

Superior Clamping and Gripping



## Product Information

Compact change system CWS

## Compact. Flat. Productive.

### Compact change system CWS

Compact, manual change system with integrated air feed-throughs for the most important SCHUNK gripping and compensation modules.

#### Field of application

Ideally suitable for the use in laboratory technology and assembly automation.

#### Advantages – Your benefits

**High productivity** through fast manual gripper change, especially with small and medium-sized lot sizes

**Flat and weight-optimized** through direct assembly of the gripper onto the change system without adapter plate

**Series with five unit sizes** for optimal size selection and a broad application range

**Integrated pneumatic feed-through** for safe energy supply of grippers

**ISO mounting pattern** for easy assembly to most types of robots without needing additional adapter plates



Sizes  
Quantity: 5



Handling weight  
10 .. 28 kg



Moment load Mx  
20 .. 110 Nm

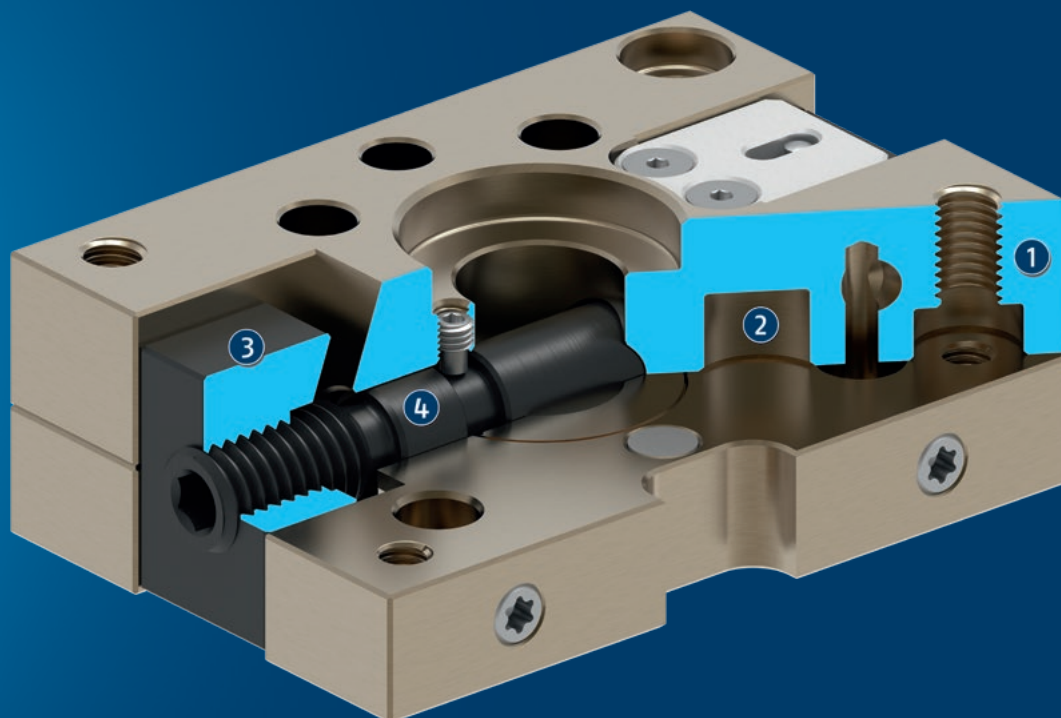


Moment load Mz  
10 .. 200 Nm

## Functional description

The compact change system (CWS) consists of a change head (CWK) and a change adapter (CWA). A form-fit connection is established between the CWK and the CWA with two clamping jaws connected via a threaded

spindle. The gripper is safely supplied with pneumatic power by up to four integrated pneumatic feed-throughs.



- ① **Housing**  
is weight-optimized due to the use of high-strength aluminum alloy
- ② **Air feed-through**  
no interfering contour, as integrated in the housing
- ③ **Clamping jaw**  
for a form-fit safe hold
- ④ **Drive spindle**  
for manually locking and unlocking the change system

## General notes about the series

**Actuation:** manually via Allen key, provided by the customer

**Operating principle:** by turning the threaded spindle, the clamping jaws are clamped or unclamped

**Energy transmission:** Integrated pneumatic feed-through

**Housing:** The housing consists of high-strength, hard-coated aluminum alloy. The functional components are made of hardened steel.

**Scope of delivery:** Centering sleeves for mounting and direct connection

**Warranty:** 24 months

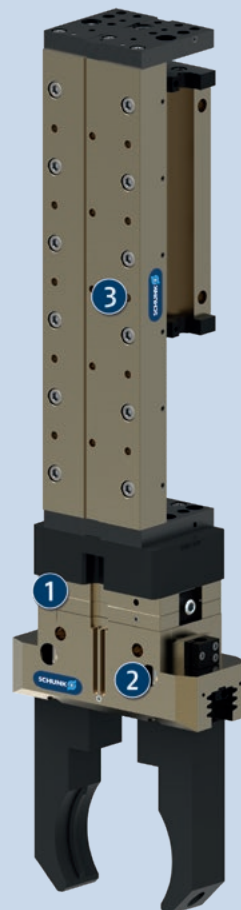
**Harsh environmental conditions:** Please note that use under harsh environmental conditions (e.g. in the coolant area, cast and grinding dust) can considerably reduce the service life of the units, and we will not take over any warranty. However, in many cases we can find a solution. Please contact us for assistance.

**Handling weight:** is the weight of the total load attached to the flange. When designing, the permissible forces and moments have to be paid attention to. Please note that exceeding the recommended handling weight will shorten the lifespan.

## Application example

Flexible assembly unit for various product versions. Easy and quick tool change using a quick-change-system.

- ① Compact change system CWS
- ② 2-finger parallel gripper PGN-plus
- ③ Linear module LM



## SCHUNK offers more ...

The following components make the product even more productive – the suitable addition for the highest functionality, flexibility, reliability, and controlled production.



Rotary feed-through



Anti-collision and overload protection sensor



Tolerance compensation unit



Universal gripper

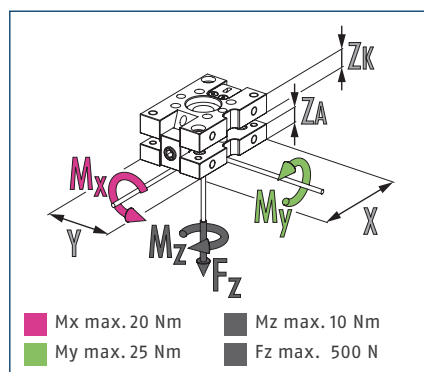


Angular gripper

① For more information on these products can be found on the following product pages or at [schunk.com](https://www.schunk.com).



### Dimensions and maximum loads



① This is the max. sum of all forces and moments which are permitted to act on the change system for ensuring proper functioning.

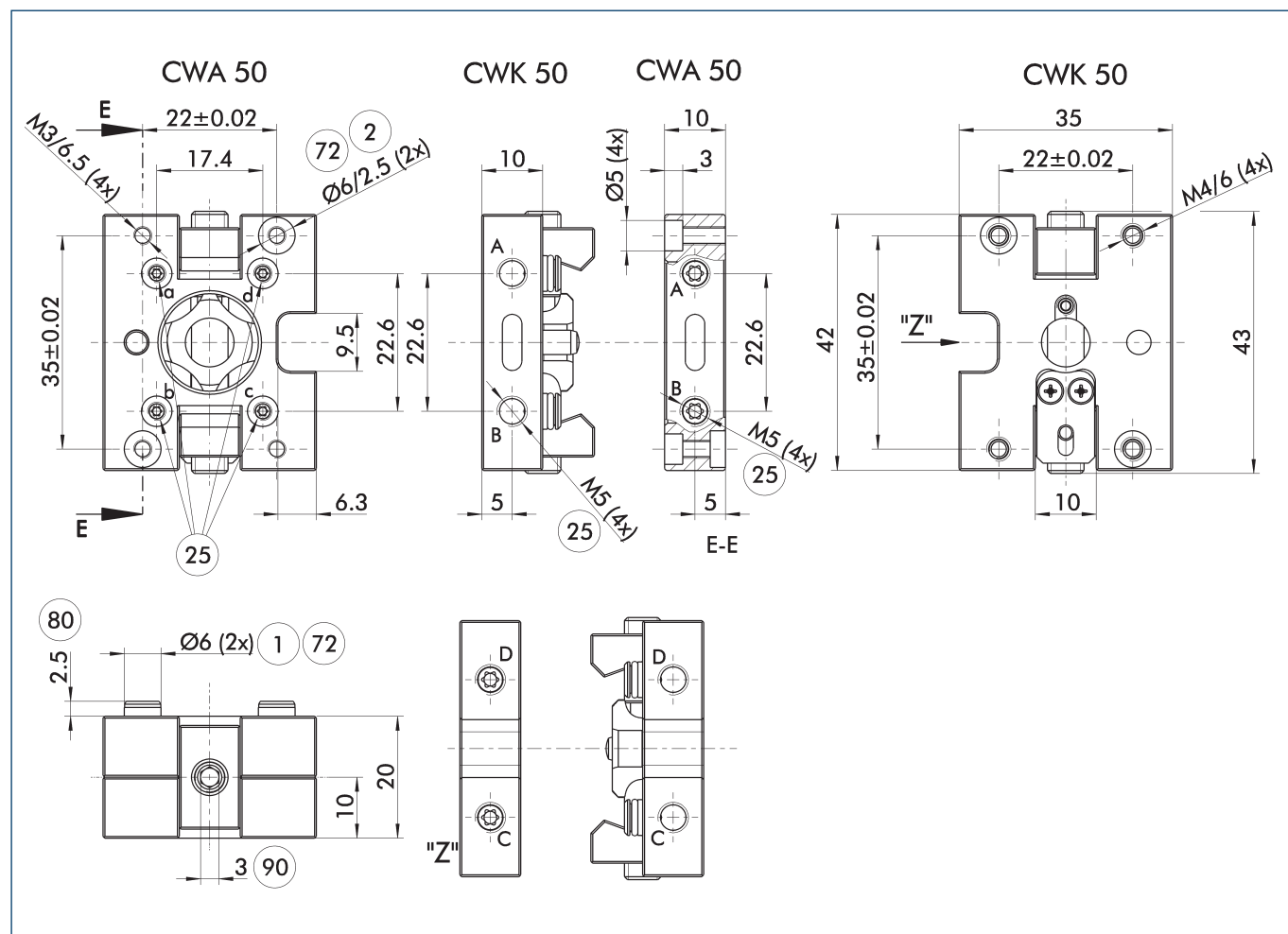
### Technical data

Description		CWK-050-P	CWA-050-P
		Compact change master	Compact change adapter
ID		0305750	0305751
Recommended handling weight	[kg]	10	10
Repeat accuracy	[mm]	0.01	0.01
Weight	[kg]	0.05	0.02
Number of pneumatic feed-throughs		4	4
Min./max. ambient temperature	[°C]	5/60	5/60
Direct connection to*			PGN-plus 50
Dimensions X x Y x Z**	[mm]	42 x 35 x 10	42 x 35 x 10

\* also suitable for other grippers with the same screw connection diagram

\*\* Please note that the heights of the change master (ZK) and change adapter (ZA) differ. The sum represents the total height of a coupled change system.

## Main view

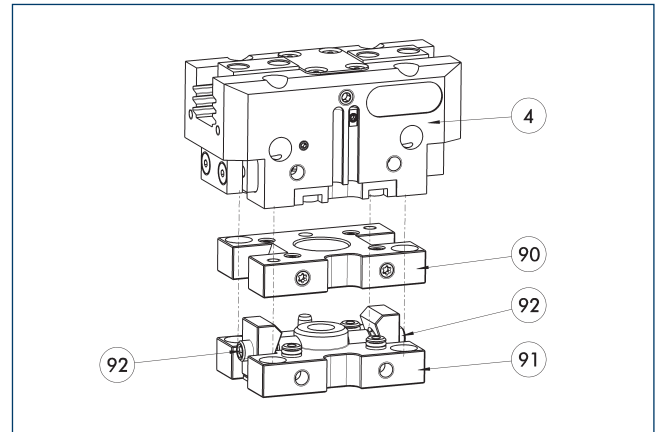


The drawing shows the basic design of the gripper change system without dimensional consideration of the options described below.

- $\textcircled{1}$  Robot-side connection
- $\textcircled{2}$  Tool-side connection
- $\textcircled{25}$  Pneumatic feed-throughs

- $\textcircled{72}$  Fit for centering sleeves
- $\textcircled{80}$  Depth of the centering sleeve hole in the counter part
- $\textcircled{90}$  Wrench size

## Compact change system for grippers



- 4 Grippers  
 90 CWA compact change adapter  
 91 CWK compact change master  
 92 Locking mechanism

Grippers can be directly mounted without an adapter plate. For details see our catalog [Gripping](#) or [Robot Accessories](#).

Description	ID	
Tool side		
A-CWA-050-040-P	0305754	
CWK compact change master		
CWK-050-P	0305750	

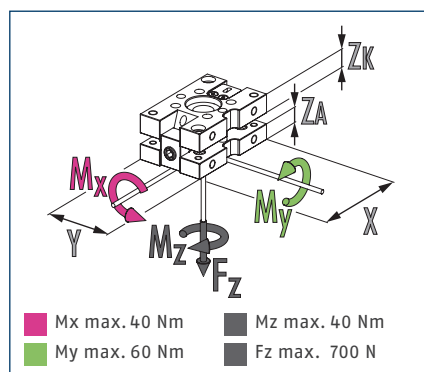
- The unit is part of a modular system in which various components such as grippers or compliant devices can be threaded to one another directly.







### Dimensions and maximum loads



① This is the max. sum of all forces and moments which are permitted to act on the change system for ensuring proper functioning.

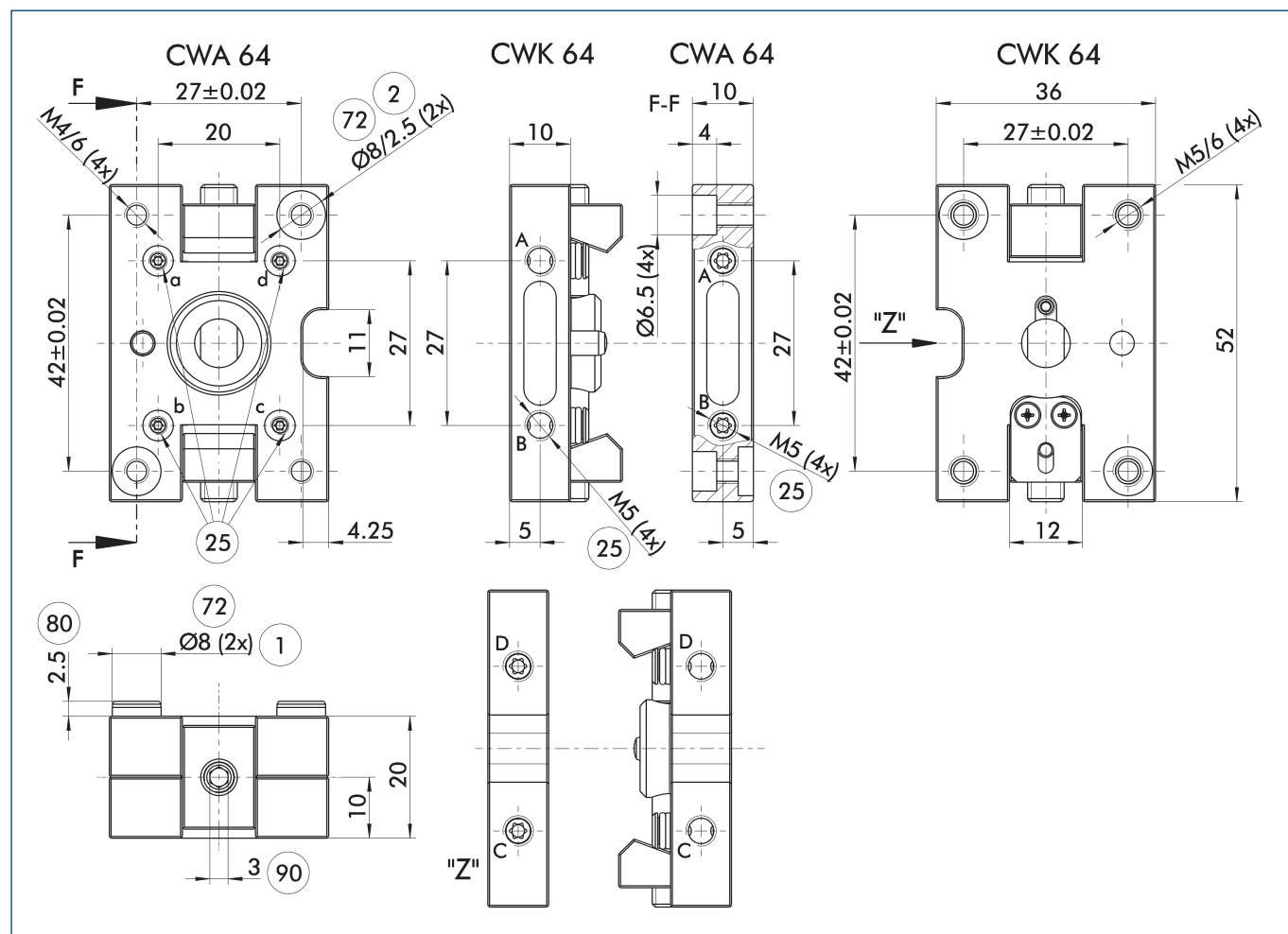
### Technical data

Description		CWK-064-P	CWA-064-P
		Compact change master	Compact change adapter
ID		0305764	0305765
Recommended handling weight	[kg]	16	16
Repeat accuracy	[mm]	0.01	0.01
Weight	[kg]	0.075	0.032
Number of pneumatic feed-throughs		4	4
Min./max. ambient temperature	[°C]	5/60	5/60
Direct connection to*			PGN-plus 64
Dimensions X x Y x Z**	[mm]	52 x 36 x 10	52 x 36 x 10

\* also suitable for other grippers with the same screw connection diagram

\*\* Please note that the heights of the change master (ZK) and change adapter (ZA) differ. The sum represents the total height of a coupled change system.

## Main view

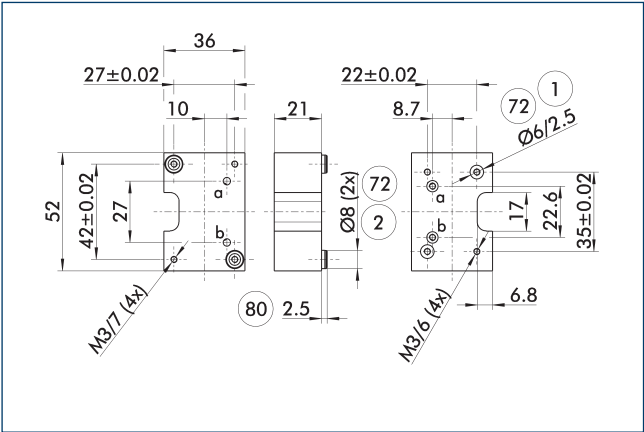


The drawing shows the basic design of the gripper change system without dimensional consideration of the options described below.

- ① Robot-side connection
- ② Tool-side connection
- ②⑤ Pneumatic feed-throughs

- ⑦② Fit for centering sleeves
- ⑧② Depth of the centering sleeve hole in the counter part
- ⑨② Wrench size

Adapter plate for PGN-plus 50

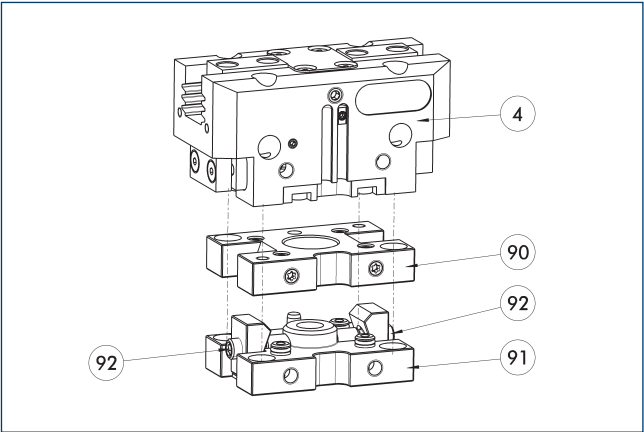


- 1 Robot-side connection
- 2 Tool-side connection
- 72 Fit for centering sleeves
- 80 Depth of the centering sleeve hole in the counter part

The adapter plate has integrated air feed-throughs in order to be able to use the hose-free direct connection of the appropriate gripper.

Description	ID	
Tool side		
A-CWA-064-050-P	0305768	

Compact change system for grippers

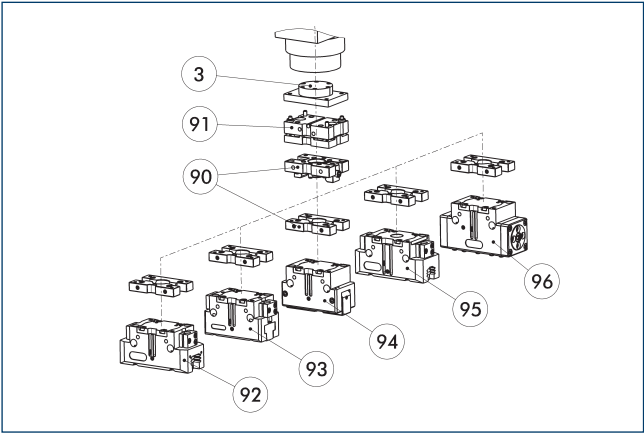


- 4 Grippers
- 90 CWA compact change adapter
- 91 CWK compact change master
- 92 Locking mechanism

Grippers can be directly mounted without an adapter plate. For details see our catalog Gripping or Robot Accessories.

Description	ID	
Tool side		
A-CWA-064-050-P	0305768	
CWK compact change master		
CWK-064-P	0305764	

Modular system



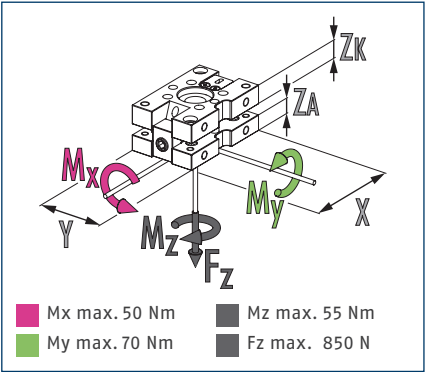
- 3 Adapter plate
- 90 Compact change system CWS
- 91 Tolerance compensation unit TCU
- 92 2-finger parallel gripper PGN-plus
- 93 JGP 2-finger parallel grippers
- 94 2-finger angular gripper PWG-plus
- 95 2-finger parallel gripper PGB
- 96 Sealed DPG-plus gripper

The unit is part of a modular system in which various components such as grippers or compliant devices can be threaded to one another directly.





Dimensions and maximum loads



ⓘ This is the max. sum of all forces and moments which are permitted to act on the change system for ensuring proper functioning.

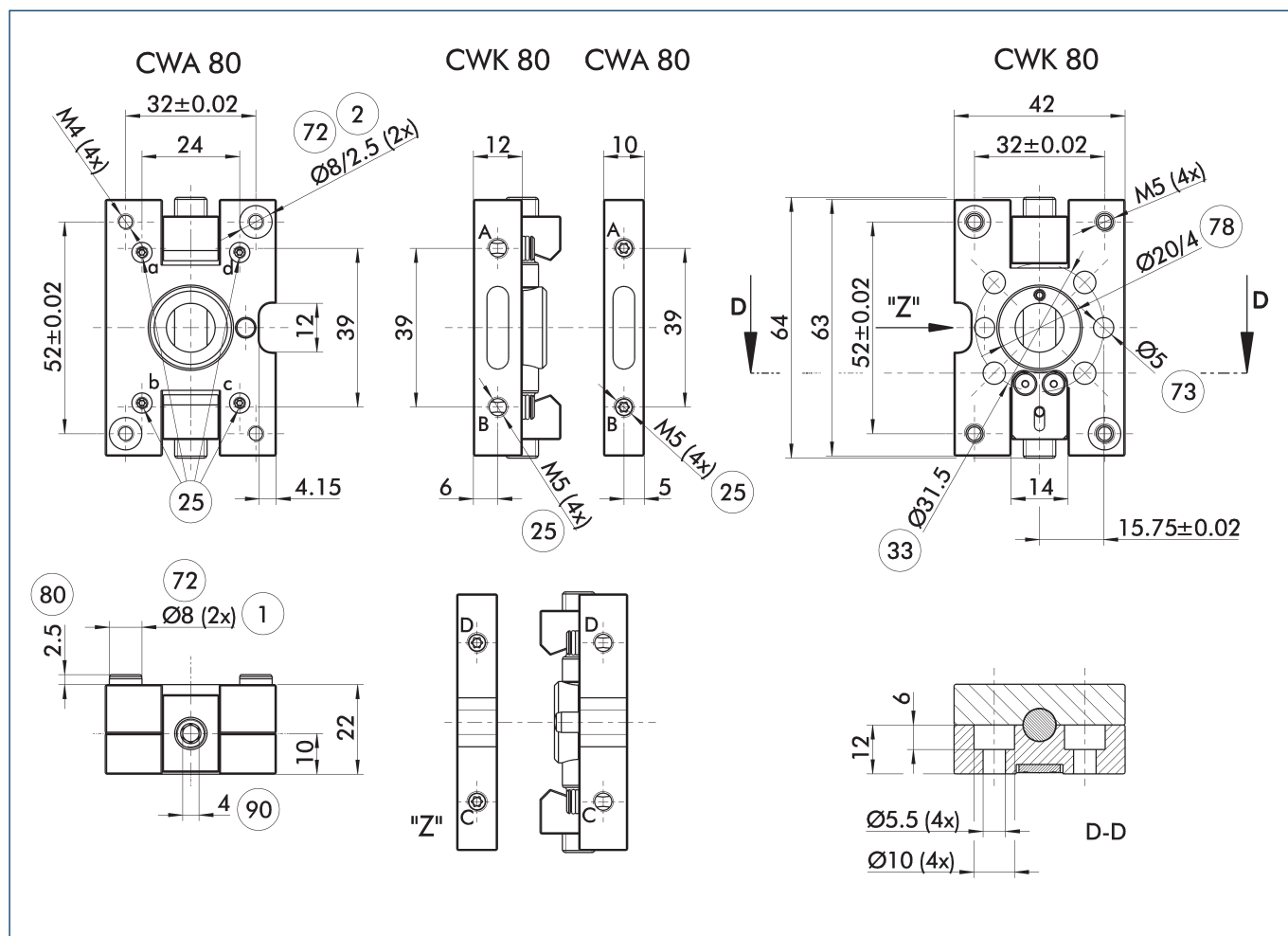
Technical data

Description		CWK-080-P	CWA-080-P
		Compact change master	Compact change adapter
ID		0305780	0305781
Recommended handling weight	[kg]	20	20
Repeat accuracy	[mm]	0.01	0.01
Weight	[kg]	0.115	0.045
Number of pneumatic feed-throughs		4	4
Min./max. ambient temperature	[°C]	5/60	5/60
Direct connection to*			PGN-plus 80
Dimensions X x Y x Z**	[mm]	63 x 42 x 12	63 x 42 x 10

\* also suitable for other grippers with the same screw connection diagram

\*\* Please note that the heights of the change master (ZK) and change adapter (ZA) differ. The sum represents the total height of a coupled change system.

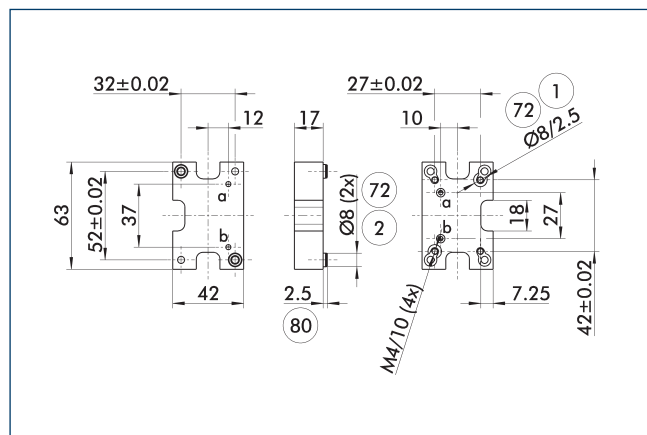
## Main view



The drawing shows the basic design of the gripper change system without dimensional consideration of the options described below.

- ① Robot-side connection
- ② Tool-side connection
- ②⑤ Pneumatic feed-throughs
- ③③ DIN ISO-9409 bolt circle
- ⑦② Fit for centering sleeves
- ⑦③ Fit for centering pins
- ⑦⑧ Fit for centering
- ⑧⑧ Depth of the centering sleeve hole in the counter part
- ⑨⑨ Wrench size

### Adapter plate for PGN-plus 64

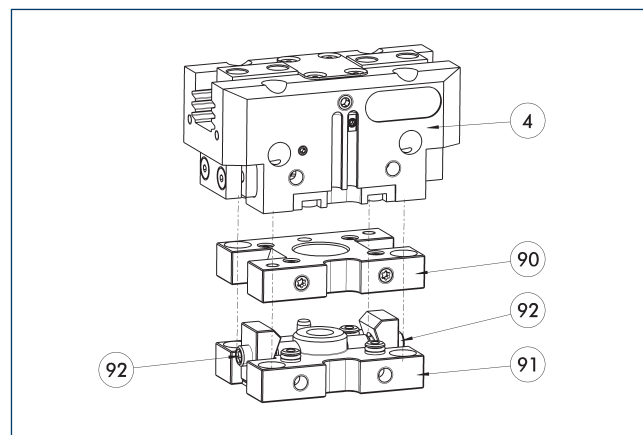


- ① Robot-side connection
- ② Tool-side connection
- ⑦ Fit for centering sleeves
- ⑧ Depth of the centering sleeve hole in the counter part

The adapter plate has integrated air feed-throughs in order to be able to use the hose-free direct connection of the appropriate gripper.

Description	ID
Tool side	
A-CWA-080-064-P	0305784

### Compact change system for grippers

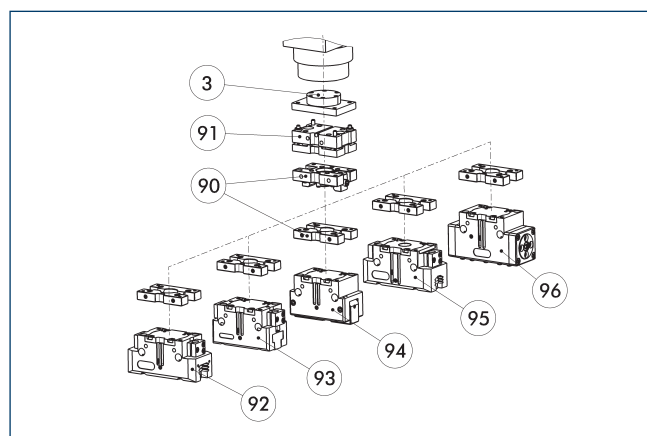


- ④ Grippers
- ⑨ CWA compact change adapter
- ⑨ CWK compact change master
- ⑨ Locking mechanism

Grippers can be directly mounted without an adapter plate. For details see our catalog Gripping or Robot Accessories.

Description	ID
Tool side	
A-CWA-080-064-P	0305784
CWK compact change master	
CWK-080-P	0305780

### Modular system

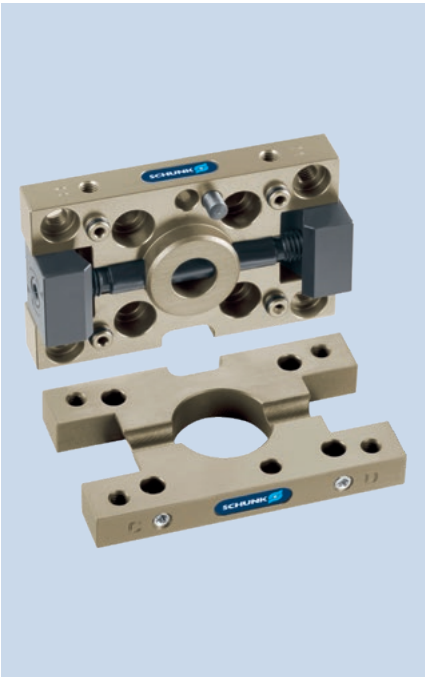


- ③ Adapter plate
- ⑨ Compact change system CWS
- ⑨ Tolerance compensation unit TCU
- ⑨ 2-finger parallel gripper PGN-plus
- ⑨ JGP 2-finger parallel grippers
- ⑨ 2-finger angular gripper PWG-plus
- ⑨ 2-finger parallel gripper PGB
- ⑨ Sealed DPG-plus gripper

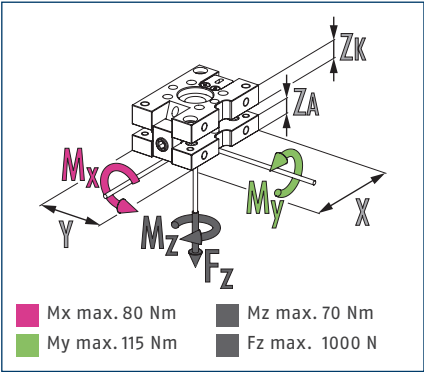
The unit is part of a modular system in which various components such as grippers or compliant devices can be threaded to one another directly.







Dimensions and maximum loads



ⓘ This is the max. sum of all forces and moments which are permitted to act on the change system for ensuring proper functioning.

Technical data

Description		CWK-100-P	CWA-100-P
		Compact change master	Compact change adapter
ID		0305800	0305801
Recommended handling weight	[kg]	24	24
Repeat accuracy	[mm]	0.01	0.01
Weight	[kg]	0.185	0.07
Number of pneumatic feed-throughs		4	4
Min./max. ambient temperature	[°C]	5/60	5/60
Direct connection to*			PGN-plus 100
Dimensions X x Y x Z**	[mm]	81 x 50 x 12	81 x 50 x 10

\* also suitable for other grippers with the same screw connection diagram  
\*\* Please note that the heights of the change master (ZK) and change adapter (ZA) differ. The sum represents the total height of a coupled change system.

**CWA 100**

Dimensions: 38±0.02, 34, 66±0.02, 14, 47.4, 4.75, 25, 72, 2, Ø10/3 (2x), M5 (4x).

**CWK 100 CWA 100**

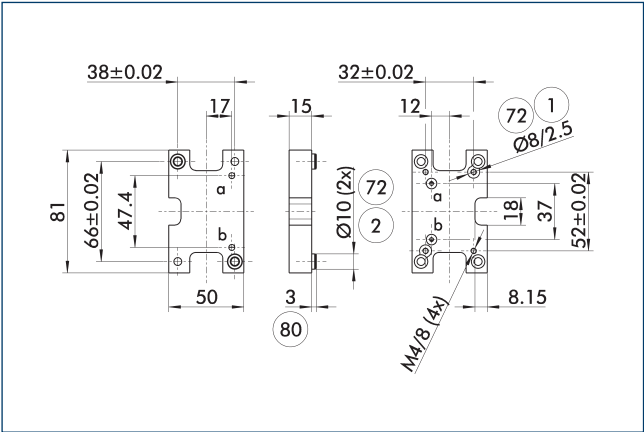
Dimensions: 12, 10, 47.4, 6, 5, 25, M5 (4x), 25, 72, 2, Ø10/3 (2x), M5 (4x).

**CWK 100**

Dimensions: 50, 38±0.02, 82, 81, 66±0.02, 22, 20±0.02, 78, 73, 33, Ø40, Ø25/4, M6 (4x), Ø6.6 (4x), Ø11 (4x), 12, 7, D-D.

① Robot-side connection	⑦③ Fit for centering pins
② Tool-side connection	⑦⑧ Fit for centering
②⑤ Pneumatic feed-throughs	⑧⑩ Depth of the centering sleeve hole in the counter part
③③ DIN ISO-9409 bolt circle	⑨⑩ Wrench size
⑦② Fit for centering sleeves	

Adapter plate PGN-plus 80

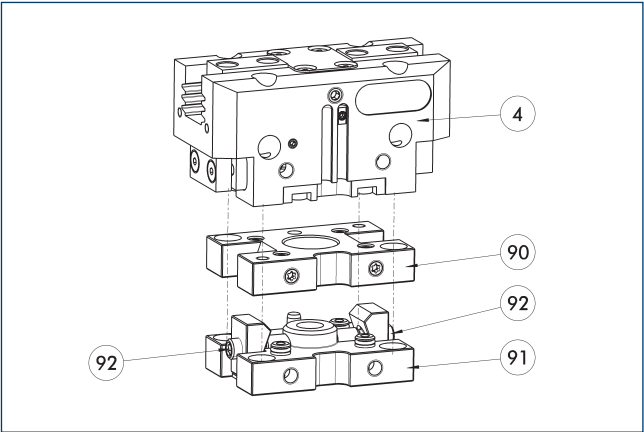


- 1 Robot-side connection
- 2 Tool-side connection
- 72 Fit for centering sleeves
- 80 Depth of the centering sleeve hole in the counter part

The adapter plate has integrated air feed-throughs in order to be able to use the hose-free direct connection of the appropriate gripper.

Description	ID	
Tool side		
A-CWA-100-080-P	0305804	

Compact change system for grippers

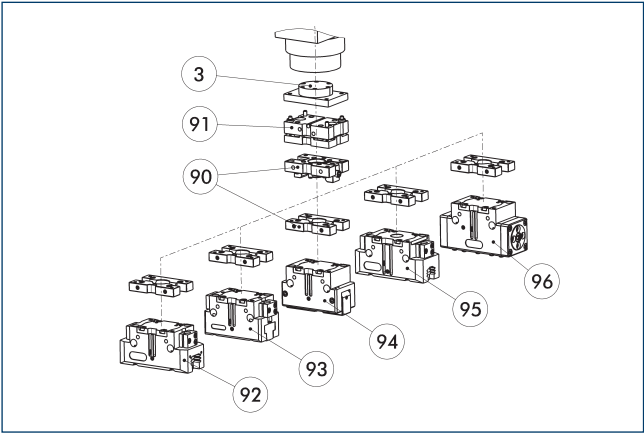


- 4 Grippers
- 90 CWA compact change adapter
- 91 CWK compact change master
- 92 Locking mechanism

Grippers can be directly mounted without an adapter plate. For details see our catalog Gripping or Robot Accessories.

Description	ID	
Tool side		
A-CWA-100-080-P	0305804	
CWK compact change master		
CWK-100-P	0305800	

Modular system



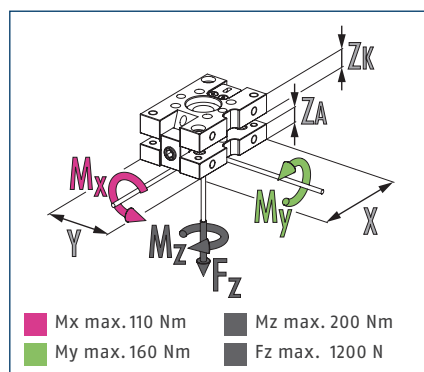
- 3 Adapter plate
- 90 Compact change system CWS
- 91 Tolerance compensation unit TCU
- 92 2-finger parallel gripper PGN-plus
- 93 JGP 2-finger parallel grippers
- 94 2-finger angular gripper PWG-plus
- 95 2-finger parallel gripper PGB
- 96 Sealed DPG-plus gripper

The unit is part of a modular system in which various components such as grippers or compliant devices can be threaded to one another directly.





### Dimensions and maximum loads



① This is the max. sum of all forces and moments which are permitted to act on the change system for ensuring proper functioning.

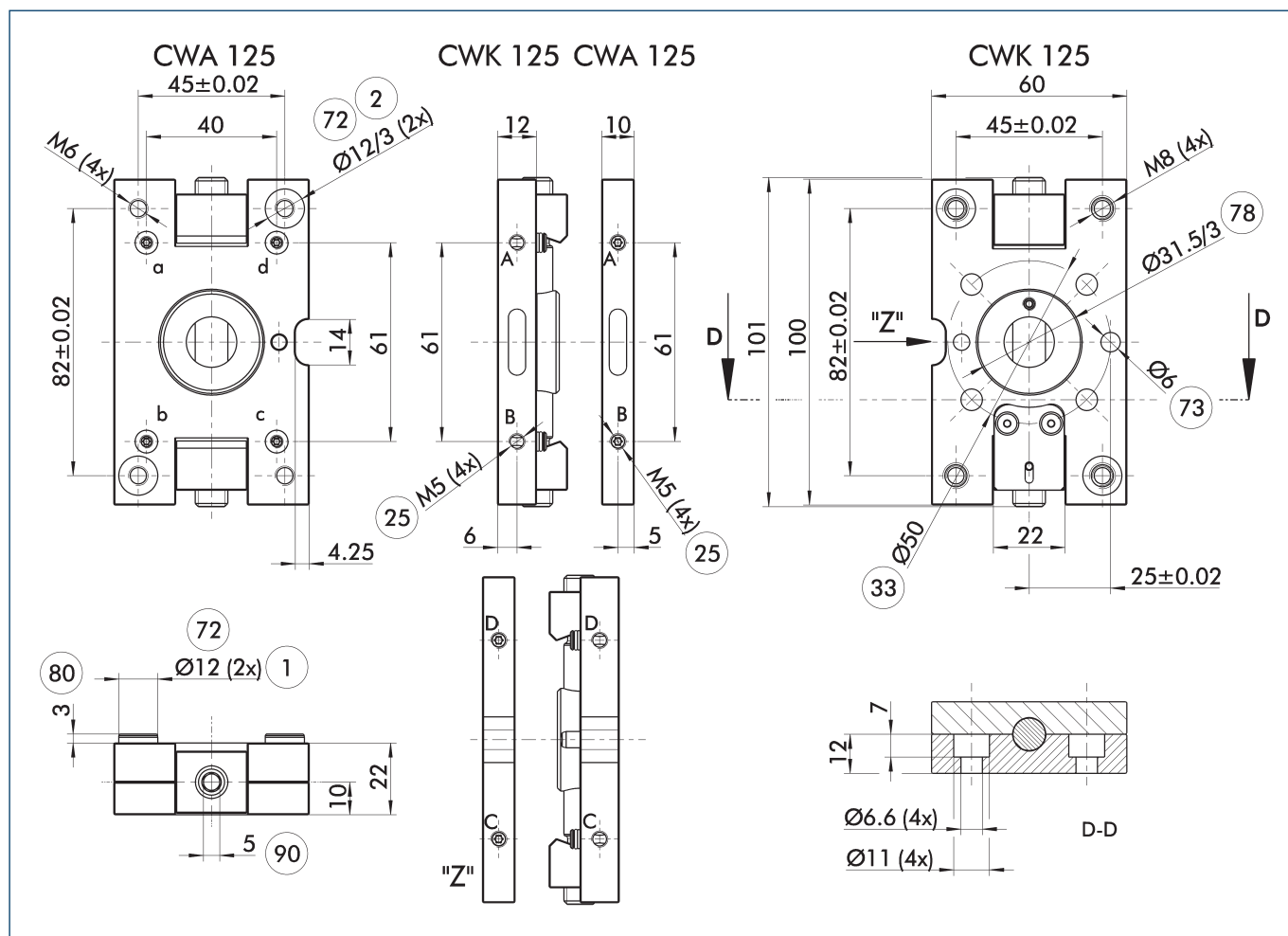
### Technical data

Description		CWK-125-P	CWA-125-P
		Compact change master	Compact change adapter
ID		0305825	0305826
Recommended handling weight	[kg]	28	28
Repeat accuracy	[mm]	0.01	0.01
Weight	[kg]	0.32	0.125
Number of pneumatic feed-throughs		4	4
Min./max. ambient temperature	[°C]	5/60	5/60
Direct connection to*			PGN-plus 125
Dimensions X x Y x Z**	[mm]	100 x 60 x 12	100 x 60 x 10

\* also suitable for other grippers with the same screw connection diagram

\*\* Please note that the heights of the change master (ZK) and change adapter (ZA) differ. The sum represents the total height of a coupled change system.

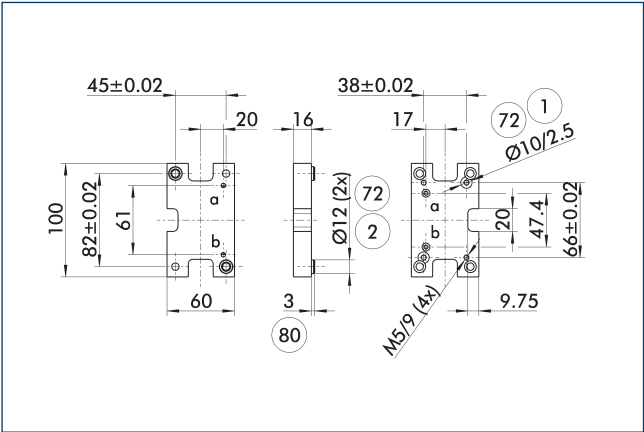
## Main view



The drawing shows the basic design of the gripper change system without dimensional consideration of the options described below.

- |                              |   |
|------------------------------|---|
| ① Robot-side connection      | ⑦③ Fit for centering pins                                 |
| ② Tool-side connection       | ⑦⑧ Fit for centering                                      |
| ②⑤ Pneumatic feed-throughs   | ⑧⑩ Depth of the centering sleeve hole in the counter part |
| ③③ DIN ISO-9409 bolt circle  | ⑨⑩ Wrench size  |
| ⑦② Fit for centering sleeves |   |

Adapter plate for PGN-plus 100



- 1 Robot-side connection

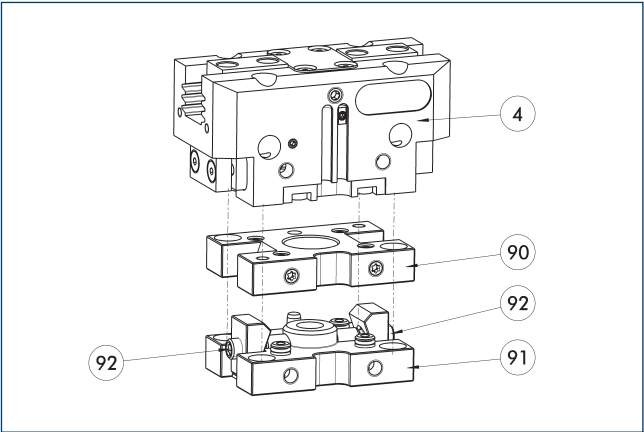
2 Tool-side connection
- 72 Fit for centering sleeves

80 Depth of the centering sleeve hole in the counter part

The adapter plate has integrated air feed-throughs in order to be able to use the hose-free direct connection of the appropriate gripper.

Description	ID	
Tool side		
A-CWA-125-100-P	0305829	

Compact change system for grippers



- 4 Grippers

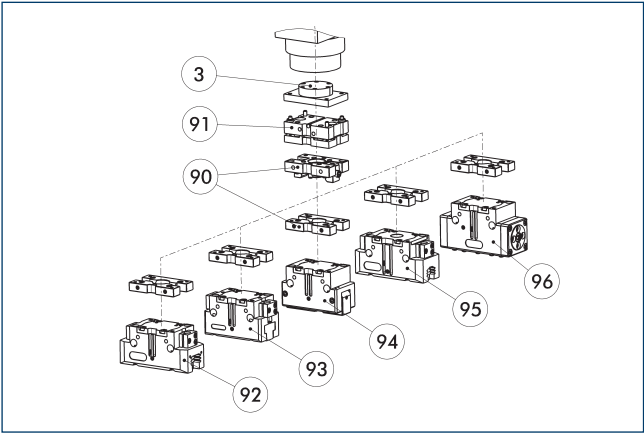
90 CWA compact change adapter
- 91 CWK compact change master

92 Locking mechanism

Grippers can be directly mounted without an adapter plate. For details see our catalog Gripping or Robot Accessories.

Description	ID	
Tool side		
A-CWA-125-100-P	0305829	
CWK compact change master		
CWK-125-P	0305825	

Modular system



- 3 Adapter plate

90 Compact change system CWS

91 Tolerance compensation unit TCU

92 2-finger parallel gripper PGN-plus
- 93 JGP 2-finger parallel grippers

94 2-finger angular gripper PWG-plus

95 2-finger parallel gripper PGB

96 Sealed DPG-plus gripper

The unit is part of a modular system in which various components such as grippers or compliant devices can be threaded to one another directly.







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**Spann- und Greiftechnik**

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