



# **Mounting Cross DEMO-MOUNTING-CROSS, Mounting Profile DEMO-MOUNTING-PROFILE**

User manual



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# Mounting cross

## About the user manual

The purpose of this user manual is to assist the user become acquainted with the mounting cross DEMO-MOUNTING-CROSS and the mounting profile DEMO-MOUNTING-PROFILE and use them for the intended purpose.

This user manual describes installation and use and is intended to help in:

- avoiding hazards
- increasing the reliability and service life of the device.

This user manual is part of the device and contains important information.

It is only valid for the mounting cross DEMO-MOUNTING-CROSS and the mounting profile DEMO-MOUNTING-PROFILE.

## Symbols

The warning and hazard symbols are defined along the lines of ANSI Z535.6–2006.

### NOTICE

In case of non-compliance, damage or malfunctions in the product or the adjacent construction will occur. <

### Note

There follows additional or more detailed information that must be observed.

## Availability

This user manual is supplied with each device and can also be ordered retrospectively.

### Note

If the user manual is absent, incomplete or illegible, the user may lack important information relating to safe use of the device and this may lead to incorrect usage. It must be ensured that this user manual is always complete and legible and that any persons using the device have the user manual available.

## Legal guidelines

The information in this manual corresponded to the most recent status at the close of editing. The illustrations and descriptions cannot be used as grounds for any claims relating to devices that have already been delivered. Schaeffler Technologies AG & Co. KG accepts no liability for any damage or malfunctions if the device or accessories have been modified or used in an inappropriate manner.

## Original user manual

This user manual is the original user manual.

## General safety guidelines

### Product safety

Our products correspond to the current level of research and technology. If the products are handled and used correctly and if they are maintained as instructed, they do not give rise to any direct hazards.

Schaeffler Technologies AG & Co. KG accepts no liability for any damage that arises as a result of incorrect handling or incorrect use that does not correspond to the purpose described.

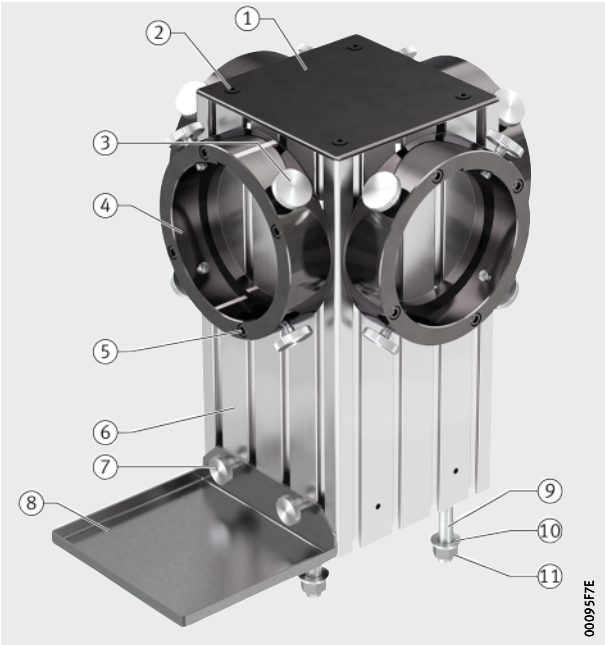
**Scope of delivery**

Check the scope of delivery immediately upon receipt for completeness and apparent intactness.

**Mounting cross  
DEMO-MOUNTING-CROSS**

The scope of delivery of the mounting cross DEMO-MOUNTING-CROSS is shown in *Figure 1*.

- ① Cover plate
- ② Countersunk head screw
- ③ Knurled screw M8×25
- ④ Flange
- ⑤ Head cap screw M6×45
- ⑥ Aluminium profile
- ⑦ Knurled screw M6×10
- ⑧ Oil drip tray
- ⑨ Threaded rod
- ⑩ Support washer
- ⑪ Hexagon nut



*Figure 1*  
Scope of delivery  
DEMO-MOUNTING-CROSS

**Scope of delivery  
DEMO-MOUNTING-CROSS**

No.	Designation	Quantity
1	Cover plate	1
2	Countersunk head screw	4
3	Knurled screw M8×25	16
4	Flange	4
5	Head cap screw M6×45	16
6	Aluminium profile	1
7	Knurled screw M6×10	2
8	Oil drip tray	1
9	Threaded rod	4
10	Support washer	4
11	Hexagon nut	4
12	T-nut	16

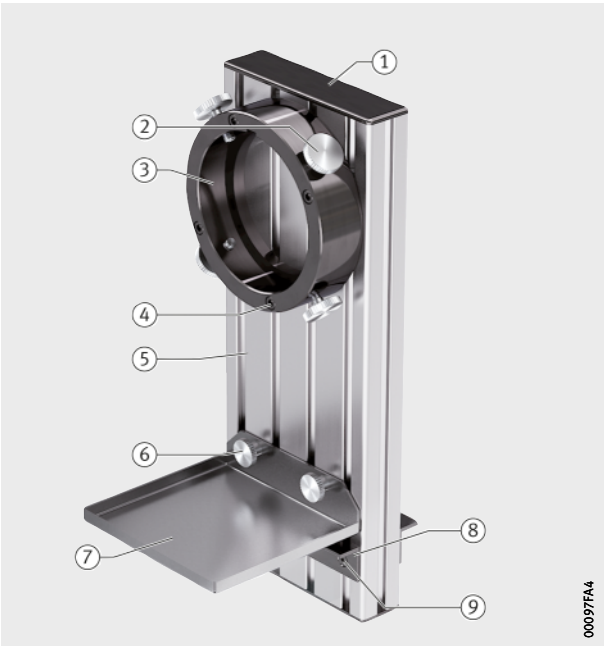
# Mounting cross

## Mounting profile DEMO-MOUNTING-PROFILE

The scope of delivery of the mounting profile DEMO-MOUNTING-PROFILE is shown in *Figure 2*.

- ① Cover plate
- ② Knurled screw M8×25
- ③ Flange
- ④ Head cap screw M6×45
- ⑤ Aluminium profile
- ⑥ Knurled screw M6×10
- ⑦ Oil drip tray
- ⑧ Bracket
- ⑨ Countersunk head screw

*Figure 2*  
Scope of delivery  
DEMO-MOUNTING-PROFILE



### Scope of delivery DEMO-MOUNTING-PROFILE

No.	Designation	Quantity
1	Cover plate	1
2	Knurled screw M8×25	4
3	Flange	1
4	Head cap screw M6×45	4
5	Aluminium profile	1
6	Knurled screw M6×10	2
7	Oil drip tray	1
8	Bracket	4
9	Countersunk head screw M5×12	2
10	T-nut	4

<b>Description</b>	<p>The mounting cross and its mobile variant the mounting profile have been developed by Schaeffler for carrying out professional training courses on the correct mounting and dismounting of rolling bearings. This piece of equipment allows the skilled trainer to communicate the correct handling procedure visually and under realistic conditions for a large number of different bearing types. The degree of difficulty corresponds to the basic training of persons who work on a regular basis with rolling bearings.</p> <p>The mounting cross is of a modular structure and can be supplemented and expanded by a large number of different exercise sets. Each one of the exercise sets contains the bearings, adjacent parts and tools required. Mechanical, thermal and hydraulic methods are communicated. The training documents enclosed give precise explanations of the correct procedure and the correct use of bearings and tools. The necessary safety measures and alternative procedures are also explained.</p>
<b>Function</b>	<p>Flanges are attached using T-nuts to the relevant aluminium profile, which acts as a base frame. These can be set at any position within the height of the aluminium profile. The flanges are used, in combination with special adapters, to accommodate the exercise shafts.</p> <p>While the DEMO-MOUNTING-CROSS is normally used as a static unit, the DEMO-MOUNTING-PROFILE offers more flexibility, since it can be clamped in any conventional vice.</p>
<b>Transport and storage</b>	<p>Specially adapted transport cases with foam inlays are available both for the mounting cross and for the mounting profile. In order to keep the mounting cross stable during exercises, it must be firmly mounted on a table.</p> <p>When the two training devices are not in use, they should be protected against contamination and dust by means of a cover.</p>

# Mounting cross

## Mounting

### Mounting cross DEMO-MOUNTING-CROSS

The mounting cross with the four threaded rods, which must at the start be screwed into the profile, is mounted by means of the threaded rods and four hexagon nuts M12 on a roller table which is available as an option.

The following options are available:

- open roller table DEMO-MOUNTING-CROSS.TABLE or
- tool cabinet with drawers DEMO-MOUNTING.TOOL-CABINET in which the necessary standard tools DEMO-MOUNTING-BASIC-TOOLS can be neatly stored, *Figure 3*.

Further information on roller tables: see *table Accessories and spare parts*, page 10.

In addition, the mounting cross can be fixed to any workbench or other tables. In order to ensure precise positioning of the holes required on the table, a hole template is included in the appendices to help in marking and drilling.



*Figure 3*  
Mounting cross  
DEMO-MOUNTING-CROSS  
on a tool cabinet



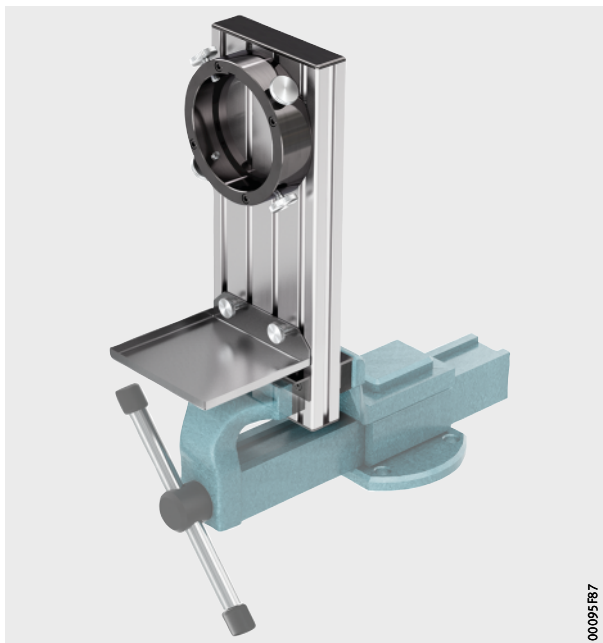
- Mounting on a table** Mount the mounting cross DEMO-MOUNTING-CROSS on a table as follows:
- ▶ Measure and mark the centre point of the table top.
  - ▶ Lay down the hole template and mark the position of the mounting holes.
  - ▶ Drill holes of diameter 13,5 mm, with predrilling if necessary.
  - ▶ Fix the mounting cross DEMO-MOUNTING-CROSS to the table top to screw wrench tightness with the aid of the threaded rods and the hexagon nuts with support washers. The threaded rods should project from the aluminium profile by at least 1,5 times the thickness of the table top.
  - ▶ Fix the oil tray to the front face with the aid of the two knurled screws M6×10.
  - ▶ Screw the table top with the unit to the table frame, if present.
- Alternatively, the mounting cross DEMO-MOUNTING-CROSS can also be fixed to the mounting plate DEMO-MOUNTING-CROSS.PLATE. This mounting plate is an aluminium plate to which suction cups are fixed and thus offers more flexibility, since it can be fixed to any flat, smooth surface.

- Mounting by means of mounting plate** Mount the mounting cross DEMO-MOUNTING-CROSS on the mounting plate as follows:
- ▶ Mount the suckers on the aluminium plate.
  - ▶ Replace the threaded rods included in the mounting plate DEMO-MOUNTING-CROSS.PLATE by the threaded rods already screwed into the mounting cross DEMO-MOUNTING-CROSS and screw them into place.
  - ▶ Fix the mounting cross DEMO-MOUNTING-CROSS to the aluminium plate to screw wrench tightness using the hexagon nuts with support washers.
  - ▶ Place the unit on a smooth surface.
  - ▶ Turn the toggle levers on the suckers.

## Mounting cross

### Mounting profile DEMO-MOUNTING-PROFILE

Although only one flange can be attached to the mounting profile DEMO-MOUNTING-PROFILE, it offers a high degree of flexibility and transportability. The profile can be clamped very easily in any conventional vice with the aid of the bracket.



*Figure 4*  
Mounting profile  
DEMO-MOUNTING-PROFILE

The brackets are, like the flange, fixed by means of T-nuts that can also be set at any height. When clamping the brackets, it must be ensured that these are straight and at the same height as the topsides of the clamping jaws, since these also act to prevent rotation.

The oil tray is mounted in the same way as in the case of the mounting cross DEMO-MOUNTING-CROSS.

## **Maintenance**

### **General guidelines**

Regular maintenance will extend the product life cycle of the training equipment. In order to ensure that the movable parts can move easily and to minimise wear, it should be ensured that the tracks for the T-nuts and all threads are cleaned and oiled at regular intervals.

Bright metal surfaces should be cleaned after each use and preserved by means of ARCANOL-ANTICORROSIONOIL.

When the training device is not in use, it should be protected against contamination and dust by means of a cover.

### **Disposal**

In order to prevent environmental contamination, disposal of the mounting cross DEMO-MOUNTING-CROSS and the mounting profile DEMO-MOUNTING-PROFILE must be carried out in accordance with the directives of the relevant country of use.

Components that are defective and cannot be repaired must be disposed of by environmentally acceptable methods.

All materials used (plastics, metals) must be fed separately to recycling facilities.

Grease-soaked materials must be disposed of by environmentally acceptable methods.

# Mounting cross

## Accessories

### Accessories and spare parts

Designation	Ordering designation	Order no.
Transport case for mounting cross	DEMO-MOUNTING-CROSS. CASE	087283980-0000-10
Base plate for mobile demonstrations using mounting cross	DEMO-MOUNTING-CROSS. PLATE	087284022-0000-10
Roller table for mounting cross	DEMO-MOUNTING-CROSS. TABLE	087284049-0000-10
Tool cabinet with drawer for mounting cross	DEMO-MOUNTING.TOOL-CABINET	087263220-0000-10
Transport case for mounting profile	DEMO-MOUNTING-PROFILE. CASE	087284588-0000-10
Basic tool for all mounting exercises	DEMO-MOUNTING-BASICTOOLS	087252740-0000-10
Transport case for basic tool	DEMO-MOUNTING-BASICTOOLS. CASE	087284219-0000-10
Adapter for retrofitting of existing shafts	DEMO-MOUNTING.ADAPTER	087079410-0000-10
Mounting exercise set 1	DEMO-MOUNTING.TASK-1	087284634-0000-10
Mounting exercise set 2	DEMO-MOUNTING.TASK-2	087288508-0000-10
Mounting exercise set 3	DEMO-MOUNTING.TASK-3	087288966-0000-10
Mounting exercise set 4	DEMO-MOUNTING.TASK-4	087289008-0000-10
Mounting exercise set 5	DEMO-MOUNTING.TASK-5	087289059-0000-10
Mounting exercise set 6	DEMO-MOUNTING.TASK-6	087289199-0000-10
Mounting exercise set 8	DEMO-MOUNTING.TASK-8	087289245-0000-10



Figure 5  
Various transport cases

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### Drilling template for mounting cross

The marking and drilling of the required holes on the table is made easier by the drilling template, *Figure 6*.

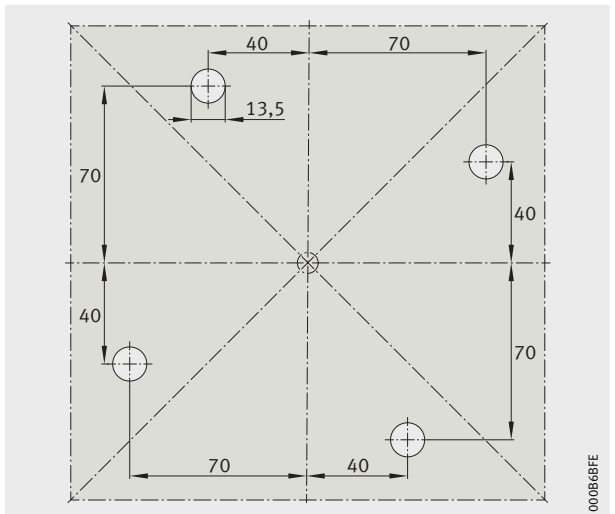


Figure 6  
Drilling template

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