

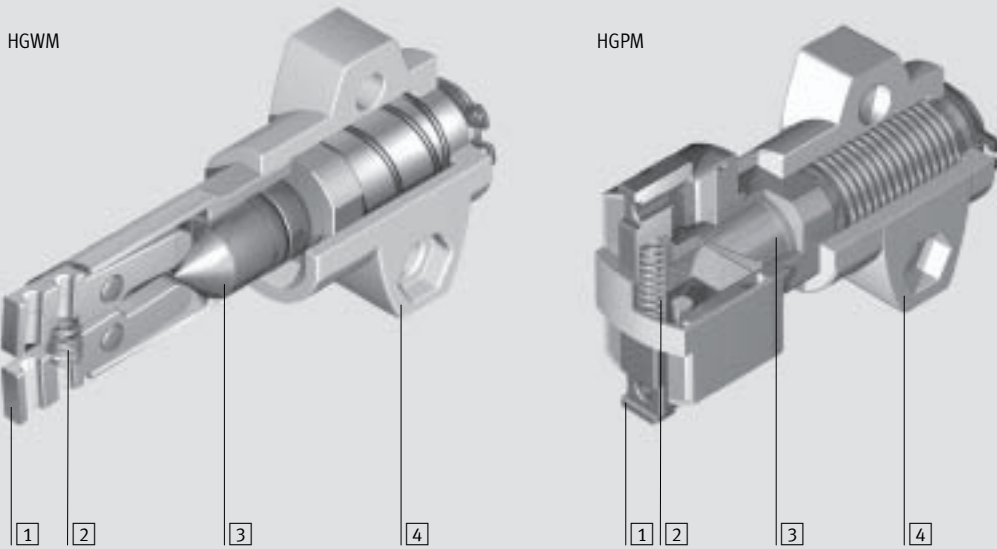


- Miniaturised and optimised for assembly tasks
- Versatile

# Micro grippers HGPM/HGWM

Key features

FESTO



Handling units  
Micro grippers

7.4

## System product for handling and assembly technology

- Compact handy design.
  - Versatile thanks to externally adaptable gripper fingers.
  - Wide range of options for mounting on drive units.
- 1 Variable gripping action
    - External gripping
    - Internal gripping
  - 2 Gripper jaws with compression spring
    - Open gripper jaws
    - Closed gripper jaws
  - 3 Single-acting piston drive
  - 4 Versatile mounting options:
    - with stroke compensation
    - with male thread
    - with clamping spigot
    - with flange mounting



Selection and calculation software  
[www.festo.com/en/engineering](http://www.festo.com/en/engineering)

# Micro grippers HGPM/HGWM

Key features

**Micro parallel gripper** Technical data → 1 / 7.4-7

with open gripper jaws      with stroke compensation      with clamping spigot      with flange mounting

HGPM-...-EO-G6

HGPM-...-EO-G8

HGPM-...-EO-G9



with closed gripper jaws

HGPM-...-EZ-G6

HGPM-...-EZ-G8

HGPM-...-EZ-G9



**Micro angle gripper** Technical data → 1 / 7.4-15

with open gripper jaws      with stroke compensation      with male thread      with clamping spigot

HGWM-...-EO-G6

HGWM-...-EO-G7

HGWM-...-EO-G8



with closed gripper jaws

HGWM-...-EZ-G6

HGWM-...-EZ-G7

HGWM-...-EZ-G8



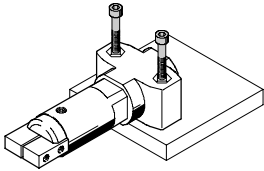
# Micro grippers HGPM/HGWM

Key features

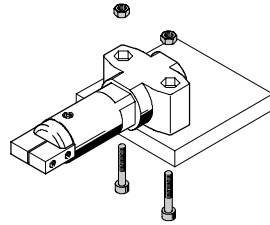


## Mounting options

Via through-holes

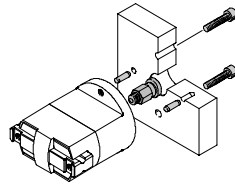


Via through-holes, screws and retaining nuts

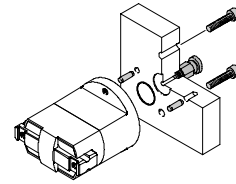


Via flange mounting, screws and dowel pins (for HGPM)

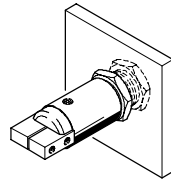
Direct air supply



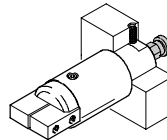
Integrated air supply



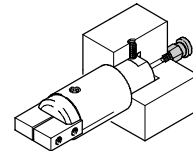
Via male thread and lock nut (for HGWM)



Via set screw  
Direct air supply

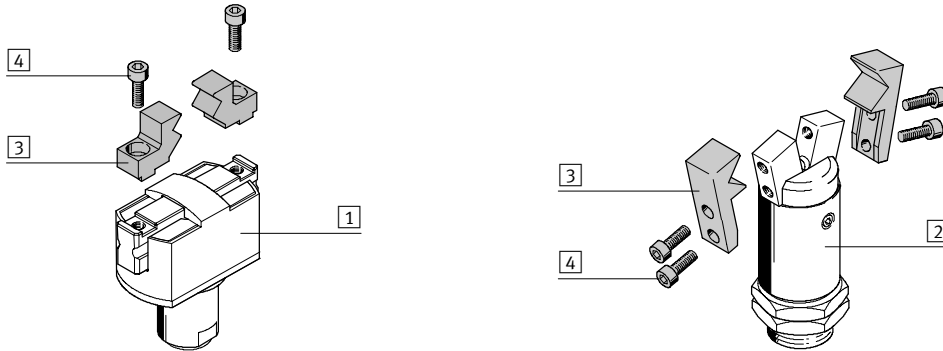


Integrated air supply



## Range of applications (user-specific)

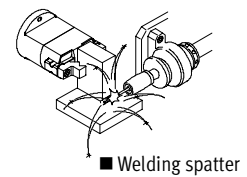
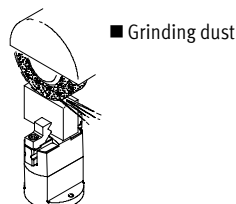
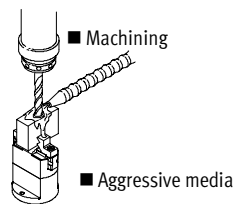
Attachment of external gripper fingers



- 1 Micro parallel gripper HGPM
- 2 Micro angle gripper HGWM
- 3 External gripper fingers
- 4 Mounting screws

Note

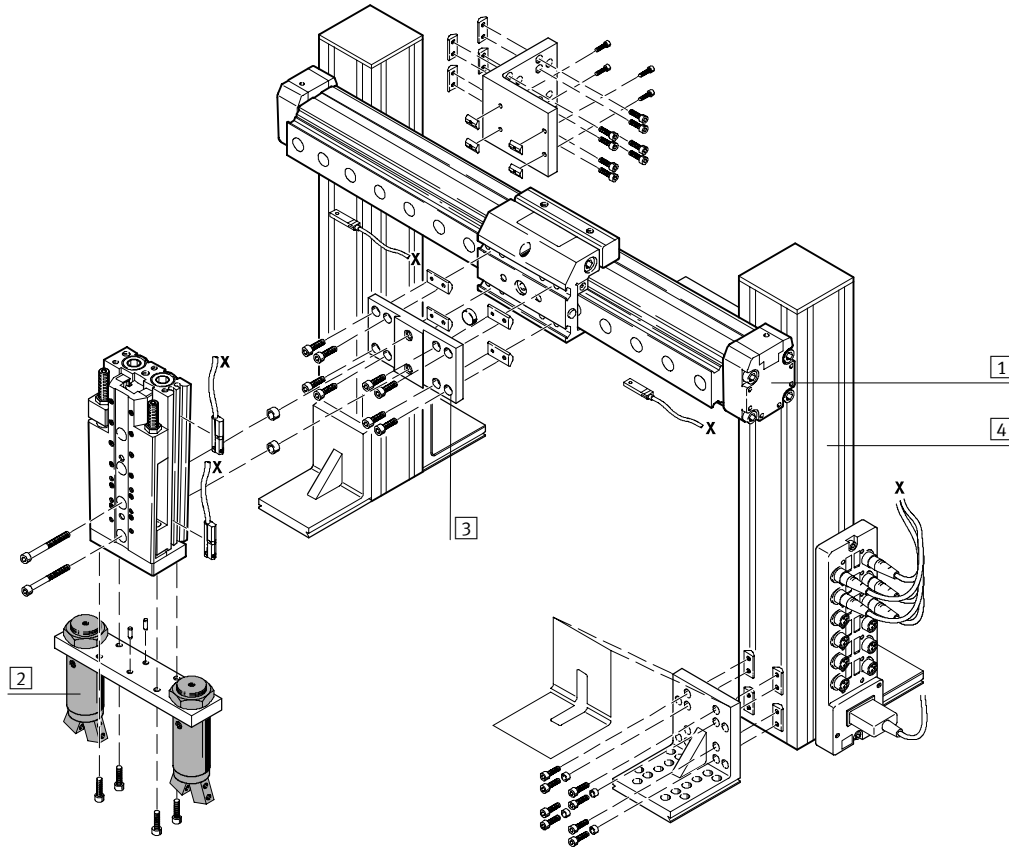
Micro grippers are not suitable for the following or similar applications:



# Micro grippers HGPM/HGWM

System example

System product for handling and assembly technology



System elements and accessories			
	Brief description	→ Page	
1	Drive unit	Wide range of combination options within handling and assembly technology	Volume 1
2	Grippers	Wide range of variation options within handling and assembly technology	Volume 1
3	Adapter	For drive/drive and drive/gripper connections	Volume 5
4	Basic components	Profiles and profile connections as well as profile/drive connections	Volume 5
-	Installation components	For achieving a clear-cut, safe layout of electrical cables and tubing	Volume 5
-	Axes	Wide range of combination options within handling and assembly technology	Volume 5
-	Motors	Servo and stepper motors, with or without gearing	Volume 5

# Micro grippers HGPM/HGWM

Type codes

HGPM – 12 – EO – G8

**Type**

HGPM	Micro parallel gripper
HGWM	Micro angle gripper

**Piston Ø**

**Gripper jaw position**

EO	Open
EZ	Closed

**Mounting options**

G6	With stroke compensation
G7	With male thread
G8	With clamping spigot
G9	With mounting flange

# Micro parallel grippers HGPM

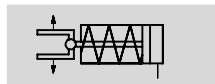
Technical data


Function  
Single-acting


Variants  
with open gripper jaws  
HGPM-...-EO-G...

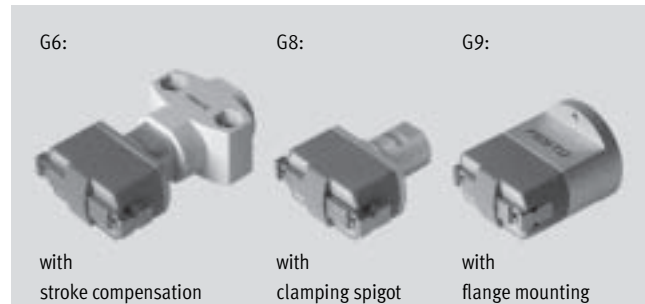


with closed gripper jaws  
HGWM-...-EZ-G...



-  - Piston  $\varnothing$   
8 ... 12 mm

-  - Stroke  
4 ... 6 mm



General technical data			
Piston $\varnothing$		8	12
Design	Wedge mechanism		
Mode of operation	Single-acting		
Gripper function	Parallel		
Number of gripper jaws	2		
Max. applied load per external gripper finger <sup>1)</sup>	[N]	0.05	0.15
Resetting force <sup>2)</sup>	Gripper jaws open	[N]	1.5
	Gripper jaws closed	[N]	2
Stroke per gripper jaw	[mm]	2	3
Pneumatic connection	M3		
Repetition accuracy <sup>3) 4)</sup>	[mm]	< 0.05	
Max. interchangeability	[mm]	0.4	
Max. operating frequency	[Hz]	4	
Centring precision <sup>4)</sup>	[mm]	< $\varnothing$ 0.15 (valid only for HGPM-...-G8 and HGPM-...-G9)	
Position sensing	No		
Type of mounting	HGPM-...-E...-G6	Via through-holes	
	HGPM-...-E...-G8	Clamped	
	HGPM-...-E...-G9	Via female thread and locating hole	

- 1) Valid for unthrottled operation.
- 2) Spring resetting force between the jaws.
- 3) End-position drift under constant conditions of use with 100 consecutive strokes in the direction of movement of the gripper jaws.
- 4) The indicated values are only valid when gripping with compressed air, not with spring force.

Operating and environmental conditions			
Piston $\varnothing$		8	12
Min. operating pressure	[bar]	4	
Max. operating pressure	[bar]	8	
Operating medium	Filtered compressed air, lubricated or unlubricated (grade of filtration 40 $\mu$ m)		
Ambient temperature	[ $^{\circ}$ C]	+5 ... +60	
Corrosion resistance class CRC <sup>1)</sup>		1	

- 1) Corrosion resistance class 1 according to Festo standard 940 070  
Components requiring low corrosion resistance. 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.

Weight [g]			
Piston $\varnothing$		8	12
With stroke compensation		19	62
With clamping spigot		11	41
With flange mounting		18	62

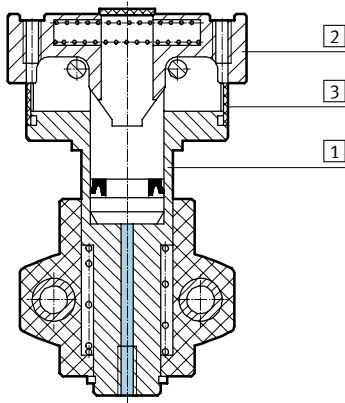
# Micro parallel grippers HGPM

Technical data



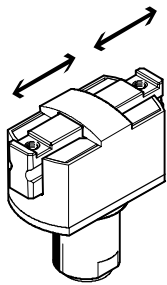
## Materials

Sectional view



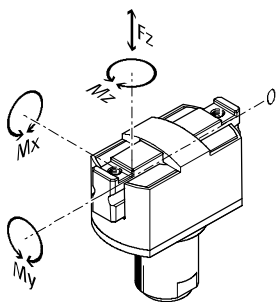
Gripper		
1	Housing	Anodised aluminium
2	Gripper jaw	Stainless steel
3	Cover cap	Polyacetate
–	Note on materials	Free of copper, PTFE and silicone

## Theoretical gripping force [N] at 6 bar per gripper jaw



Piston $\varnothing$	8	12
Gripper jaws open	16.5	30
Gripper jaws closed	17	33

## Characteristic load values per gripper jaw



The indicated permissible forces and torques refer to a single gripper jaw. The indicated values include the lever arm, additional applied loads caused

by the workpiece or external gripper fingers, as well as forces which occur during movement. The zero coordinate line (gripper

finger guide slot) must be taken into consideration for the calculation of torques.

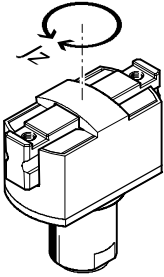
Piston $\varnothing$	8	12	
Max. permissible force $F_z$	[N]	10	30
Max. permissible torque $M_x$	[Nm]	0.15	0.5
Max. permissible torque $M_y$	[Nm]	0.15	0.5
Max. permissible torque $M_z$	[Nm]	0.15	0.5



# Micro parallel grippers HGPM

Technical data

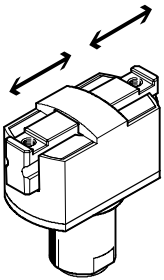
## Mass moment of inertia [ $\text{kgm}^2 \times 10^{-4}$ ]



Mass moment of inertia [ $\text{kgm}^2 \times 10^{-4}$ ] for micro parallel grippers in relation to the central axis, without external gripper fingers, without load.

Piston $\varnothing$	8	12
With stroke compensation	0.00922	0.06674
With clamping spigot	0.00573	0.04252
With flange mounting	0.01712	0.07939

## Opening and closing times [ms] at 6 bar without external gripper fingers



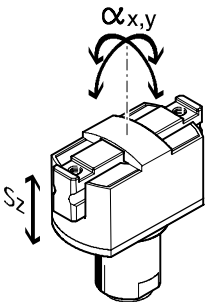
The indicated opening and closing times [ms] have been measured at room temperature and 6 bar operating pressure with vertically mounted gripper and without additional gripper fingers. Load is increased if external gripper fingers are attached. This means that kinetic energy is also

increased, as this is determined by gripper finger weight and velocity. If permissible kinetic energy is exceeded, various parts of the gripper may be damaged. This occurs when the applied load reaches the end position and the cushioning is only able to

partially convert the kinetic energy into potential energy and heat energy. It thus becomes apparent that the indicated max. permissible applied load due to the external gripper fingers must be checked and maintained.

Piston $\varnothing$	8	12	
Gripper jaws open	Opening	4.9	11
	Closing	2.3	3.7
Gripper jaws closed	Opening	1.9	3
	Closing	4.1	8.3

## Gripper jaw backlash without external gripper fingers



With micro parallel grippers, backlash occurs between the gripper jaws and the guide element due to the plain-bearing guide. The backlash values listed in the table have been

calculated based upon the traditional accumulative tolerance method and usually do not occur with mounted grippers.

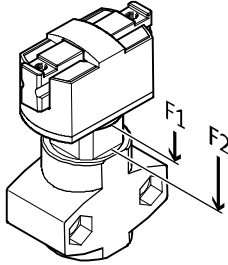
Piston $\varnothing$	8	12
Gripper jaw backlash $s_z$	[mm]	< 0.03
Gripper jaw angular backlash $a_x, a_y$	[°]	< 0.5

# Micro parallel grippers HGPM

Technical data



## Spring displacement forces [N]



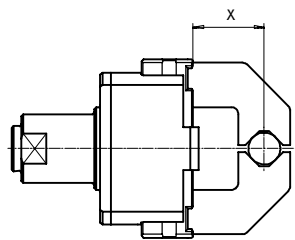
Theoretical actuating force due to stroke compensation for design variant with stroke compensation.

Piston Ø	8	12
Spring displacement forces $F_1$	4	10
Spring displacement forces $F_2$	6	23

## Gripping force $F_{Grip}$ per gripper jaw as a function of operating pressure and lever arm $x$

External and internal gripping (closing and opening)

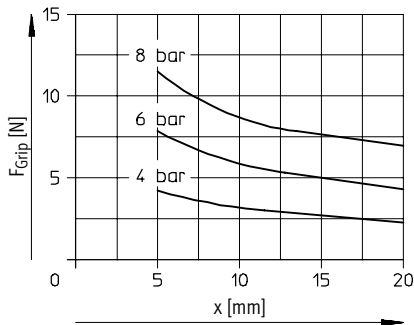
Gripping forces related to operating pressure and lever arm can be determined for the various sizes using the following graphs.



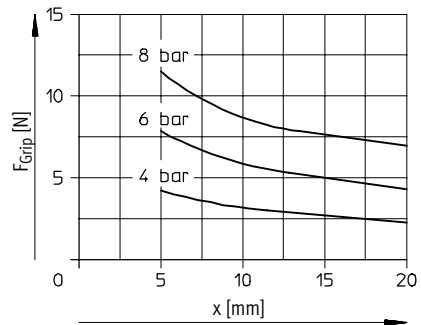
EO = External gripping (closing)

EZ = Internal gripping (opening)

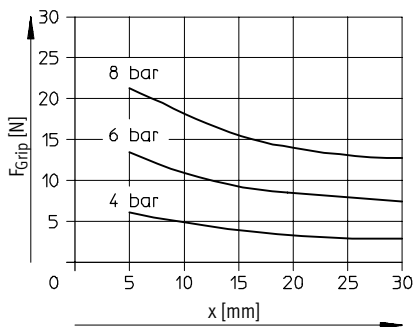
### HGPM-08-EO...



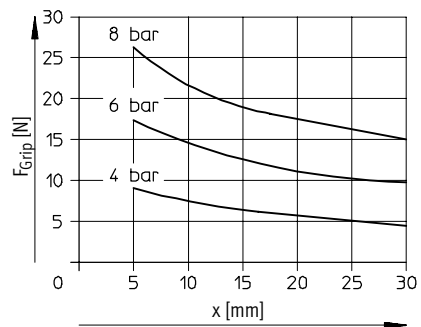
### HGPM-08-EZ...



### HGPM-12-EO...



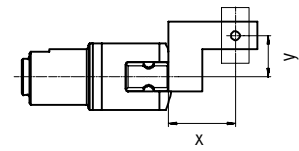
### HGPM-12-EZ...



# Micro parallel grippers HGPM

Technical data

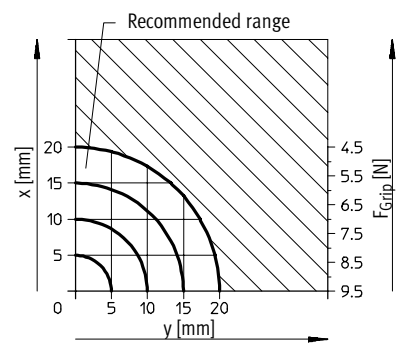
**Gripping force  $F_{Grip}$  per gripper jaw at 6 bar as a function of lever arm  $x$  and eccentricity  $y$**   
 External and internal gripping (closing and opening)



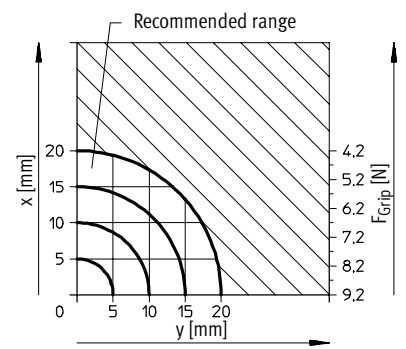
Gripping forces at 6 bar dependent upon eccentric application of force and the maximum permissible off-

centre point of force application can be determined for the various sizes using the following graphs.

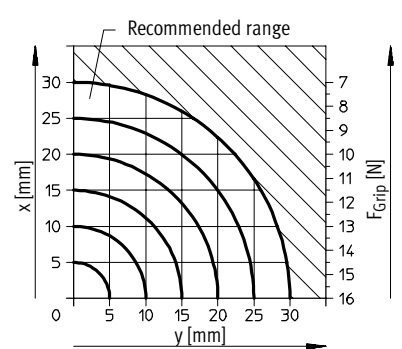
**HGPM-08-E0-...**



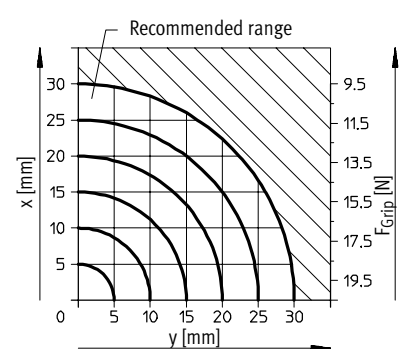
**HGPM-08-EZ-...**



**HGPM-12-E0-...**



**HGPM-12-EZ-...**

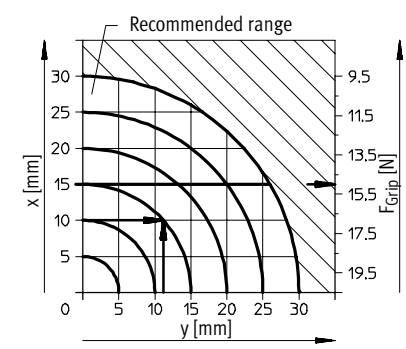


E0 = External gripping (closing)  
 EZ = Internal gripping (opening)

**Calculation example**

Given:  
 HGPM-12-EZ-...  
 Lever arm  $x = 10$  mm  
 Eccentricity  $y = 11$  mm  
 To be found:  
 Gripping force at 6 bar

- Procedure:
- Determine the intersection  $xy$  between lever arm  $x$  and eccentricity  $y$  in the graph for HGPM-12-EZ
  - Draw an arc (with centre at origin) through intersection  $xy$
  - Determine the intersection between the arc and the X axis
  - Read the gripping force
- Result:  
 Gripping force = approx. 15 N



# Micro parallel grippers HGPM

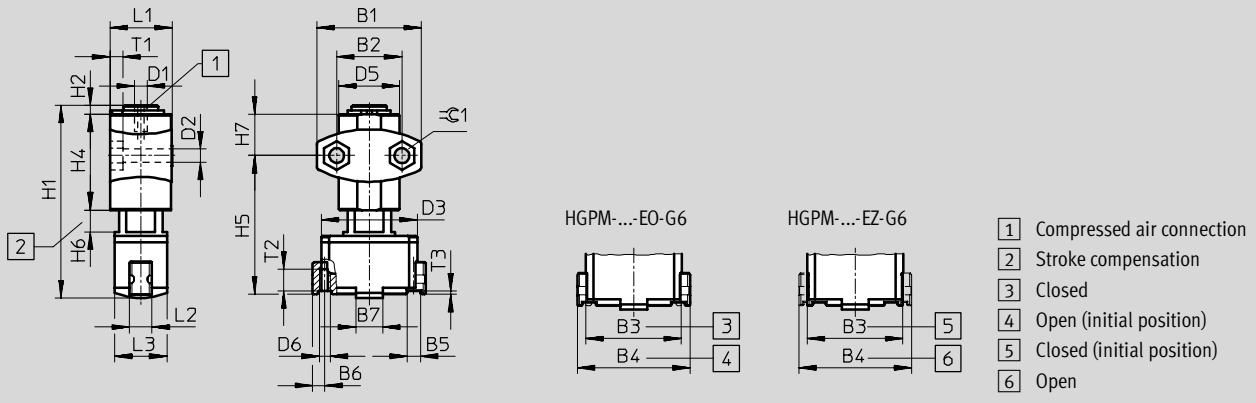
Technical data

FESTO

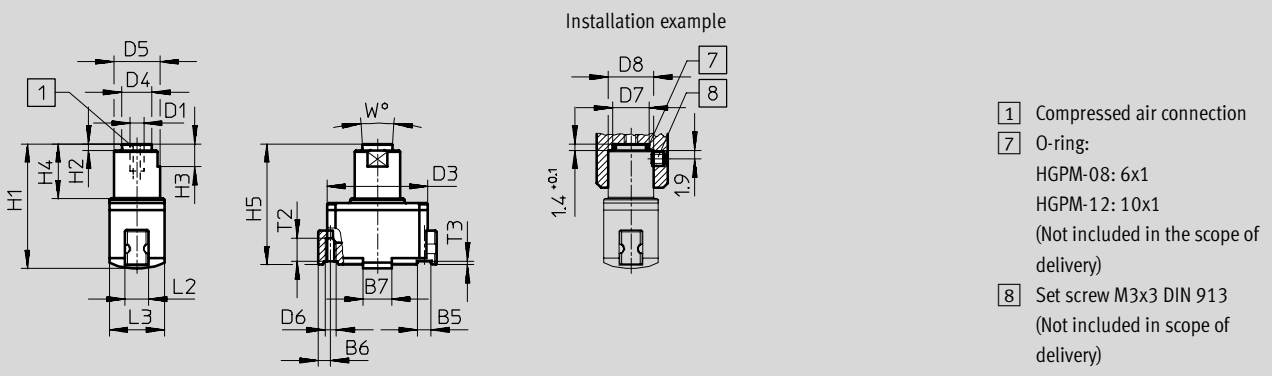
## Dimensions

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

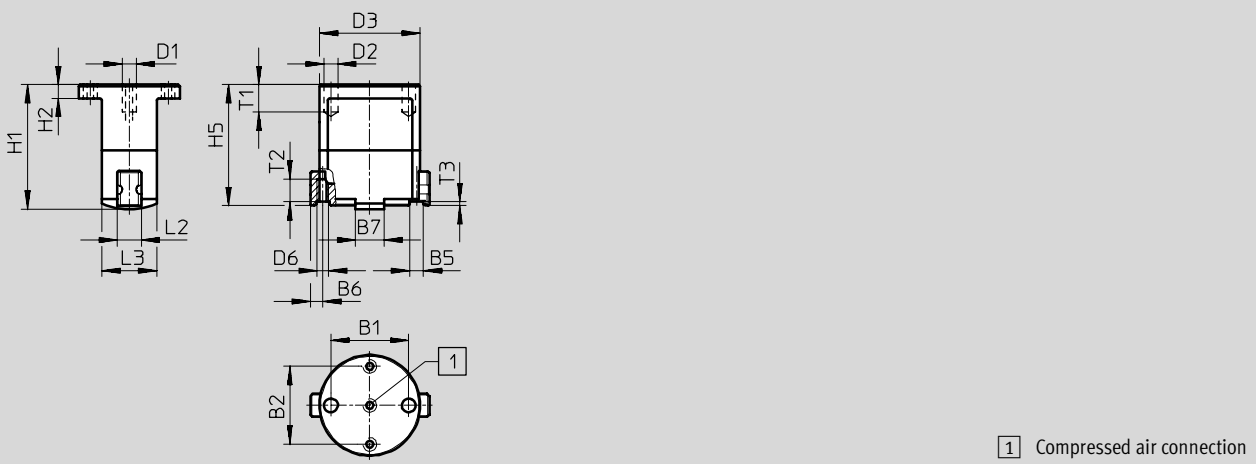
with stroke compensation – HGPM-...-E...-G6



with clamping spigot – HGPM-...-E...-G8



with flange mounting – HGPM-...-E...-G9



Handling units  
Micro grippers

7.4

# Micro parallel grippers HGPM

Technical data

FESTO

Type	B1	B2	B3 ±0.3	B4 ±0.3	B5 +0.05/+0.02	B6 +0.19/-0.23	B7 ±0.1	D1	D2 ∅	D3 ∅
HGPM-08-EO-G6	24 ±0.1	15 ±0.25	22	26	3	2.75	6.2	M3	3.4 ±0.2	22
HGPM-08-EZ-G6										
HGPM-12-EO-G6	35 ±0.1	24 ±0.25	33	39	4	4	9	M3	4.5 ±0.2	33
HGPM-12-EZ-G6										
HGPM-08-EO-G8	-	-	22	26	3	2.75	6.2	M3	-	22
HGPM-08-EZ-G8										
HGPM-12-EO-G8	-	-	33	39	4	4	9	M3	-	33
HGPM-12-EZ-G8										
HGPM-08-EO-G9	17 ±0.02	17 ±0.1	22	26	3	2.75	6.2	M3	3 F8	22
HGPM-08-EZ-G9										
HGPM-12-EO-G9	27 ±0.02	27 ±0.1	33	39	4	4	9	M3	3 F8	33
HGPM-12-EZ-G9										

Type	D4 ∅ ±0.1	D5 ∅	D6	D7 ∅ +0.1	D8 ∅ +0.1	H1 ±0.3	H2	H3	H4	H5
HGPM-08-EO-G6	-	15 ±0.5	M2.5	-	-	44.2	2 +0.1/-0.3	-	22 -0.3	31.9 +0.8/-0.65
HGPM-08-EZ-G6										
HGPM-12-EO-G6	-	22 ±0.5	M3	-	-	63	3 +0.2/-0.3	-	29 -0.3	46.65 +0.8/-0.7
HGPM-12-EZ-G6										
HGPM-08-EO-G8	6.6	10 h8	M2.5	8	10	27.2	1.4 -0.1	5	12 ±0.1	26.4 +0.2/-0.25
HGPM-08-EZ-G8										
HGPM-12-EO-G8	10.6	15 h8	M3	12	15	41	1.4 -0.1	7 ±0.1	18 ±0.1	40.15 +0.2/-0.25
HGPM-12-EZ-G8										
HGPM-08-EO-G9	-	-	M2.5	-	-	27.2	3 ±0.2	-	-	26.4 +0.2/-0.25
HGPM-08-EZ-G9										
HGPM-12-EO-G9	-	-	M3	-	-	41	5 ±0.2	-	-	40.15 +0.2/-0.25
HGPM-12-EZ-G9										

Type	H6 +0.7/-0.2	H7 ±0.3	L1 +0.1/-0.3	L2 -0.1	L3 ±0.1	T1	T2 <sup>1)</sup>	T3	W	∠C1
HGPM-08-EO-G6	0 ... 5	9.5	14.3	5	12	3 -0.2	4	0.8	-	5.7
HGPM-08-EZ-G6										
HGPM-12-EO-G6	0 ... 8	12.5	20.35	7	18	4 -0.2	6	1	-	7.5
HGPM-12-EZ-G6										
HGPM-08-EO-G8	-	-	-	5	12	-	4	0.8	8°	-
HGPM-08-EZ-G8										
HGPM-12-EO-G8	-	-	-	7	18	-	6	1	8°	-
HGPM-12-EZ-G8										
HGPM-08-EO-G9	-	-	-	5	12	min. 6	4	0.8	-	-
HGPM-08-EZ-G9										
HGPM-12-EO-G9	-	-	-	7	18	min. 6	6	1	-	-
HGPM-12-EZ-G9										


1) Do not exceed max. thread screw-in depth.

# Micro parallel grippers HGPM

Technical data and accessories



Ordering data							
Single-acting	Piston $\varnothing$ [mm]	Mounting options					
		with stroke compensation		with clamping spigot		with mounting flange	
		Part No.	Type	Part No.	Type	Part No.	Type
Gripper jaws open	8	197 559	HGPM-08-EO-G6	197 560	HGPM-08-EO-G8	197 561	HGPM-08-EO-G9
	12	197 565	HGPM-12-EO-G6	197 566	HGPM-12-EO-G8	197 567	HGPM-12-EO-G9
Gripper jaws closed	8	197 562	HGPM-08-EZ-G6	197 563	HGPM-08-EZ-G8	197 564	HGPM-08-EZ-G9
	12	197 568	HGPM-12-EZ-G6	197 569	HGPM-12-EZ-G8	197 570	HGPM-12-EZ-G9

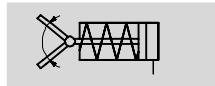
Ordering data – Accessories	
For micro parallel grippers with clamping spigot	
Adapter kits A08 and A12	
	In combination with semi-rotary drives DRQD-6 to 12 → 1 / 4.2-24 Adapter kits for drive/gripper connections → Band 5

# Micro angle grippers HGWM

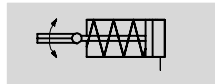
Technical data

Function  
Single-acting

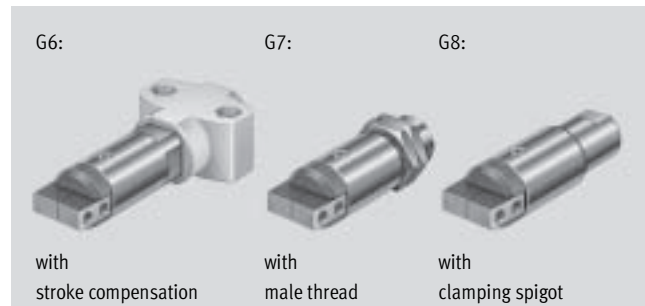
Variants  
with open gripper jaws  
HGWM-...-EO-G...



with closed gripper jaws  
HGWM-...-EZ-G...



- Ø - Piston Ø  
8 ... 12 mm



General technical data			
Piston Ø		8	12
Design	Wedge mechanism		
Mode of operation	Single-acting		
Gripper function	Angled		
Number of gripper jaws	2		
Opening angle (±2°)	Gripper jaws open	Open	[°] 20
		Closed	[°] 4
	Gripper jaws closed	Open	[°] 14
		Closed	[°] 4
Spring resetting torque <sup>1)</sup>	Gripper jaws open	[Ncm] 0.5	1.3
	Gripper jaws closed	[Ncm] 0.55	1.5
Pneumatic connection	M3		
Repetition accuracy <sup>2) 3)</sup>	[mm]	< 0.02	
Max. operating frequency	[Hz]	4	
Position sensing	No		
Type of mounting	HGWM-...-E...-G6	Via female thread	
	HGWM-...-E...-G7	Via lock nut	
	HGWM-...-E...-G8	Clamped	

- 1) Spring resetting force between the gripper jaws.
- 2) End-position drift under constant conditions of use with 100 consecutive strokes in the direction of movement of the gripper jaws.
- 3) The indicated values are only valid when gripping with compressed air, not with spring force.

Operating and environmental conditions			
Piston Ø		8	12
Min. operating pressure	[bar]	2	
Max. operating pressure	[bar]	8	
Operating medium	Filtered compressed air, lubricated or unlubricated (grade of filtration 40µm)		
Ambient temperature	[°C]	+5 ... +60	
Corrosion resistance class CRC <sup>1)</sup>		2	

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

Weight [g]			
Piston Ø		8	12
With stroke compensation		23	75
With male thread		14	52
With clamping spigot		13	45

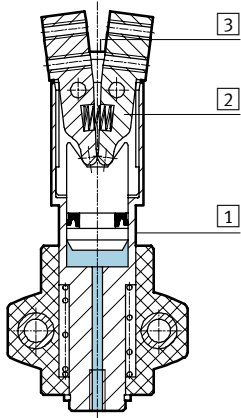
# Micro angle grippers HGWM

Technical data



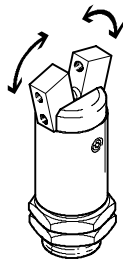
## Materials

Sectional view



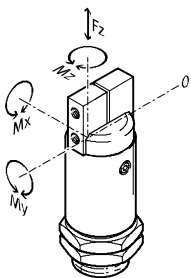
Gripper		
1	Housing	Stainless steel
2	Gripper jaw	Stainless steel
3	Cover cap	Polyacetate
-	Note on materials	Free of copper, PTFE and silicone

## Theoretical gripping torque [Ncm] at 6 bar per gripper jaw



Piston $\varnothing$	8	12
Gripper jaws open	11	32
Gripper jaws closed	12	38

## Characteristic load values at the gripper jaws



The indicated permissible forces and torques refer to a single gripper jaw. Static forces and torques relate to additional applied loads caused by

the workpiece or external gripper fingers, as well as forces which occur during handling. The zero co-ordinate

line (gripper jaws point of rotation) must be taken into consideration for the calculation of torques.

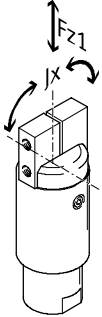
Piston $\varnothing$	8	12	
Max. permissible force $F_z$	[N]	7	20
Max. permissible torque $M_x$	[Ncm]	20	40
Max. permissible torque $M_y$	[Ncm]	20	40
Max. permissible torque $M_z$	[Ncm]	20	40



# Micro angle grippers HGWM

Technical data

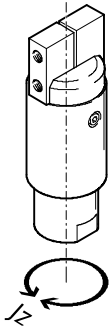
## Applied load [N] and mass moment of inertia [ $\text{kgm}^2 \times 10^{-4}$ ] per external gripper finger



Piston $\varnothing$	8	12
Applied load $F_{z1}^{1)}$	< 0.04	< 0.1
Mass moment of inertia $Jx^{1)}$	< 0.025	< 0.056

1) Valid for unthrottled operation.

## Mass moment of inertia [ $\text{kgm}^2 \times 10^{-4}$ ]

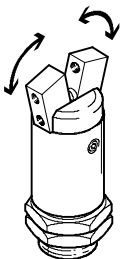


Mass moment of inertia [ $\text{kgm}^2 \times 10^{-4}$ ] for micro angle grippers in relation to the central axis without external gripper fingers.

Piston $\varnothing$	8	12
With stroke compensation	0.00705	0.0421
With male thread	0.00315	0.0267
With clamping spigot	0.00252	0.02154

## Opening and closing times [ms] at 6 bar

without external gripper fingers



The indicated opening and closing times [ms] have been measured at room temperature and 6 bar operating pressure with vertically mounted

gripper and without additional gripper fingers. Load is increased if external gripper fingers are attached. This means that kinetic energy is also

increased, as this is determined by gripper finger mass moment of inertia and angular velocity.

Piston $\varnothing$	8		12	
Gripper jaws open	Opening	2.7	3.7	
	Closing	1.2	1.8	
Gripper jaws closed	Opening	1	1.7	
	Closing	2.5	2.8	

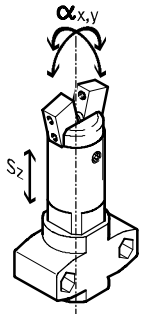
# Micro angle grippers HGWM

Technical data



## Gripper jaw backlash

without external gripper fingers

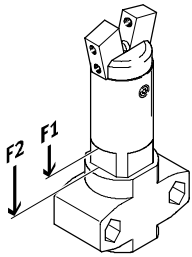


With micro angle grippers, backlash occurs between the gripper jaws and the guide element due to the plain-bearing guide. The backlash values listed in the table have been

calculated based upon the traditional accumulative tolerance method and usually do not occur with mounted grippers.

Piston $\varnothing$		8	12
Gripper jaw backlash $s_z$	[mm]	< 0.03	
Gripper jaw angular backlash $a_x, a_y$	[°]	< 0.5	

## Spring displacement forces [N]



Theoretical actuating force due to stroke compensation for design variant with stroke compensation.

Piston $\varnothing$		8	12
Spring displacement forces $F_1$		4	10
Spring displacement forces $F_2$		6	23

# Micro angle grippers HGWM

Technical data

FESTO

## Application example



Handling units  
Micro grippers

7.4

# Micro angle grippers HGWM

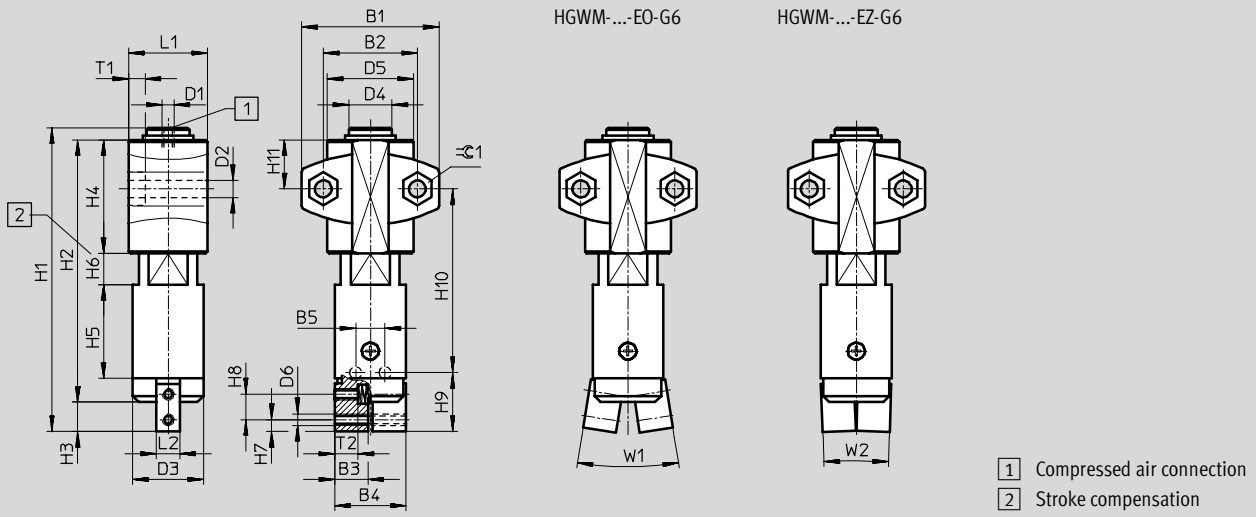
Technical data

FESTO

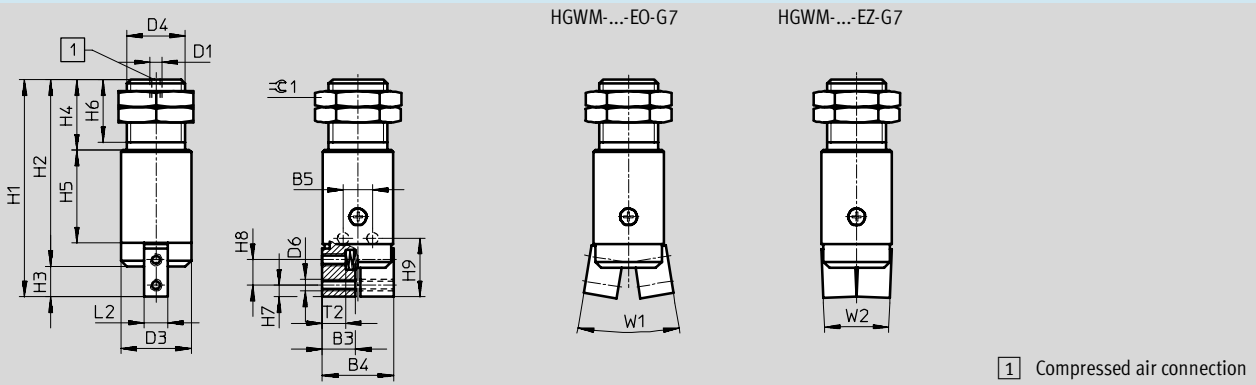
## Dimensions

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

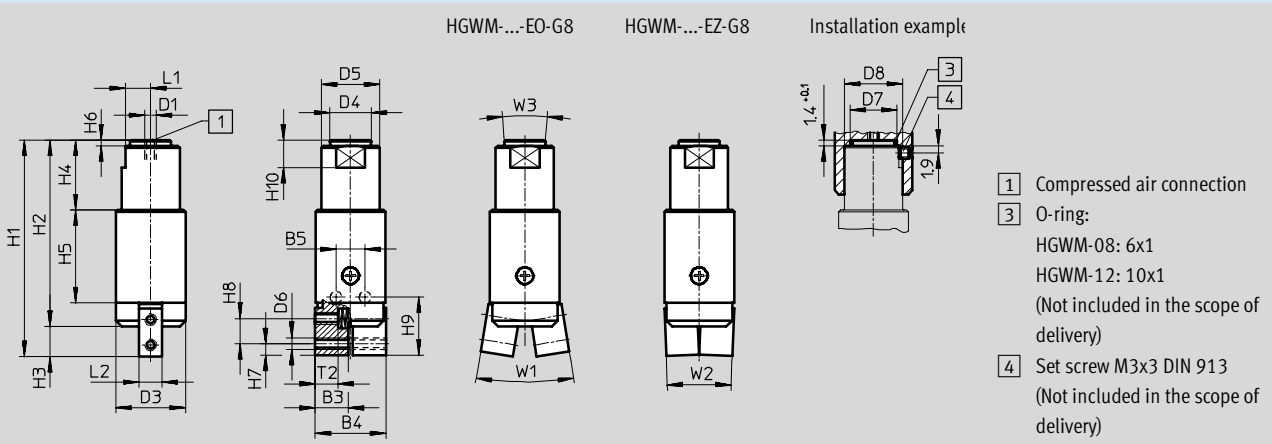
with stroke compensation – HGWM-...-E...-G6



with male thread – HGWM-...-E...-G7



with clamping spigot – HGWM-...-E...-G8



Handling units  
Micro grippers

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# Micro angle grippers HGWM

Technical data

FESTO

Type	B1 ±0.1	B2 ±0.25	B3	B4 ±0.3	B5	D1	D2 ∅ +0.1	D3 ∅ +0.1	D4 ∅	D5 ∅	D6
HGWM-08-EO-G6	24	15	5.5	11.8	5 ±0.02	M3	3.4	12	8 -0.02/-0.05	15 ±0.5	M2
HGWM-08-EZ-G6											
HGWM-12-EO-G6	35	24	8.5	18.2	7.5 -0.05	M3	4.5	18	11 -0.02/-0.05	22 ±0.5	M3
HGWM-12-EZ-G6											
HGWM-08-EO-G7	-	-	5.5	11.8	5 ±0.02	M3	-	12	M10x1	-	M2
HGWM-08-EZ-G7											
HGWM-12-EO-G7	-	-	8.5	18.2	7.5 -0.05	M3	-	18	M15x1.5	-	M3
HGWM-12-EZ-G7											
HGWM-08-EO-G8	-	-	5.5	11.8	5 ±0.02	M3	-	12	6.6 -0.03	10 h8	M2
HGWM-08-EZ-G8											
HGWM-12-EO-G8	-	-	8.5	18.2	7.5 -0.05	M3	-	18	10.6 -0.03	15 h8	M3
HGWM-12-EZ-G8											

Type	D7 ∅ +0.1	D8 +0.1	H1 +0.25	H2	H3	H4	H5 +0.1	H6	H7	H8	H9 +0.1
HGWM-08-EO-G6	-	-	54	47 ±0.3	5 ±0.2	22-0.3	16	0 ... 5 +0.6/-0.3	2	4.3	10
HGWM-08-EZ-G6											
HGWM-12-EO-G6	-	-	77.5	67 ±0.3	7.5	29-0.3	24	0 ... 8 +0.6/-0.3	3	6.5	15
HGWM-12-EZ-G6											
HGWM-08-EO-G7	-	-	37	32 +0.3/-0.2	5 ±0.2	12	16	11	2	4.3	10
HGWM-08-EZ-G7											
HGWM-12-EO-G7	-	-	55.5	48 +0.3/-0.2	7.5	18	24	16	3	6.5	15
HGWM-12-EZ-G7											
HGWM-08-EO-G8	8	10	37	32 +0.3/-0.2	5 ±0.2	12	16	1.4 -0.1	2	4.3	10
HGWM-08-EZ-G8											
HGWM-12-EO-G8	12	15	55.5	48 +0.3/-0.2	7.5	18	24	1.4 -0.1	3	6.5	15
HGWM-12-EZ-G8											

Type	H10	H11 ±0.3	L1	L2 -0.02	T1 -0.2	T2 <sup>1)</sup>	W1 ±2°	W2 ±2°	W3 ±2°	≙C1
HGWM-08-EO-G6	32.4 ±0.6	9.5	14.2 -0.2	4	3	3.4 ±0.2	20°	4°	-	5.7
HGWM-08-EZ-G6						-	14°			
HGWM-12-EO-G6	47 ±0.6	12.5	20.2 -0.2	6	4	5.9	18.5°	3.5°	-	7.5
HGWM-12-EZ-G6						-	14°			
HGWM-08-EO-G7	-	-	-	4	-	3.4 ±0.2	20°	4°	-	12
HGWM-08-EZ-G7						-	14°			
HGWM-12-EO-G7	-	-	-	6	-	5.9	18.5°	3.5°	-	19
HGWM-12-EZ-G7						-	14°			
HGWM-08-EO-G8	5	-	4.5 -0.05	4	-	3.4 ±0.2	20°	4°	8°	-
HGWM-08-EZ-G8						-	14°			
HGWM-12-EO-G8	7	-	6.5 -0.05	6	-	5.9	18.5°	3.5°	8°	-
HGWM-12-EZ-G8						-	14°			

1) Do not exceed max. thread screw-in depth.

Handling units  
Micro grippers


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# Micro angle grippers HGWM

Technical data and accessories



Ordering data							
Single-acting	Piston $\varnothing$ [mm]	Mounting options					
		with stroke compensation		with male thread		with clamping spigot	
		Part No.	Type	Part No.	Type	Part No.	Type
Gripper jaws open	8	185 693	HGWM-08-EO-G6	185 694	HGWM-08-EO-G7	185 695	HGWM-08-EO-G8
	12	185 699	HGWM-12-EO-G6	185 700	HGWM-12-EO-G7	185 701	HGWM-12-EO-G8
Gripper jaws closed	8	185 696	HGWM-08-EZ-G6	185 697	HGWM-08-EZ-G7	185 698	HGWM-08-EZ-G8
	12	185 702	HGWM-12-EZ-G6	185 703	HGWM-12-EZ-G7	185 704	HGWM-12-EZ-G8

Ordering data – Accessories	
For micro angle grippers with clamping spigot	
Adapter kits A08 and A12	
	In combination with semi-rotary drives DRQD-6 to 12 → 1 / 4.2-24 Adapter kits for drive/gripper connections → Volume 5