

## 2-JAW PARALLEL GRIPPERS ELECTRICAL

# 2-JAW PARALLEL GRIPPERS

## SERIES OVERVIEW

▶ **FURTHER INFORMATION** on page 260

**WORKING CONDITIONS**

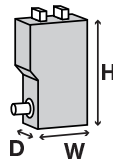
**FUNCTIONALITY**

**PRICE**

Series GEP9000 	clean	dirty	-	+	+	++
	■ ■ ■ ■ ■ ■ ■ ■		■ ■ ■ ■ ■ ■ ■ ■		■ ■ ■ ■ ■ ■ ■ ■	

„The quickest“

- ▶ Plug and Play
- ▶ 250 cycles per minute
- ▶ Failure-free continuous operation



▶ **Technical Data**

Installation size	Stroke per Jaw [mm]		Gripping force [N]		Weight [kg]	
	from	to	from	to	from	to
GEP9002	2	2	11	15	0,25	0,25
GEP9004	4	4	14	26	0,57	0,57

▶ **Dimension**

Installation size	Width [mm]	Height [mm]	Depth [mm]
GEP9002	40	77,5	27
GEP9004	51,5	99,5	35

▶ **FURTHER INFORMATION** on page 264

**WORKING CONDITIONS**

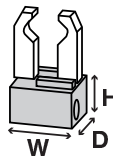
**FUNCTIONALITY**

**PRICE**

Series GEP1400 	clean	dirty	-	+	+	++
	■ ■ ■ ■ ■ ■ ■ ■		■ ■ ■ ■ ■ ■ ■ ■		■ ■ ■ ■ ■ ■ ■ ■	

„The robust“

- ▶ Proven T slot guide
- ▶ Integrated position sensing
- ▶ The simplest activation



▶ **Technical Data**

Installation size	Stroke per Jaw [mm]		Gripping force [N]		Weight [kg]	
	from	to	from	to	from	to
GEP1402	2	2	140	140	0,3	0,3
GEP1406	6	6	350	350	1	1

▶ **Dimension**

Installation size	Width [mm]	Height [mm]	Depth [mm]
GEP1402	32	72	32
GEP1406	70	110	44

▶ **FURTHER INFORMATION** on page 268

**WORKING CONDITIONS**

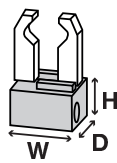
**FUNCTIONALITY**

**PRICE**

Series GEP1600 	clean	dirty	-	+	+	++
	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■

„The sealed“

- ▶ Sealed circular guide
- ▶ Integrated position sensing
- ▶ The simplest activation



▶ **Technical Data**

Installation size	Stroke per Jaw [mm]		Gripping force [N]		Weight [kg]	
	from	to	from	to	from	to
GEP1602	2	2	115	115	0,3	0,3
GEP1606	6	6	280	280	1,5	1,5

▶ **Dimension**

Installation size	Width [mm]	Height [mm]	Depth [mm]
GEP1602	58	84	35
GEP1606	82	121	44

# 2-JAW PARALLEL GRIPPERS

## SERIES GEP9000

1

Series GEP9000 / 2-Jaw Parallel Grippers / electric / Grippers

### ▶ PRODUCT ADVANTAGES



SOMMER  
automatic **S**

#### “The quickest”

##### ▶ Plug and Play

Reduce programming and assembly costs to a minimum with the integrated control system and the 3 position query

##### ▶ 250 cycles per minute

No more worrying about cycle times: There is nothing faster on the market!

##### ▶ Failure-free continuous operation

Our “Made in Germany” quality guarantees up to 30 million maintenance-free gripping cycles

### ▶ THE BEST PRODUCT FOR YOUR APPLICATION



#### ▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

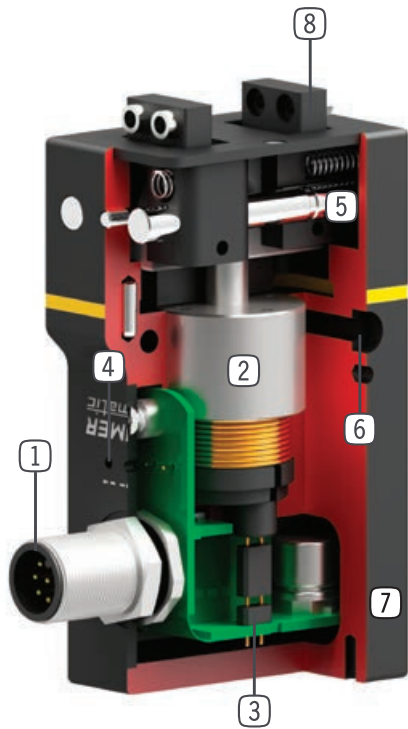
[www.zimmer-group.de](http://www.zimmer-group.de)

#### HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	GEP9002N	<input type="checkbox"/>	-B	
Grip direction closed		C		
Grip direction opened		O		

## ► BENEFITS IN DETAIL



- ① **Energy supply**
  - standardized interface M12 round connector
- ② **Drive**
  - via Pot magnet and coil bobbin according to the coil system principle
  - energy consumption only at opening and closing
- ③ **Position sensing**
  - integrated Hallsensor
  - 3 positions monitorable
- ④ **Status control**
  - optical LED position display
  - gripper opened, gripper closed, "workpiece available"
- ⑤ **Wedge hook mechanism**
  - mechanical self-locking at stop position
- ⑥ **Mounting and positioning**
  - mounting possible from several sides for versatile positioning
- ⑦ **Robust, lightweight housing**
  - hard coated aluminium alloy
- ⑧ **Gripper jaw**
  - from high-strength, hard-anodized aluminium
  - removable centering sleeves for individual gripper finger mounting

## ► FURTHER INFORMATION IS AVAILABLE ONLINE



### ► Technical Information

All information just a click away at: [www.zimmer-group.de](http://www.zimmer-group.de)

Find data, illustrations, 3D models and Installation instructions for your installation size using the order number for your desired product.

Quick, clear and always current.

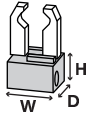


# 2-JAW PARALLEL GRIPPERS SERIES GEP9000

1

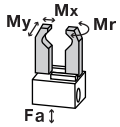
Series GEP9000 / 2-Jaw Parallel Grippers / electric / Grippers

## Installation Size: GEP9002



### Dimension

Width [mm]	Height [mm]	Depth [mm]
40	77.5	27



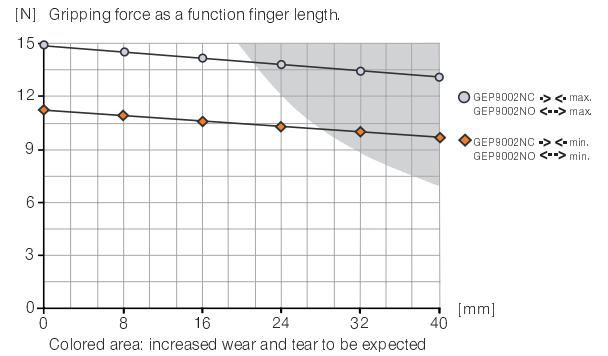
### Force and moment

Mr [Nm]	Mx [Nm]	My [Nm]	Fa [N]
1.5	1.5	2.1	270

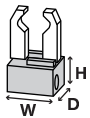
### Technical Data

Order no.	Stroke per jaw [mm]	Gripping force [N]		Weight [kg]
		min.	max.	
GEP9002NC-B	2	11	15	0.25
GEP9002NO-B	2	11	15	0.25

### Gripping force diagram

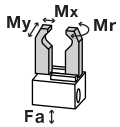


## Installation Size: GEP9004



### Dimension

Width [mm]	Height [mm]	Depth [mm]
51.5	99.5	35



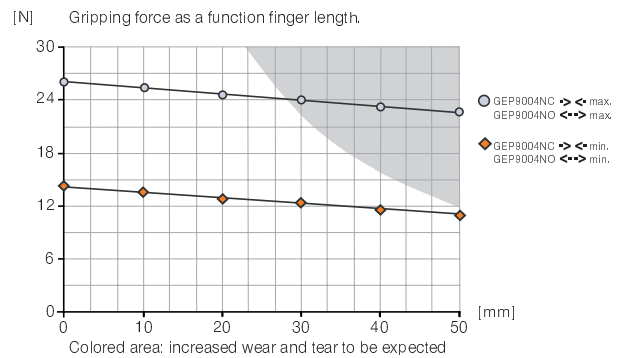
### Force and moment

Mr [Nm]	Mx [Nm]	My [Nm]	Fa [N]
2.7	2.7	4.3	335

### Technical Data

Order no.	Stroke per jaw [mm]	Gripping force [N]		Weight [kg]
		min.	max.	
GEP9004NC-B	4	14	26	0.57
GEP9004NO-B	4	14	26	0.57

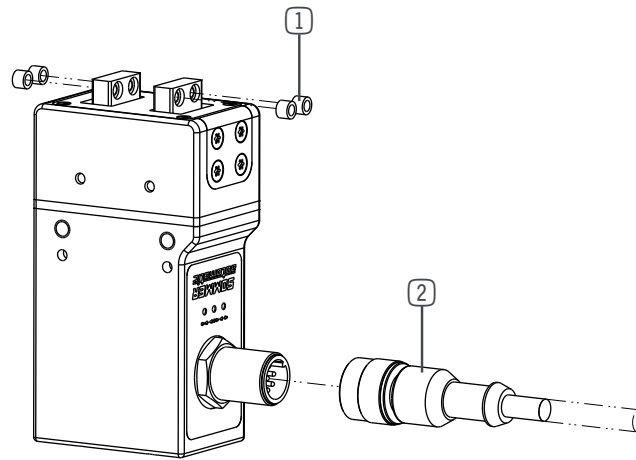
### Gripping force diagram



# 2-JAW PARALLEL GRIPPERS

## SERIES GEP9000

### ▶ ACCESSORIES



#### ▶ Installation Size: GEP9002

Pos.	Accessories	Order no.
②	Plug-in Connector Straight Cable 10 m - Female M12	<b>KAG1000B8</b>
②	Plug-in Connector Angled Cable 10 m - Female M12	<b>KAW1000B8</b>
	Busbox (see page 300)	<b>ZUBBOX9000-01</b>
Delivery contents		Order no.
①	Centering Disc	<b>BDST80320</b>

#### ▶ Installation Size: GEP9004

Pos.	Accessories	Order no.
②	Plug-in Connector Straight Cable 10 m - Female M12	<b>KAG1000B8</b>
②	Plug-in Connector Angled Cable 10 m - Female M12	<b>KAW1000B8</b>
	Busbox (see page 300)	<b>ZUBBOX9000-01</b>
Delivery contents		Order no.
①	Centering Disc	<b>BDST80320</b>

# 2-JAW PARALLEL GRIPPERS

## SERIES GEP1400

### ▶ PRODUCT ADVANTAGES



#### “The robust”

- ▶ **Proven T slot guide**  
This established and proven guiding technology stands for the highest process reliability like no other
- ▶ **Integrated position sensing**  
You can detect the gripper status safely via the motor current using your control system
- ▶ **The simplest activation**  
The included control unit is controlled easily via plus and minus buttons, while you can optionally adjust the gripping force using the potentiometer

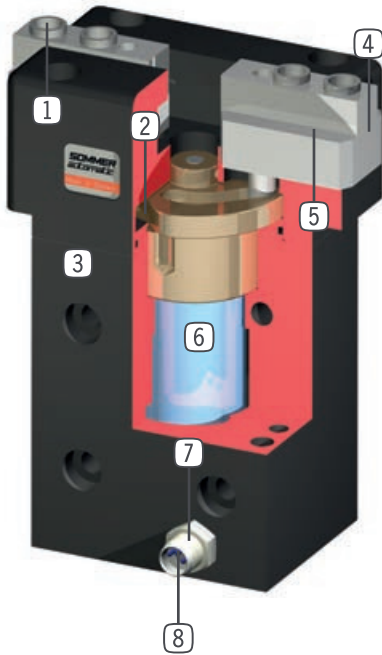
### ▶ THE BEST PRODUCT FOR YOUR APPLICATION



- ▶ **Our products love the challenge!**  
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:  
Find the best product for your specific use:  
[www.zimmer-group.de](http://www.zimmer-group.de)



## ► BENEFITS IN DETAIL



- ① **Removable centering sleeves**
  - quick and economical positioning of the gripper fingers
- ② **Positively driven curve disc**
  - synchronized the movement of the gripper jaws
  - high force transfer
  - rapid stroke and force stroke (version with 6 mm stroke per jaw)
- ③ **Robust, lightweight housing**
  - hard coated aluminium alloy
- ④ **Gripper jaw**
  - hardened steel
  - individual gripper finger mounting
- ⑤ **Guide**
  - precise T-Slot guide for high forces and moments capacity
- ⑥ **Drive**
  - electric drive by 24 VDC step motor
- ⑦ **Position sensing**
  - measured at the end of stroke via power increase on the motor
- ⑧ **Energy supply**
  - standardized interface M8 round plug
  - signal control line (use only cable without diode)

## ► FURTHER INFORMATION IS AVAILABLE ONLINE



### ► Technical Information

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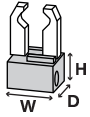
# 2-JAW PARALLEL GRIPPERS

## SERIES GEP1400

1

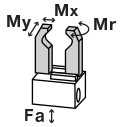
Series GEP1400 / 2-Jaw Parallel Grippers / electric / Grippers

### Installation Size: GEP1402



#### Dimension

Width [mm]	Height [mm]	Depth [mm]
32	72	32



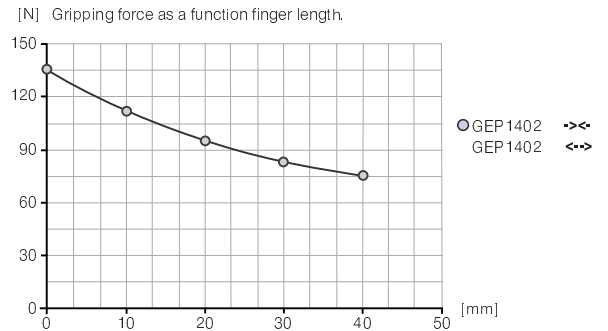
#### Force and moment

Mr [Nm]	Mx [Nm]	My [Nm]	Fa [N]
5	5	4	70

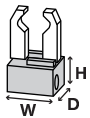
#### Technical Data

Order no.	Stroke per jaw [mm]	Gripping force [N]		Weight [kg]
		closing	opening	
<b>GEP1402</b>	2	140	140	0.3

#### Gripping force diagram

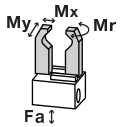


### Installation Size: GEP1406



#### Dimension

Width [mm]	Height [mm]	Depth [mm]
70	110	44



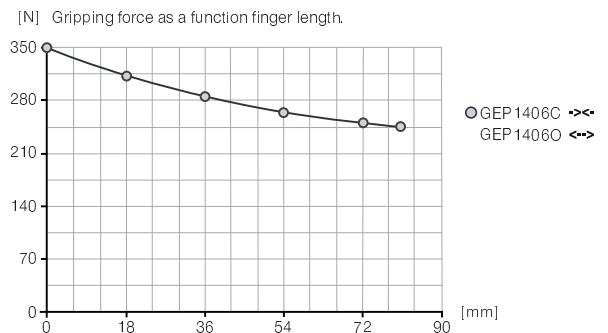
#### Force and moment

Mr [Nm]	Mx [Nm]	My [Nm]	Fa [N]
30	30	20	500

#### Technical Data

Order no.	Stroke per jaw [mm]	Gripping force [N]		Weight [kg]
		closing	opening	
<b>GEP1406C</b>	6	350		1
<b>GEP1406O</b>	6		350	1

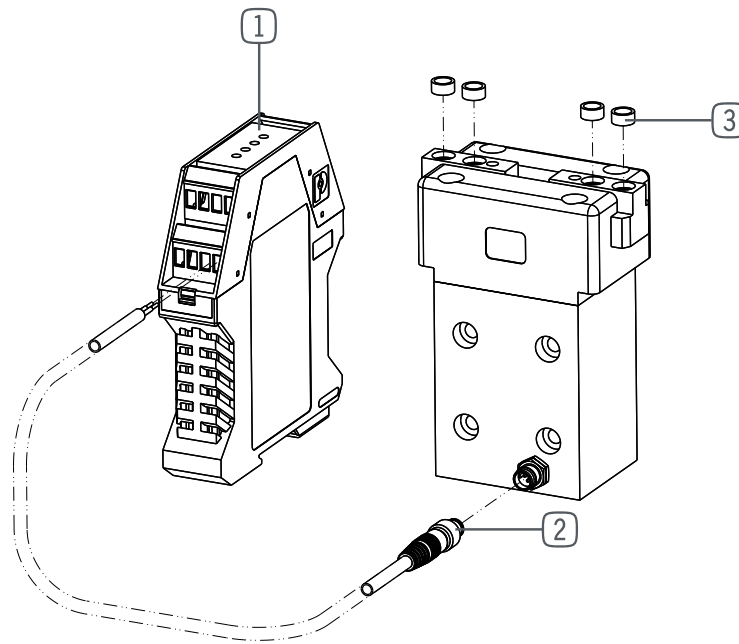
#### Gripping force diagram



# 2-JAW PARALLEL GRIPPERS

## SERIES GEP1400

### ▶ ACCESSORIES



#### ▶ Installation Size: GEP1402

Pos.	Accessories	Order no.
②	Plug-in connector Straight Cable 5m - Socket M8 (female)	<b>KAG500</b>
②	Plug-in connector Angled Cable 5m - Socket M8 (female)	<b>KAW500</b>
Delivery contents		Order no.
①	Control	<b>ELEGR01</b>
③	Centering Disc	<b>BDST02900</b>

#### ▶ Installation Size: GEP1406

Pos.	Accessories	Order no.
②	Plug-in connector Straight Cable 5m - Socket M8 (female)	<b>KAG500</b>
②	Plug-in connector Angled Cable 5m - Socket M8 (female)	<b>KAW500</b>
Delivery contents		Order no.
①	Control	<b>ELEGR04</b>
③	Centering Disc	<b>BDST40800</b>

# 2-JAW PARALLEL GRIPPERS

## SERIES GEP1600

### ▶ PRODUCT ADVANTAGES



#### “The airtight”

##### ▶ IP67

The sealed circular guide guarantees process reliability even under the harshest conditions

##### ▶ Integrated position sensing

You can detect the gripper status safely via the motor current using your control system

##### ▶ The simplest activation

The included control unit is controlled easily via plus and minus buttons, while you can optionally adjust the gripping force using the potentiometer

### ▶ THE BEST PRODUCT FOR YOUR APPLICATION



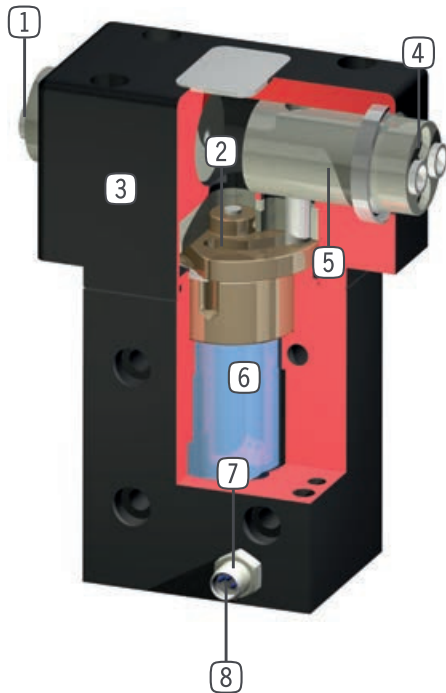
##### ▶ Our products love the challenge!

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## ► BENEFITS IN DETAIL



- ① **Removable centering sleeves**
  - quick and economical positioning of the gripper fingers
- ② **Positively driven curve disc**
  - synchronized the movement of the gripper jaws
  - high force transfer
  - rapid stroke and force stroke (version with 6 mm stroke per jaw)
- ③ **Robust, lightweight housing**
  - hard coated aluminium alloy
- ④ **Gripper jaw**
  - hardened steel
  - individual gripper finger mounting
- ⑤ **Guide**
  - sealed round guide for harsh environmental conditions
- ⑥ **Drive**
  - electric drive by 24 VDC step motor
- ⑦ **Position sensing**
  - measured at the end of stroke via power increase on the motor
- ⑧ **Energy supply**
  - standardized interface M8 round plug
  - signal control line (use only cable without diode)

## ► FURTHER INFORMATION IS AVAILABLE ONLINE



### ► Technical Information

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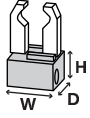
# 2-JAW PARALLEL GRIPPERS

## SERIES GEP1600

1

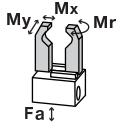
Series GEP1600 / 2-Jaw Parallel Grippers / electric / Grippers

### Installation Size: GEP1602



#### Dimension

Width [mm]	Height [mm]	Depth [mm]
58	84	35



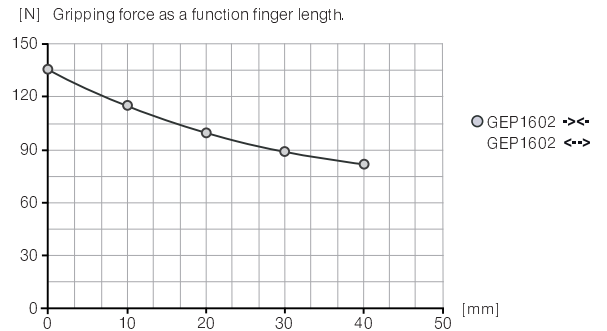
#### Force and moment

Mr [Nm]	Mx [Nm]	My [Nm]	Fa [N]
2	3	2	50

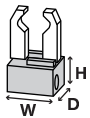
#### Technical Data

Order no.	Stroke per jaw [mm]	Gripping force [N]		Weight [kg]
		closing	opening	
<b>GEP1602</b>	2	115	115	0.3

#### Gripping force diagram

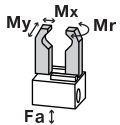


### Installation Size: GEP1606



#### Dimension

Width [mm]	Height [mm]	Depth [mm]
82	121	44



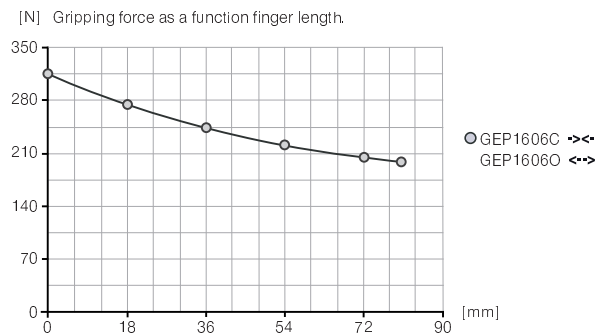
#### Force and moment

Mr [Nm]	Mx [Nm]	My [Nm]	Fa [N]
10	25	10	400

#### Technical Data

Order no.	Stroke per jaw [mm]	Gripping force [N]		Weight [kg]
		closing	opening	
<b>GEP1606C</b>	6	280	280	1.5
<b>GEP1606O</b>	6		280	1.5

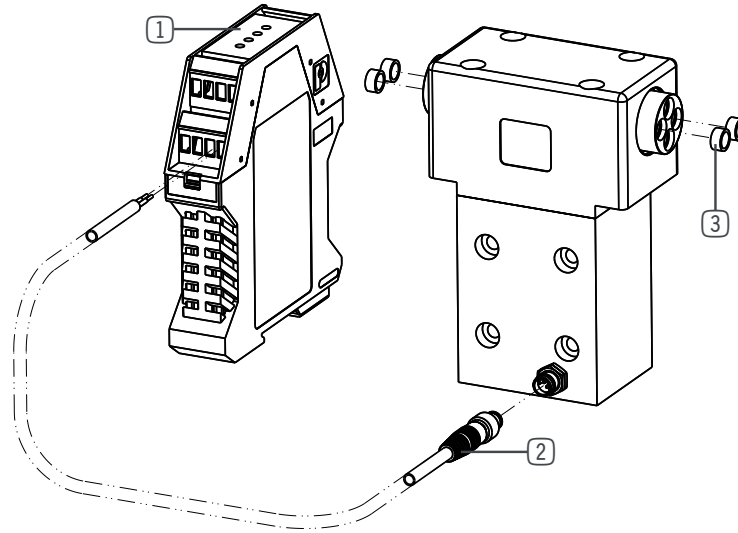
#### Gripping force diagram



# 2-JAW PARALLEL GRIPPERS

## SERIES GEP1600

### ▶ ACCESSORIES



#### ▶ Installation Size: GEP1602

Pos.	Accessories	Order no.
②	Plug-in connector Straight Cable 5m - Socket M8 (female)	<b>KAG500</b>
②	Plug-in connector Angled Cable 5m - Socket M8 (female)	<b>KAW500</b>

#### ▶ Installation Size: GEP1606

Pos.	Accessories	Order no.
②	Plug-in connector Straight Cable 5m - Socket M8 (female)	<b>KAG500</b>
②	Plug-in connector Angled Cable 5m - Socket M8 (female)	<b>KAW500</b>
<b>Delivery contents</b>		<b>Order no.</b>
①	Control	<b>ELEGR04</b>
③	Centering Disc	<b>BDST40800</b>