

## USER'S MANUAL

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### Rotational arms **RO**

**EN**



The user's manual is valid for the following device models:

Catalog No.	Product name
811R16	RO-1,5-E-L/X
811R17	RO-2,5-E-L/X
811R21	RO-4-E-L/X
811R22	RO-2,5-E-L/Y
811R23	RO-4-E-L/Y

User's manual – title: „Rotational arms RO”



Just reliably

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Gdynia 2023-06-26

Date of publication: **2023-06-26**  
Number of pages: 12

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## 1. INTRODUCTION

The purpose of the present manual is to supply the User with directions within the range of application, installation, start-up and the use of the **RO extension arms**.

It contains instructions on the application, start-up and operation of the above-mentioned products. **That is why, before starting to assemble the device at the workplace and before starting it, read this manual carefully.**

Due to the constant improvement of its products, the manufacturer reserves the right to make structural changes, the purpose of which is to increase the usability and safety of the device. In case of finding a faulty operation of the suction arm, please contact the manufacturer or its authorized representative. The construction of rotary arms type **RO** meets the requirements of the current level of technology and ensures safety and health.

### INFORMATION



Due to the constant improvement of its products, the manufacturer reserves the right to make design changes aimed at increasing the usability and safety of use.

### CAUTION!

**PLEASE READ THIS MANUAL BEFORE USING THE DEVICE!**

**KEEP THE USER'S MANUAL FOR THE FUTURE!**

## 2. NAME AND ADDRESS OF THE MANUFACTURER

Any requests for information or repair work or questions regarding the technical aspects of this document should be addressed to:

**KLIMAWENT S.A.**  
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### 3. APPLICATION

Rotational arms increase the working range of the hanging **ERGO** extraction arms attached to them. In the basic version, the **ERGO** extraction arm is mounted (at the end of the extraction arm). In the "broken" version, the **ERGO** arm is attached to the end of a set consisting of two extension arms.

### 4. RESERVATIONS OF PRODUCER

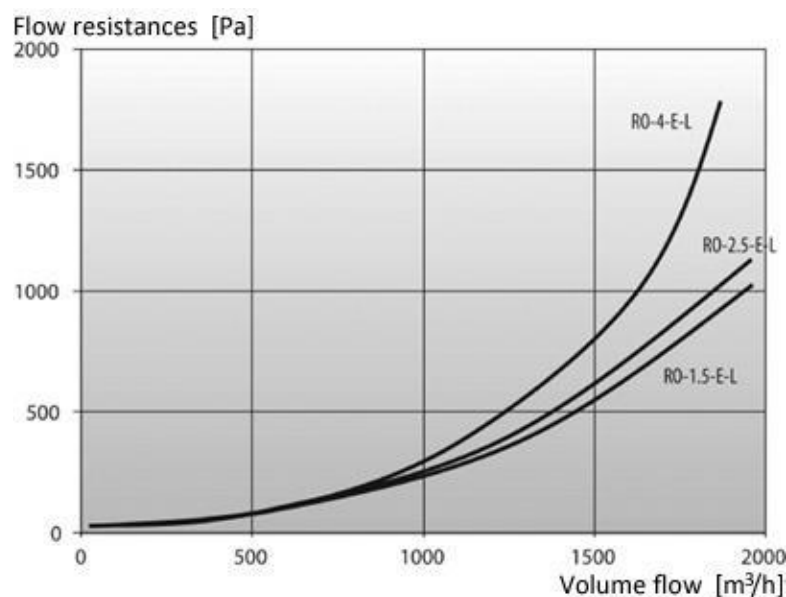
1. The manufacturer is not responsible for the consequences resulting from the non-intended use of the device.
2. It is unacceptable to install additional elements on the device that are not included in its composition or equipment.
3. Unauthorized alterations and modifications of the device are not allowed.
4. Before installing, it is important to examine the load-carrying capacity of the building structure, at points where the appliance shall be installed.
5. Unsure mounting might result in uncontrolled device detachment and hazard to operators/people in the vicinity.

### 5. TECHNICAL DATA

Table 1

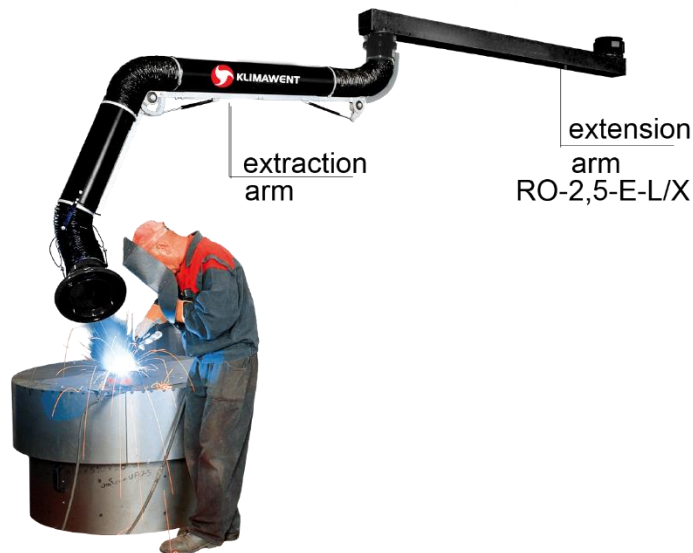
Type	Part no.	Connection diameter [mm]	Weight [kg]	Maximum torque M [Nm]
RO-1,5-E-L/X	811R16	160	46	1400
RO-2,5-E-L/X	811R17	160	51	1700
RO-4-E-L/X	811R22	160	84	3100
RO-2,5-E-L/Y	811R21	160	68	4400
RO-4-E-L/Y	811R23	160	98	6400

**CAUTION:** Before installing check if the load-carrying capacity of the wall (or another structural element of the building) is sufficient to take the torque M. Additionally, it is important to select suitable mounting bolts.



## 6. STRUCTURE AND FUNCTION

The rotating arm is made of a bearing swivel, connected to a sheet metal ventilation duct with a rectangular cross-section. **RO-L/X** extension arms of 1,5m and 2,5m operational range are equipped with swivels of cast aluminium rings in roller bearings, whereas other extension arms have steel swivels in slide bearings. The movement resistances are very minimal, therefore it is easy to manoeuvre and set the arm into a convenient operational position.



*Picture 1 A set of arms in the basic version*



*Picture 2 A set of arms in a "broken" version*

## 7. ASSEMBLY AND START-UP

Before installing the extension arm in the facility, you should:

- 1) Examine the load-carrying capacity of the constructional elements of the building, where the **RO** extension arm shall be installed,
- 2) Prepare the necessary constructional elements connected with the building structure within the screw connection points of the mounting plate (of the wall bracket).

The diameter, hole pattern and quantity of holes for the bolts, as well as the diameters of mounting bolts of the mounting plate of **RO** extension arms, are given in the attached drawing.

When assembling, pay attention to the vertical position of the mounting plate. In case they deviate from verticality– the arm will tend to set always into the same position.

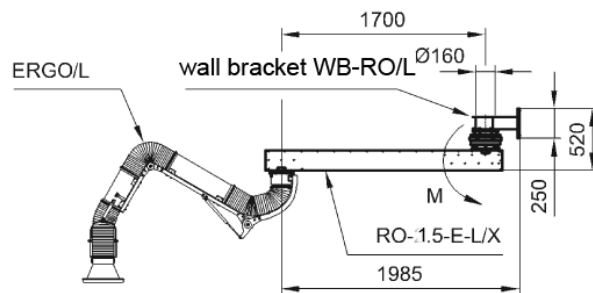
The swivel construction provides:

- installing the extraction fan,
- connection to the ventilation discharge ducting.

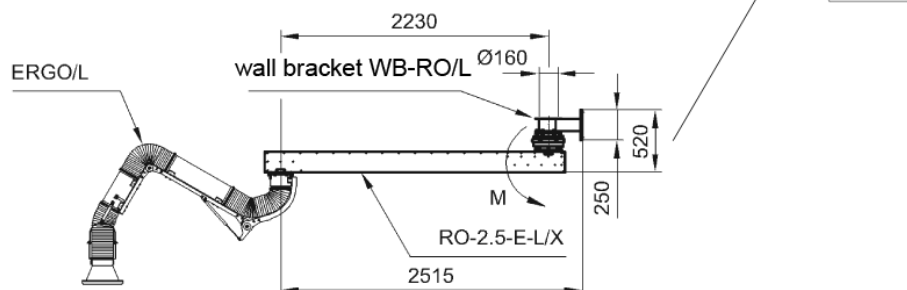
### Extension arms type **RO-E-L/X**

**RO-E-L/X** extension arms are designed for attachment of the **ERGO-L** extraction arm at its free end. The extension arm should be installed to the wall using a **WB-RO/L** wall bracket (in case of extension arms **RO-1,5-E-L/X** and **RO-2,5-E-L/X**) or directly to the wall (**RO-4-E-L/X**).

Extension arm **RO-1.5-E-L/X**

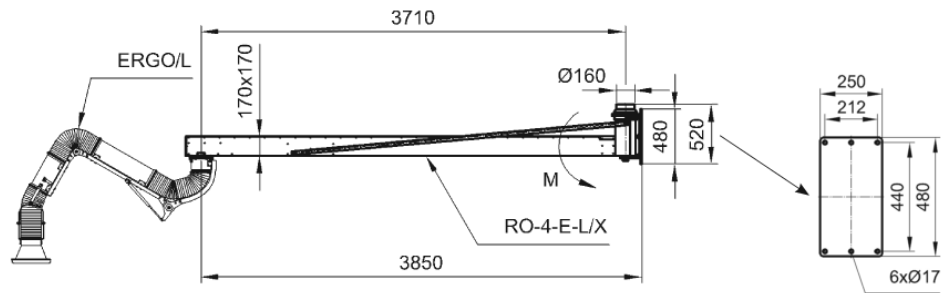


Extension arm **RO-2.5-E-L/X**



**CAUTION:** The wall bracket is not standard equipment for the arm, so it should be ordered separately.

## Extension arm RO-4-E-L/X



Picture 3

## 8. OPERATIONAL USE

### Before start-up:

- Check that the arm rotates without resistance and that it does not change automatically after stopping in a certain position.
- Set the rotary arm in the most convenient position for work at the station, and at the same time not create any obstacles to movement and observation of the work area.

### After the work is completed:

- Leave the device in its current position. If this position obstructs operators/people in the vicinity, set the extension arm and the extraction arm into a standstill position.

## 9. TROUBLESHOOTING GUIDE

Table 2

Problem	Possible reason	Counter-measures
The extension arm sets automatically in one position.	The swivel is not positioned exactly vertically.	Set the swivel into vertical position by levelling the mounting plate of the device.
The extension arm is rotating with high resistances or with too low resistances.	Incorrectly adjusted swivel.	Tighten up or release the adjustment nuts.

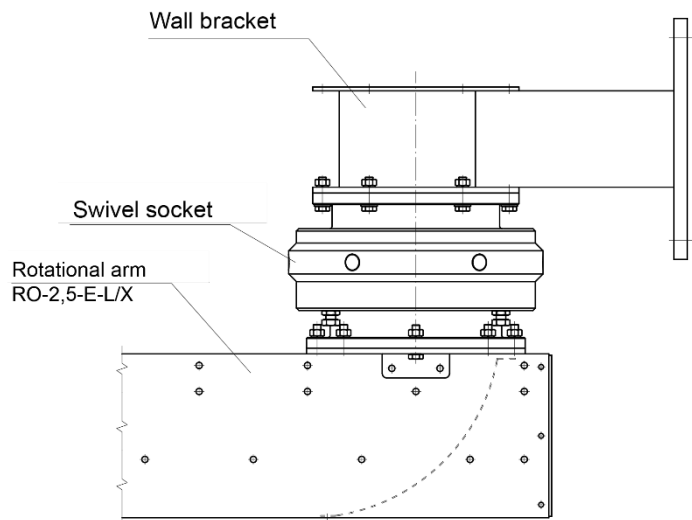


## 10. MAINTENANCE

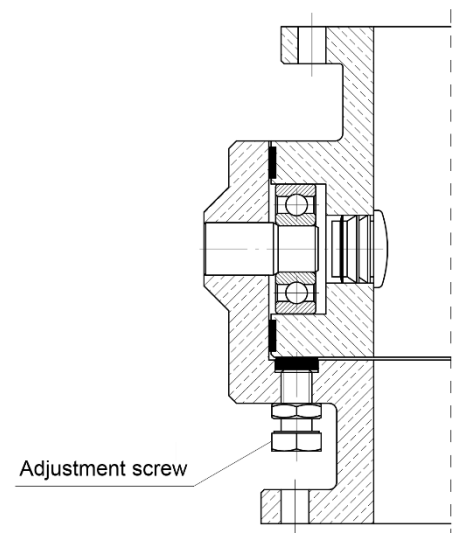
### Swivel with the bracket

The swivel of the RO-2,5-E-L/X arm does not require lubrication. Its design allows it to work unattended for a long time. It is recommended to adjust every 12 months or when you feel the swivel has loosened a bit when manipulating it up and down.

To do this, adjust the loosened swivel, by turning the adjustment screws mounted on the perimeter of the fixed sleeve. This operation should be performed alternately (Picture. 4a and 4b).



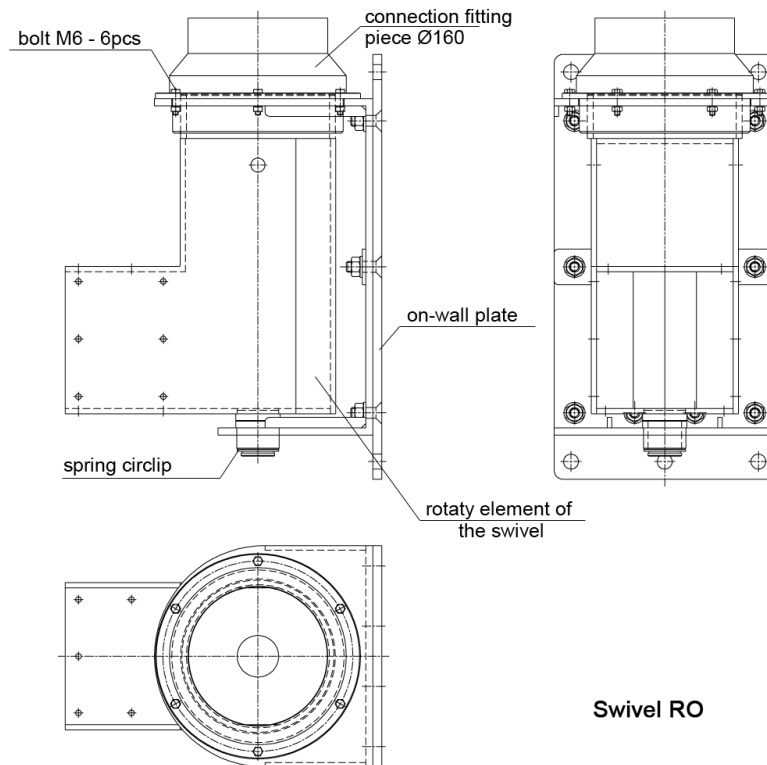
**Picture 4a** Rotational arm with wall bracket



**Picture 4b** Swivel socket – adjustment

## Swivel RO

The design of the RO rotary arm allows operation without constant maintenance. Periodic maintenance inspections are recommended every 6 months. As part of the maintenance inspection, clean the arm of dust and other impurities and check the screw connections.



**Picture 5**

## 11. OCCUPATIONAL HEALTH AND SAFETY

Start-up and maintenance are exclusively possible after getting acquainted with the contents of the present Use and Maintenance Manual.

1. Rotary arms type RO does not pose any special threats from the point of view of safety, provided that the arm is properly and permanently attached to the wall of the room or other structural elements of the building. If the device is not securely fastened there is a risk of it breaking off, which may cause a serious threat to the safety of operators/people in the vicinity.
2. It is forbidden to load the rotating arm with additional forces.
3. After finishing the operation of the device, it should be placed in such a position that it does not obstruct movement and does not create obstacles and threats to other employees or users in the vicinity (in the process room).
4. When using the device, the general regulations regarding occupational health and safety should be used properly.



## 12. TRANSPORT AND STORAGE

RO extension arms ought to be stored and transported in their packages. Store them in dry rooms with efficient ventilation.

During the transport and reloading pay attention that no damage, scratching, or indents occur to the device.

Transport and reloading should be carried out in a way that eliminates damage, scratches, and dents of the devices themselves, as well as damage to the packaging or blurring of markings on it.

## 13. TERMS OF WARRANTY

The manufacturer provides a 12-month warranty from the date of purchase of the device.

The warranty does not cover:

- a device used contrary to its intended use,
- mechanical damage caused by the user,
- unauthorized modifications and adaptations of the device,
- damage due to improper storage or improper maintenance

Failure to comply with point 3. "Reservations of producer" of this manual, and especially unauthorised of the device or its use contrary to its intended purpose, results in the loss of the warranty.

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