

## Instructions for use

Rotor A-4-81, Rotor A-4-81-MTP/Flex

English (EN)

This document supplements the operation manual of Centrifuge 5810/5810 R and does not replace it. Therefore, please also read the operating manual before starting up the rotors for the first time. You can find the current version on the Internet at

[www.eppendorf.com/worldwide](http://www.eppendorf.com/worldwide).

## 1 Product description

### 1.1 Features

The rotor A-4-81, A-4-81-MTP/Flex is a swing-bucket rotor for the Centrifuge 5810/5810 R. The rotor has a maximum capacity of 4 × 500 mL.

## 2 Safety

### 2.1 Warnings for intended use



#### **CAUTION! Risk of injury from asymmetric loading of rotors.**

- ▶ Load rotors symmetrically with identical tubes and/or buckets and plates.
- ▶ Only load adapters with suitable tubes or plates.
- ▶ Always use the same type of tubes and plates (weight, material/density and volume). Always observe the max. g-force of the tubes and plates as indicated by the manufacturer.
- ▶ Check that loading is symmetrical by balancing the adapters and tubes and/or plates used with scales.



#### **NOTICE! If handled incorrectly, the rotor can fall over.**

The buckets of the rotor may not be used as a handle.

- ▶ Before moving the rotor, remove the buckets.
- ▶ Always grip the rotor on the rotor cross using both hands.

## 3 Operation



Observe the instructions in the operating manual of the centrifuge on inserting the rotor and loading the buckets symmetrically as well as for information on the max. load per bucket and the max. loading height/tube length for the buckets.

### 3.1 Inserting the rotor

- ▶ Use the supplied rotor key for the rotor A-4-81/A-4-81-MTP/Flex.

### 3.2 Loading the swing-bucket rotor

- ▶ Use the rotor, bucket and adapter combinations approved by Eppendorf.
- ▶ Check the grooves in the buckets for cleanliness. Lightly lubricate the grooves with pivot grease.
- ▶ Check that all buckets have been fully attached and can swing out freely.

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### 3.2.1 Loading the rectangular bucket

- ▶ Insert the adapters into the rectangular bucket with the black clamp facing the "Eppendorf" logo on the bucket.
- ▶ For tubes with a length of more than 100 mm perform a manual swing-out test with empty tubes.  
The tubes must not come into contact with the rotor cross.

### 3.2.2 Loading the plate buckets

- ▶ Observe the maximum load and the maximum height when using stacked plates.

## 4 Maintenance

### 4.1 Cleaning

- All buckets, buckets, caps and adapters can be autoclaved (121°C, 20 min).
- The rotor cross is not autoclavable.
- ▶ Clean the rotor and accessories with a mild cleaning agent.

## 5 Technical data

	<b>Rectangular bucket 500 mL</b>	<b>Bucket for conical tubes 7 × 50 mL</b>	<b>MTP/Flex bucket</b>
Max. <i>g</i> -force (rcf)	3 220 × <i>g</i>	3 220 × <i>g</i>	2 900 × <i>g</i>
Max. speed (rpm)	4 000 rpm	4 000 rpm	4 000 rpm
Max. load per bucket (adapter, vessel and content)	780 g	7 × 75 g	380 g
Max. centrifugation radius	18 cm	18 cm	16.3 cm
Max. loading height/ vessel length	Please note the data in the operating manual of the centrifuge.		60 mm