



Superior Clamping and Gripping



## Product Information

Deburring tool CDB

# Compliant. Flexible. Economical.

## Deburring tool CDB

Compliant tool for deburring with the robot and proven deburring tools

### Field of application

For automatic deburring of different workpieces, geometries, and materials in a uniform quality



### Advantages – Your benefits

**Flexibility in axial and radial direction** for a simplified robot programming

**Use of proven deburring tools** for simple automation of manual deburring processes

**Optional tool change system** for the automatic exchange of different deburring tools

**Adjustable rigidity of the tool via compressed air** for flexible use and ideal results with different materials

**Lock function for the Y axis** for an oscillating compensation only in the X-axis

**Versatile use** by using different deburring tools such as knives, scrapers and countersinks



Sizes  
Quantity: 1



Max. radial  
compensation force  
76 N



Max. axial  
compensation force  
67 N



Compensation Z  
8 mm

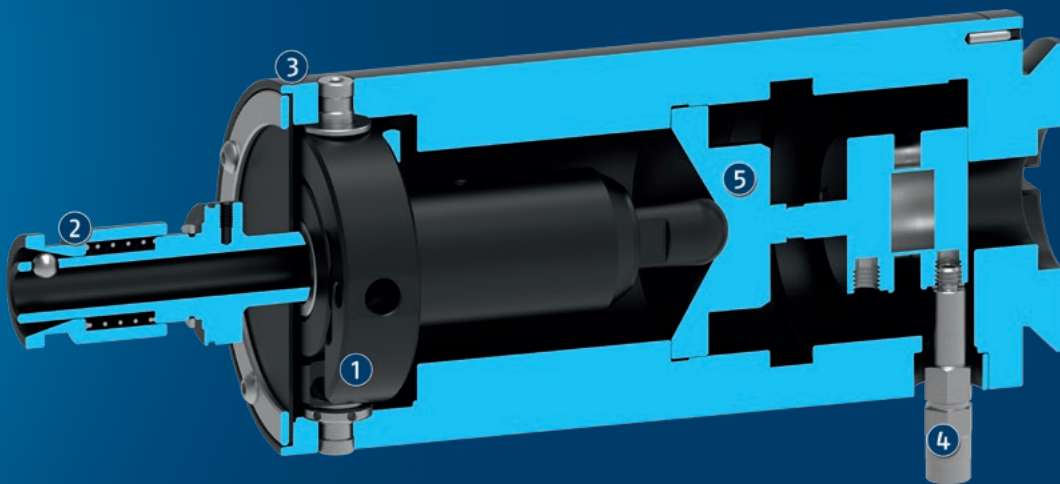


Compensation  
angle, radial  
 $\pm 5.5^\circ$

## Functional description

The deburring tool has a radial compensation in direction of the X,Y-axis, as well as an axial compensation along the Z axis. Optionally, the compensation of the Y-axis can be fixed with a set screw, so that an oscillating compensation in the X-axis is possible. The compensation force can be

flexibly adjusted by means of compressed air. The quick-release fastener can be used for easily exchanging standard blade holders together with the deburring tools. When using the automatic tool change with a storage module, this can be done quickly and automatically.



- ① **Gimballed system**  
for robust and flexible absorption of forces and moments
- ② **Tool mounting with quick-release fastener**  
for simple and fast exchange of deburring tools

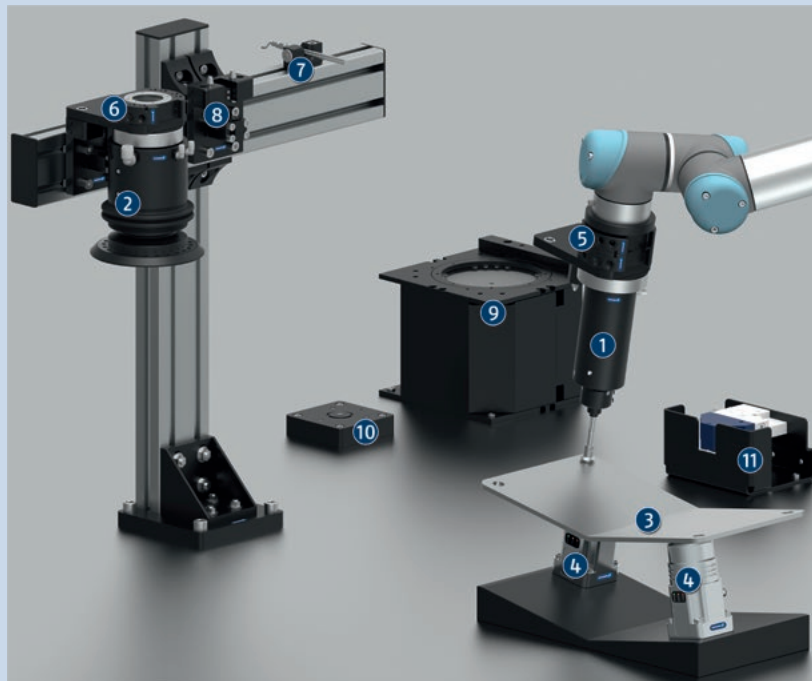
- ③ **Locking function for Y axis**  
for an oscillating compensation in the X-axis
- ④ **Air connection**  
for adjusting the contact pressure to the workpiece
- ⑤ **Reset mechanism**  
for centering the unit

## General notes about the series

**Mounting:** on the robot arm or as a stationary unit

**Warranty:** 24 months

**Ambient conditions:** Please note that the unit is not suitable for use in an area where coolants or cutting fluids are present.



## Application example

Robot-guided deburring metal sheets with automatic tool change system for different contours with one deburring blade and one counterbore.

- |                            |                                   |
|----------------------------|-----------------------------------|
| ① Deburring tool CDB       | ⑦ Tool stand module CDB           |
| ② Orbital Sander Tool A0V  | ⑧ Mounting module pin and bushing |
| ③ Workpiece                | ⑨ Washer rack                     |
| ④ Magnetic gripper EMH     | ⑩ Washer presence detector        |
| ⑤ Quick-change system SWS  | ⑪ Washer remover                  |
| ⑥ Quick-change adapter SWA |                                   |

## SCHUNK offers more ...

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



Quick change system



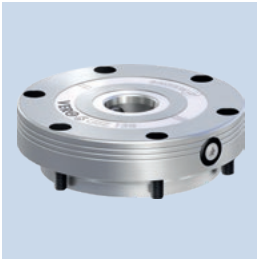
Manual change system



Force/torque sensor



2-finger parallel gripper



Quick-change Pallet System



Clamping force block



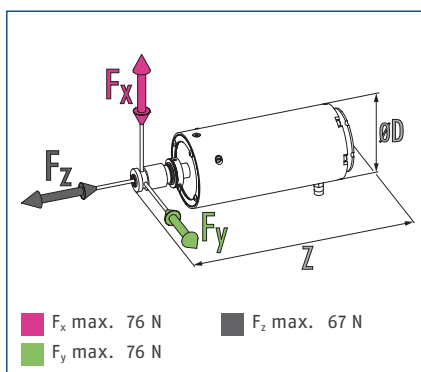
2-finger small components gripper



3-Finger Centric Gripper

① For more information on these products can be found on the following product pages or at [schunk.com](http://schunk.com). Please contact us: SCHUNK technical hotline +49-7133-103-2696

### Dimensions and maximum loads

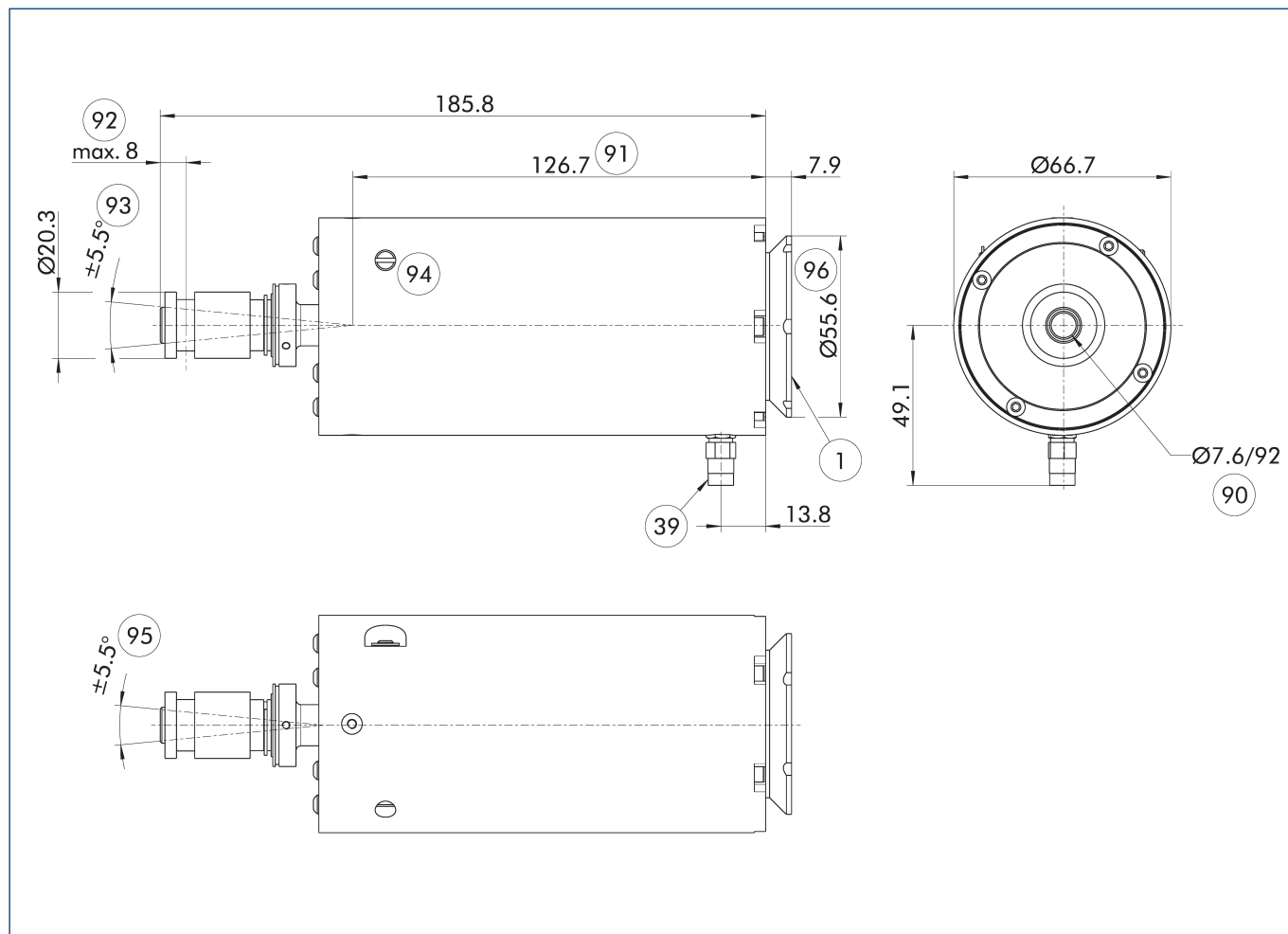


① The indicated forces show the maximum payload.

### Technical data

Description		CDB-8-11-0	CDB-8-11-ATC
ID		1421055	1435108
Max. compensation angle X	[°]	±5.5	±5.5
Max. compensation angle Y	[°]	±5.5	±5.5
Compensation Z	[mm]	8	8
Weight	[kg]	1.04	1.09
Air connection hose		4 mm	4 mm
Tool holder		Blade holder for deburring tool types C, D, E, and F	Blade holder for deburring tool types C, D, E, and F
Tool change		manual	Automatic
Axis fixation		integrated	integrated
Min./max. radial compensation force	[N]	25/76	25/76
Min./max. axial compensation force	[N]	13/67	13/67
Min./max. compensation pressure	[bar]	0.7/4.1	0.7/4.1
Dimensions Ø D x Z	[mm]	66.7 x 193.7	66.7 x 193.7

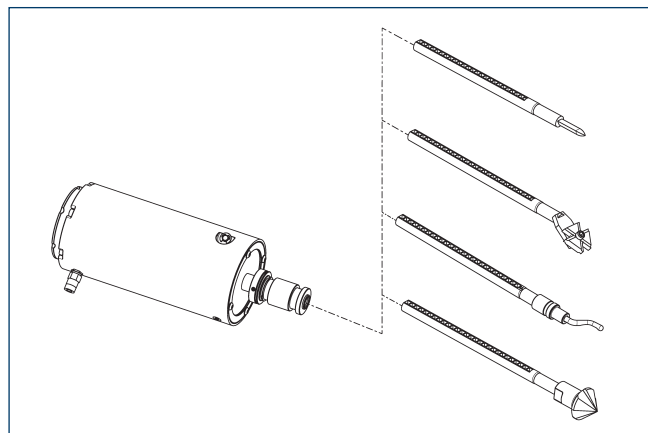
## Main view



The main view shows the unit in its basic version.

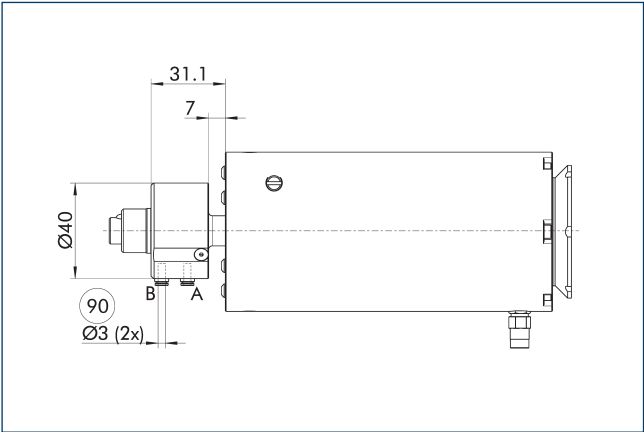
- |                                |  |
|--------------------------------|--|
| ① Robot-side connection        | ⑨③ max. radial compensation (x axis)           |
| ③⑨ Compensation air connection | ⑨④ Locking function for Y axis                 |
| ⑨① Tool holder                 | ⑨⑤ max. radial compensation (y axis, lockable) |
| ⑨② Pivot                       | ⑨⑥ axial mounting option                       |
| ⑨② Max. axial compensation     |  |

## Blade holder for deburring tool types C, D, E, and F



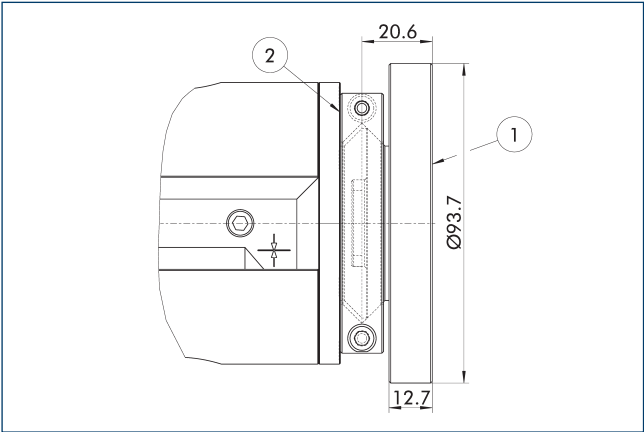
① Diese Darstellung illustriert lediglich mögliche Entgratwerkzeuge die mit dem Produkt CDB verwendet werden können. Die Klingenhalter sind nicht Teil des Lieferumfangs.

Automatic tool changer ATC



A, a Air connection locked  
B, b Air connection unlocked  
Variant with automatic tool change. The dimensional differences to the basic version are shown.

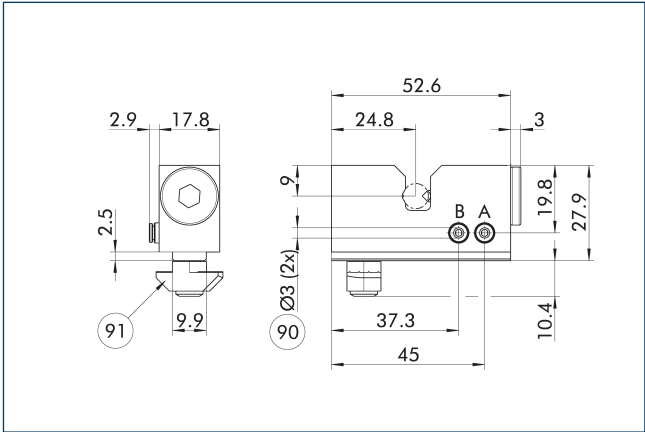
Adapter plates axial



1 Robot-side connection  
2 Tool-side connection

Description	ID	Height
		[mm]
Adapter plate		
A-CDB/FDB-1XX/3XX-Blank	0322210	20.6
A-CDB/FDB-1XX/3XX-ISO-A050	1411542	20.6
A-CDB/FDB-1XX/3XX-ISO-A31.5	1411562	20.6

Storage module for automatic tool change



A, a Air connection locked  
B, b Air connection unlocked  
90 Hose diameter  
91 T-nut

Storage module for depositing deburring tools

Description	ID	
Storage module		
CDB-M-ATC-Holder	1435106	





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Jens Lehmann, German goalkeeper legend, SCHUNK brand ambassador since 2012 for  
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