGR/HGW

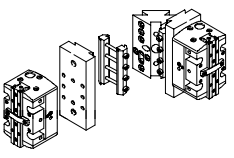


- 1 Standard gripper
- 2 Angle adapter HMSVS
- 3 Dovetail adapter kit HMSV

Attachment component	Angle adapter	Adapter kit	
		Dovetail mounting	Adapter plate
HGD-16	HMSVS-1/-2/-3	–	HAPG-36-S3
HGD-32		HMSV-32	–
HGD-50	HMSVS-3	HMSV-33	
HGP-6/HGR-10/HGW-10	HMSVS-1/-2/-3	–	HAPG-37-S1
HGP-10/HGR-16/HGW-16		HMSV-27	HAPG-36-S1
HGP-16/HGP-20/HGR-25/ HGW-25		HMSV-28	HAPG-37-S4
HGP-25/HGR-32/HGW-32	HMSVS-1/-2/-3	HMSV-29	–
HGP-35/HGR-40/HGW-40	HMSVS-2/-3	HMSV-30	

Angle adapters HMSVS

Technical data – Mounting the attachment component

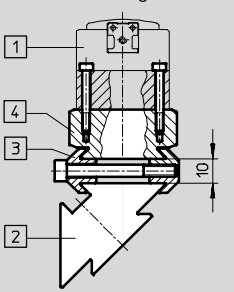
Ordering data							
Attachment component	Direct mounting			Dovetail mounting ¹⁾			
	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type	
	HMSVS-1	HMSVS-2	HMSVS-3	HMSVS-1	HMSVS-2	HMSVS-3	
Precision parallel gripper HGPP							
	12	–	–	–	177 649 HMSV-3 191 262 HAPG-44	177 649 HMSV-3 191 262 HAPG-44	177 649 HMSV-3 191 262 HAPG-44
	16	–	–	–	177 649 HMSV-3 191 263 HAPG-45	177 649 HMSV-3 191 263 HAPG-45	177 649 HMSV-3 191 263 HAPG-45
	20	–	–	–	177 649 HMSV-3 191 265 HAPG-47	177 649 HMSV-3 191 265 HAPG-47	177 649 HMSV-3 191 265 HAPG-47
	25	–	–	–	177 649 HMSV-3 529 019 HAPG-59	177 649 HMSV-3 529 019 HAPG-59	177 649 HMSV-3 529 019 HAPG-59
	32	–	–	–	–	177 649 HMSV-3 529 020 HAPG-81	177 649 HMSV-3 529 020 HAPG-81

1) Both adapter kits are required for mounting.

Dimensions
Precision parallel gripper HGPP

Download CAD data → www.festo.com/en/engineering

Dovetail mounting



- 1 Precision parallel gripper HGPP
- 2 Angle adapter HMSVS
- 3 Dovetail adapter kit HMSV
- 4 Adapter kit HAPG

Attachment component	Angle adapter	Adapter kit	
		Dovetail mounting	Adapter plate
HGPP-12	HMSVS-1/-2/-3	HMSV-3	HAPG-44
HGPP-16			HAPG-45
HGPP-20			HAPG-47
HGPP-25	HMSVS-1/-2/-3	HMSV-3	HAPG-59
HGPP-32			HMSVS-2/-3

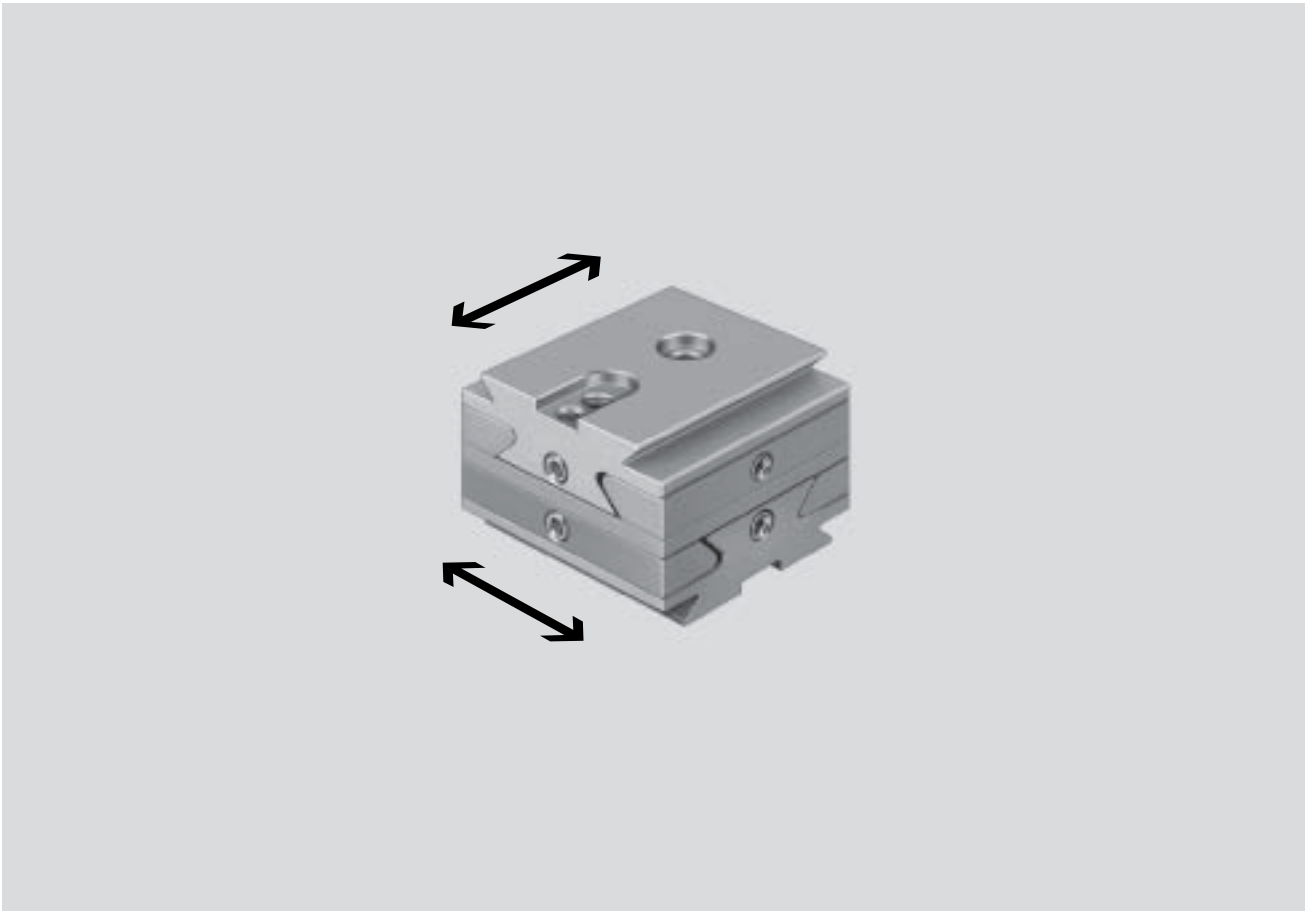
Adjusting units HMX



- Permits easy adjustment
- Wide choice of mounting options

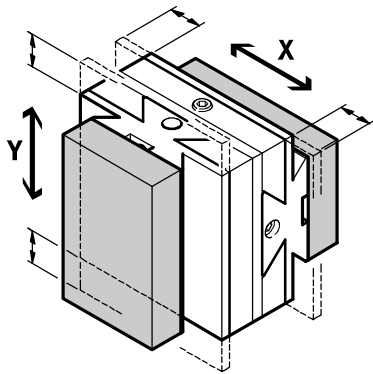
Adjusting units HMXY

Key features



System product for handling and assembly technology

Mounting options



- 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:
 - Dovetail mounting
 - Direct mounting

Adjusting units HMXY

Key features

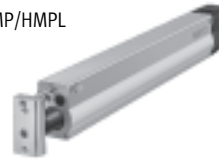
Combining drives and grippers

Mounting on the basic components → 5 / 3.3-24

Semi-rotary drives
DRQD



Linear modules
HMP/HMPL



Mini slides
SLT



Adapter kits

- Direct mounting
- Dovetail mounting



Adjusting unit HMXY

- Interface between basic component and attachment component



Angle adapter
HMSVS



Angle adapter
HMSVS



Angle adapter HMSVS

→ 5 / 3.3-2

Adapter kits

- Direct mounting
- Dovetail mounting



Mounting the attachment component → 5 / 3.3-27



Semi-rotary drives
DRQD



Standard grippers
HGD/HGP/HGR/HGW
Micro grippers
HGPM/HGWM
Precision parallel grippers
HGPP
T-slot grippers
HGPT



Mini slides
SLT

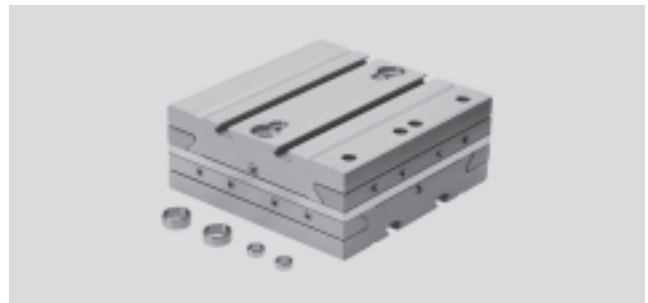
Adjusting units HMX

Technical data

Adjusting unit HMX-1



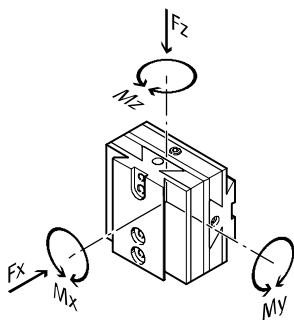
Adjusting unit HMX-3



General technical data			
		HMX-1	HMX-3
Adjustment travel	y [mm]	7.5	7.5
	z [mm]	7.5	7.5
Max. static characteristic load values → Fig. 1	Forces	F_x [N]	50
		F_z [N]	50
	Torques	M_x [Nm]	1.4
		M_y [Nm]	1.4
		M_z [Nm]	1.4
Mass moments of inertia → Fig. 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
Temperature range	[°C]	+5 ... +60	
Weight	[g]	155	1892
Materials		Anodised aluminium	

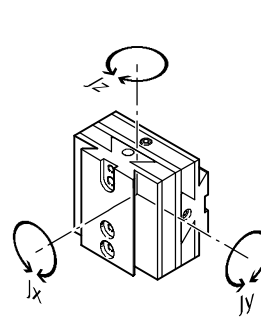
Max. permissible static characteristic load values

Fig. 1



Mass moments of inertia

Fig. 2



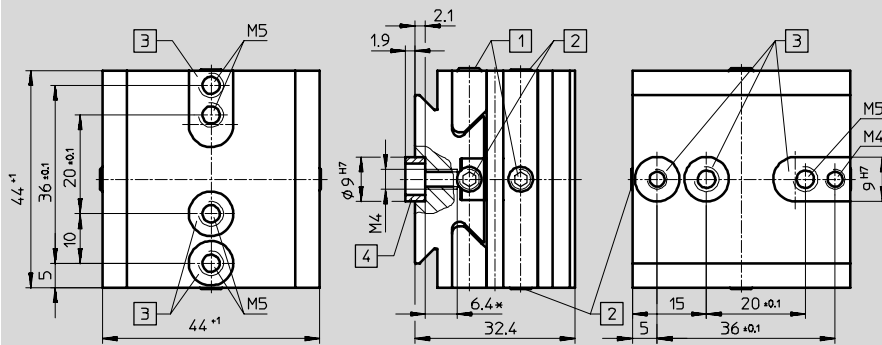
Adjusting units HMXY

Technical data

Dimensions

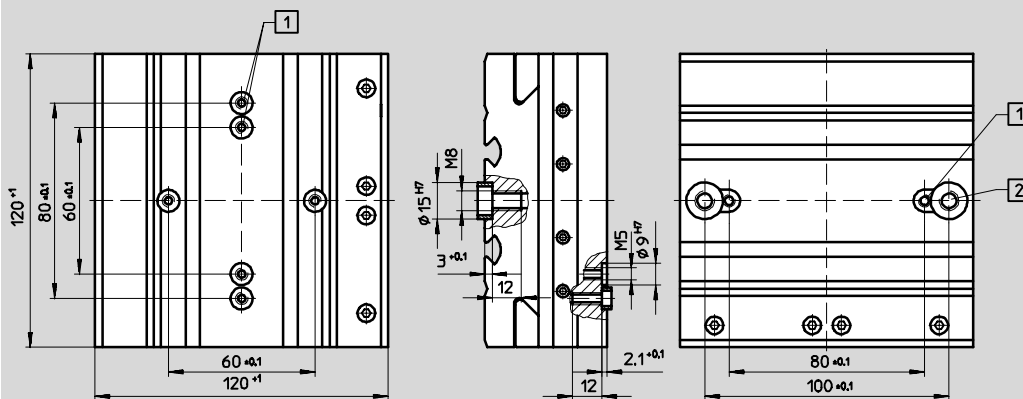
Download CAD data → www.festo.com/en/engineering

HMXY-1



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

HMXY-3



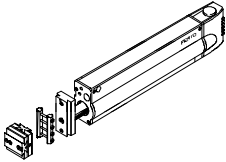
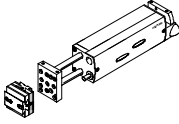
- 1 For centring sleeve ZBH-9 (2 pieces included in scope of delivery)
- 2 For centring sleeve ZBH-15 (2 pieces included in scope of delivery)

Ordering data

Part No.	Type	Part No.	Type
187 582	HMXY-1	526 030	HMXY-3

Adjusting units HMXY

Technical data – Mounting on the basic component

Ordering data					
Basic component	Direct mounting ¹⁾		Dovetail mounting		
	Part No. Type	Part No. Type	Part No. Type	Part No. Type	
	HMXY-1	HMXY-3	HMXY-1	HMXY-3	
Linear module HMP					
	16	–	2x M5x5	177 647 HMSV-1	177 649 HMSV-3
	20	–	2x M5x25	177 647 HMSV-1	177 649 HMSV-3
	25	–	2x M5x30	177 647 HMSV-1	177 649 HMSV-3
	32	–	2x M5x30	177 647 HMSV-1	177 649 HMSV-3
Linear module HMPL					
	12	2x M5x16	–	–	–
	16	2x M5x16	–	–	–
	20	2x M5x16	–	–	–

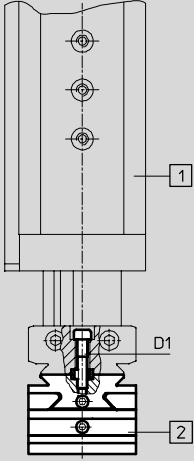
1) The screws listed are not included with the adjusting unit.

3.3

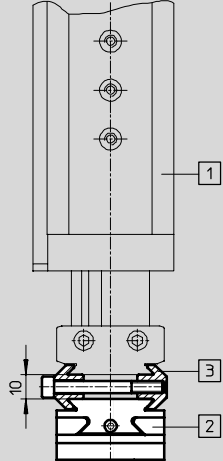
Dimensions Download CAD data → www.festo.com/en/engineering

Linear module HMP/HMPL

Direct mounting



Dovetail mounting



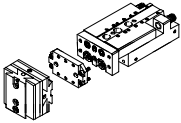
1 Linear module HMP
2 Adjusting unit HMXY
3 Dovetail adapter kit HMSV

Basic component	Adjusting unit	Dovetail adapter kit	Screws ¹⁾ DIN912 D1
HMP-16/-20	HMXY-1	HMSV-1	–
	HMXY-3	HMSV-3	M5x25
HMP-25/-32	HMXY-1	HMSV-1	–
	HMXY-3	HMSV-3	M5x30
HMPL-12/-16/-20	HMXY-1	–	M5x16

1) The screws listed are not included in the scope of delivery.

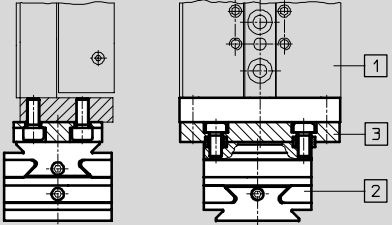
Adjusting units HMXY

Technical data – Mounting on the basic component

Ordering data				
Basic component	Direct mounting		Dovetail mounting	
	Part No. Type	Part No. Type	Part No. Type	Part No. Type
	HMXY-1	HMXY-3	HMXY-1	HMXY-3
Mini slide SLT				
	16	191 266 HAPG-48	–	–
	20	191 268 HAPG-50	–	–
	25	191 270 HAPG-52	191 270 HAPG-52	–

Dimensions Download CAD data → www.festo.com/en/engineering

Mini slide SLT



1 Mini slide SLT

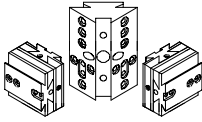
2 Adjusting unit HMXY

3 Adapter kit HAPG

Basic component	Adjusting unit	Adapter kit
SLT-16	HMXY-1	HAPG-48
SLT-20		HAPG-50
SLT-25		HAPG-52
	HMXY-3	HAPG-52

Adjusting units HMXY

Technical data – Mounting on the basic component

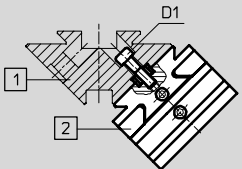
Ordering data					
Basic component	Direct mounting ¹⁾			Dovetail mounting	
	Part No.	Part No.	Part No.	Part No.	Part No.
Type	Type	Type	Type	Type	Type
HMXY-1	HMXY-3	HMXY-1	HMXY-1	HMXY-3	HMXY-3
Angle adapter HMSVS					
	1	2x M5x16	–	177 647 HMSV-1	177 649 HMSV-3
	2	–	–	177 647 HMSV-1	177 649 HMSV-3
	3	–	–	177 647 HMSV-1	177 649 HMSV-3

1) The screws listed are not included with the adjusting unit.

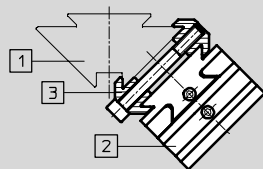
Dimensions

Angle adapter HMSVS

Direct mounting



Dovetail mounting



1 Angle adapter HMSVS
2 Adjusting unit HMXY
3 Dovetail adapter kit HMSV

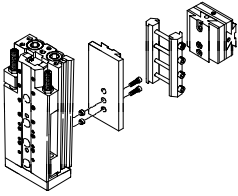
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Basic component	Adjusting unit	Dovetail adapter kit	Screws ¹⁾
HMSVS-1	HMXY-1	HMSV-1	DIN912
	HMXY-3	HMSV-3	D1
HMSVS-2/-3	HMXY-1	HMSV-1	M5x16
	HMXY-3	HMSV-3	–

1) The screws listed are not included in the scope of delivery.

Adjusting units HMXY

Technical data – Mounting the attachment component

Ordering data				
Attachment component	Direct mounting ¹⁾		Dovetail mounting	
	Part No. Type	Part No. Type	Part No. Type	Part No. Type
	HMXY-1	HMXY-3	HMXY-1	HMXY-3
Mini slide SLT				
	6	–	178 329 HMSV-34	178 329 HMSV-34
	10	–	178 330 HMSV-35	178 330 HMSV-35
	16	2x M5x38	178 331 HMSV-36	178 331 HMSV-36
	20	–	178 332 HMSV-37	178 332 HMSV-37
	25	–	–	178 332 HMSV-37

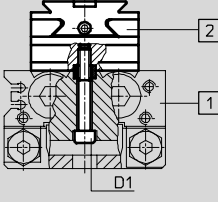
1) The screws listed are not included with the adjusting unit.

Dimensions

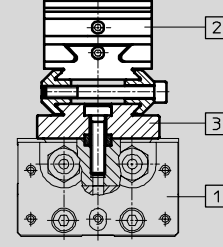
Download CAD data → www.festo.com/en/engineering

Mini slide SLT

Direct mounting



Dovetail mounting



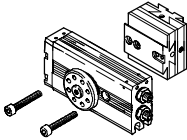
- 1 Mini slide SLT
- 2 Adjusting unit HMXY
- 3 Dovetail adapter kit HMSV

Attachment component	Adjusting unit	Dovetail adapter kit	Screws ¹⁾ DIN912 D1
SLT-06	HMXY-1/-3	HMSV-34	–
SLT-10		HMSV-35	–
SLT-16	HMXY-1	HMSV-36	M5x38
	HMXY-3		–
SLT-20	HMXY-1/-3	HMSV-37	–
SLT-25	HMXY-3		–

1) The screws listed are not included in the scope of delivery.

Adjusting units HMXY

Technical data – Mounting the attachment component

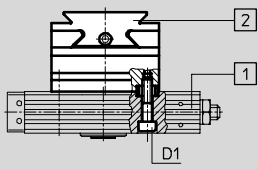
Ordering data					
Attachment component	Direct mounting ¹⁾			Dovetail mounting	
	Part No. Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type
	HMXY-1	HMXY-3	HMXY-1	HMXY-3	
Semi-rotary drive DRQD					
	6	193 920 HAPG-36-S2	–	–	–
	8	2x M4x20	–	–	–
	12	2x M4x25	–	–	–
	16	192 707 HAPG-38	–	177 656 HMSV-10	177 656 HMSV-10
	20	192 707 HAPG-38	–	177 656 HMSV-10	177 656 HMSV-10
	25	–	–	–	177 660 HMSV-14
	32	–	2x M5x55	–	177 665 HMSV-19
	40	–	2x M8x75 ²⁾	–	–
	50	–	2x M8x90 ³⁾	–	–

- 1) The screws listed are not included with the adjusting unit.
2) The terminal length should be 60 mm.
3) The terminal length should be 75 mm.

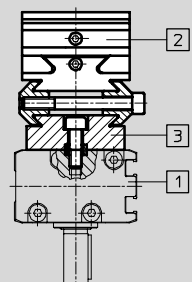
Dimensions Download CAD data → www.festo.com/en/engineering

Semi-rotary drive DRQD

Direct mounting



Dovetail mounting



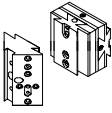
1 Semi-rotary drive DRQD
2 Adjusting unit HMXY
3 Dovetail adapter kit HMSV

Attachment component	Adjusting unit	Dovetail adapter kit		Screws ¹⁾ DIN912 D1
		Dovetail mounting	Adapter plate	
DRQD-06	HMXY-1	–	HAPG-36-S2	–
DRQD-08		–	–	M4x20
DRQD-12		–	–	M4x25
DRQD-16/-20	HMXY-3	HMSV-10	HAPG-38	–
DRQD-25		HMSV-14	–	–
DRQD-32		HMSV-19	–	M5x55
DRQD-40		–	–	M8x75 ²⁾
DRQD-50		–	–	M8x90 ³⁾

- 1) The screws listed are not included in the scope of delivery.
2) The terminal length should be 60 mm.
3) The terminal length should be 75 mm.

Adjusting units HMXY

Technical data – Mounting the attachment component

Ordering data				
Attachment component	Direct mounting ¹⁾		Dovetail mounting	
	Part No. Type	Part No. Type	Part No. Type	Part No. Type
	HMXY-1	HMXY-3	HMXY-1	HMXY-3
Angle adapter HMSVS				
	1	2x M4x32	–	177 647 HMSV-1
	2	–	2x M5x40	177 647 HMSV-1
	3	–	2x M5x40	–
				177 649 HMSV-3

1) The screws listed are not included with the adjusting unit.

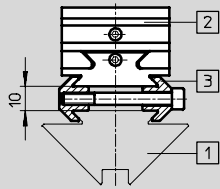
Dimensions Download CAD data → www.festo.com/en/engineering

Angle adapter HMSVS

Direct mounting



Dovetail mounting



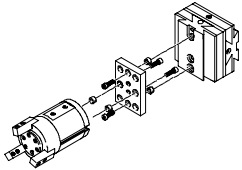
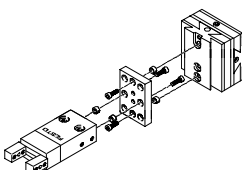
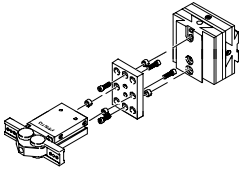
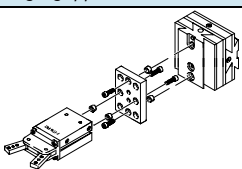
1) Angle adapter HMSVS
2) Adjusting unit HMXY
3) Dovetail adapter kit HMSV

Attachment component	Adjusting unit	Dovetail adapter kit	Screws ¹⁾ DIN912 D1
HMSVS-1	HMXY-1	HMSV-1	M4x32
	HMXY-3	HMSV-3	–
HMSVS-2	HMXY-1	HMSV-1	M5x40
	HMXY-3	HMSV-3	
HMSVS-3	HMXY-3	HMSV-3	

1) The screws listed are not included in the scope of delivery.

Adjusting units HMXY

Technical data – Mounting the attachment component

Ordering data				
Attachment component	Direct mounting		Dovetail mounting	
	Part No. Type	Part No. Type	Part No. Type	Part No. Type
	HMXY-1	HMXY-3	HMXY-1	HMXY-3
3-point gripper HGD				
	16	193 921 HAPG-36-S3	–	–
	32	–	–	178 212 HMSV-32
	50	–	–	178 213 HMSV-33
Dimensions → 5 / 3.3-31				
Parallel gripper HGP				
	6	192 706 HAPG-37-S1	–	–
	10	192 705 HAPG-36-S1	–	177 767 HMSV-27
	16	193 922 HAPG-37-S4	–	177 768 HMSV-28
	20	193 922 HAPG-37-S4	–	177 768 HMSV-28
	25	–	–	177 769 HMSV-29
	35	–	–	177 770 HMSV-30
Dimensions → 5 / 3.3-31				
Radial gripper HGR				
	10	192 706 HAPG-37-S1	–	–
	16	192 705 HAPG-36-S1	–	177 767 HMSV-27
	25	193 922 HAPG-37-S4	–	177 768 HMSV-28
	32	–	–	177 769 HMSV-29
	40	–	–	177 770 HMSV-30
Dimensions → 5 / 3.3-31				
Angle gripper HGW				
	10	192 706 HAPG-37-S1	–	–
	16	192 705 HAPG-36-S1	–	177 767 HMSV-27
	25	193 922 HAPG-37-S4	–	177 768 HMSV-28
	32	–	–	177 769 HMSV-29
	40	–	–	177 770 HMSV-30
Dimensions → 5 / 3.3-31				

Adjusting units HMXY

Technical data – Mounting the attachment component

Dimensions Download CAD data → www.festo.com/en/engineering

Standard gripper

Dovetail mounting

HGD HGP/HGR/HGW

1 Standard gripper

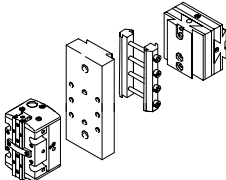
2 Adjusting unit HMXY

3 Dovetail adapter kit HMSV

Attachment component	Adjusting unit	Dovetail adapter kit	
		Dovetail mounting	Adapter plate
HGD-16	HMXY-1	–	HAPG-36-S3
HGD-32	HMXY-3	HMSV-32	–
HGD-50	HMXY-3	HMSV-33	–
HGP-6/HGR-10/HGW-10	HMXY-1	–	HAPG-37-S1
HGP-10/HGR-16/HGW-16	HMXY-1	HMSV-27	HAPG-36-S1
	HMXY-3		–
HGP-16/HGP-20/HGR-25/HGW-25	HMXY-1	HMSV-28	HAPG-37-S4
	HMXY-3		–
HGP-25/HGR-32/HGW-32	HMXY-1/-3	HMSV-29	–
HGP-35/HGR-40/HGW-40	HMXY-3	HMSV-30	–

Adjusting units HMXY

Technical data – Mounting the attachment component

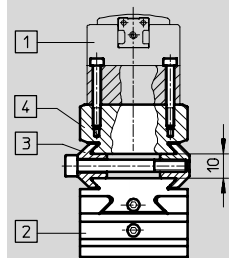
Ordering data				
Attachment component	Direct mounting		Dovetail mounting ¹⁾	
	Part No. Type	Part No. Type	Part No. Type	Part No. Type
	HMXY-1	HMXY-3	HMXY-1	HMXY-3
Precision parallel gripper HGPP				
	12	–	163 239 HAVB-3 191 262 HAPG-44	177 649 HMSV-3 191 262 HAPG-44
	16	–	163 239 HAVB-3 191 263 HAPG-45	177 649 HMSV-3 191 263 HAPG-45
	20	–	163 239 HAVB-3 191 265 HAPG-47	177 649 HMSV-3 191 265 HAPG-47
	25	–	163 239 HAVB-3 529 019 HAPG-59	177 649 HMSV-3 529 019 HAPG-59
	32	–	–	177 653 HMSV-7 529 020 HAPG-81

1) Both adapter kits are required for mounting.

Dimensions Download CAD data → www.festo.com/en/engineering

Precision parallel gripper HGPP

Dovetail mounting



- 1 Precision parallel gripper HGPP
- 2 Adjusting unit HMXY
- 3 Dovetail adapter kit HMSV
- 4 Adapter kit HAPG

Attachment component	Adjusting unit	Dovetail adapter kit	
		Dovetail mounting	Adapter plate
HGPP-10	HMXY-1	HAVB-3	–
HGPP-12	HMXY-1	HAVB-3	HAPG-44
	HMXY-3	HMSV-3	
HGPP-16	HMXY-1	HAVB-3	HAPG-45
	HMXY-3	HMSV-3	
HGPP-20	HMXY-1	HAVB-3	HAPG-47
	HMXY-3	HMSV-3	
HGPP-25	HMXY-1	HAVB-3	HAPG-59
	HMXY-3	HMSV-3	
HGPP-32	HMXY-3	HMSV-7	HAPG-81