

## MoveTronic

Electric folding sliding shutter



### Installation instructions

INSTALLATION BY  
SPECIALIST PERSONNEL  
Valid from 10.2022

E 672.1

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## Notes

These installation instructions describe the installation and commissioning of the EHRET MoveTronic electric folding sliding shutter.

Carefully read through these installation instructions prior to commissioning. Observe the specified process steps and take into account the notes and recommendations given.

Knowledge of and technically impeccable implementation of the given safety notes and warnings are prerequisites for safe and proper operation of the EHRET MoveTronic. Insufficient knowledge at the time of commissioning and utilisation lead to the loss of any liability claims against EHRET GmbH.

These installation instructions are a component part of the product and are therefore always to be retained until the product is disposed of. These installation instructions are to be passed along in the event of the sale of this product.

These installation instructions are addressed to qualified specialist personnel. Qualified specialist personnel are persons who are familiar with the transport, set-up, installation, commissioning and operation of the product and who have appropriate qualifications for their work. Specialist personnel must know and observe the relevant standards and/or guidelines.

This product complies with the general rules of technology. Safety-conscious behaviour is necessary for commissioning the product safely. For this reason, observe the following notes.

- 
- ▶ *Remove all packaging and protective materials before assembly!*
  - ▶ *Remove the labels stuck to the shutters after installation!*
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Should any of the information in these installation instructions not be absolutely clear, it is essential that you contact the specialist personnel at EHRET GmbH, 77972 Mahlberg (Germany).

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# Contents

Notes . . . . .	2
Explanation of signs and symbols . . . . .	4
Safety notes . . . . .	4
<b>CE</b> EC Declaration of Conformity . . . . .	6
<b>1 Product description</b>	
Product properties . . . . .	7
Technical data . . . . .	7
Scope of delivery . . . . .	8
Tools required . . . . .	9
<b>2 Installation instructions</b>	
Preparation . . . . .	10
Vorbereitung . . . . .	10
Mounting type 1: Header installation . . . . .	11
Mounting type 2: Façade mounting . . . . .	11
Installation of the drive . . . . .	12
Mounting the guide rail . . . . .	12
Preparing the sash . . . . .	14
Hook in the first sash . . . . .	14
Hooking in the sash package . . . . .	15
Hooking in the last sash . . . . .	16
Inserting the coupling profile . . . . .	17
<b>3 Operating instructions</b>	
Connection diagram . . . . .	18
Controls . . . . .	19
Teaching in end positions . . . . .	19

## Explanation of signs and symbols

### Warning notes

#### DANGER

- ▶ Designates an immediately pending danger that could lead to death or severe injuries if the respective precautionary measures are not implemented.

#### WARNING

- ▶ Means that death, severe bodily injury or major property damage could occur if the respective precautionary measures are not implemented.

#### CAUTION

- ▶ Means a possibly pending danger that could lead to minor injuries or property damage if it is not avoided.

- ▶ Directives for action

## Safety notes

- ▶ Only qualified specialist personnel may carry out installation and commissioning!

#### WARNING

**Incorrect installation could lead to severe injuries and/or damage to property.**

- ▶ Follow all installation instructions.

#### WARNING

- ▶ Take into account the following notes and warnings in order to avoid dangers and to protect the product.

- ▶ Observe the accident prevention regulations of the Accident Prevention & Insurance Association.
- ▶ Observe the rules of the road during transport.
- ▶ Make sure that the load is well-secured on the means of transport.
- ▶ Take care to ensure that the drives are stored under dry conditions prior to final installation and commissioning.
- ▶ Cordon off a generously large area around the installation site.
- ▶ Observe without limitation the regulations of the manufacturers of dowel and fitting materials.
- ▶ The mounting bases of the installation site are to be checked for load-bearing capacity prior to installation.
- ▶ In the event of uncertainties about the mounting bases, contact your responsible building experts.
- ▶ Electrical work may be carried out only by authorised electricians.

- ▶ The specified connection diagrams are to be observed, as otherwise damage to the motor could occur. EHRET GmbH assumes no liability for damage resulting from incorrect installation.
- ▶ Check the product for damage prior to installation. Products requiring repair may not be used.
- ▶ Do not touch any internal parts of the product that become exposed as the result of damage (e.g. electrical cables/lines).
- ▶ Discontinue operation of your electrical drive at once in the event of smoke or fumes.
- ▶ Do not allow children to play with the operating apparatus of the drives.
- ▶ Electrical/electronic devices are not secure against failure. Make sure that no hazardous situations for personnel or product could arise in the event of a power failure.
- ▶ Devices with electrical controls could go into motion at any time and without warning. Prevent situations hazardous to personnel and product that arise from this fact.
- ▶ No personnel or obstacles are permitted to be within the range of pivoting and/or travelling shutters while they are moving. Keep personnel and objects away until the shutters have reached their final position.
- ▶ Do not reach into moving parts or closing areas while shutters are opening or closing.
- ▶ Make sure that no articles of clothing or body parts are able to be caught by moving parts in the system.
- ▶ Disconnect the drives from the power supply during maintenance work.
- ▶ Ice could form on the product in the event of snowfall, sleet or icy rain. Do not operate equipment until the ice formation is no longer present, and switch automatic controls to manual.
- ▶ Make sure that the shutters are locked before any wind load occurs.
- ▶ The shutters may not be operated at wind speeds from 62 km/h (stormy wind).
- ▶ No additional loads such as persons or objects are permitted to have an effect on the shutters.
- ▶ Shutters are not intended to protect individuals from falls.

### **WARNING**

#### **Danger of injury from the weight of the product!**

- ▶ Due to the weight of the products, transport and installation must be carried out by at least two individuals.

- ▶ Transport the product carefully in order to avoid damage.
- ▶ Take care to ensure that the product is not damaged when the packaging material is removed.

### **WARNING**

#### **Danger of suffocation from packaging foil.**

- ▶ The packaging foil must be kept out of reach of children.
- ▶ Store the foil carefully until you turn it in for recycling.

- ▶ Turn the packaging materials in for recycling.

## CE EC Declaration of Conformity

**The manufacturer:** EHRET GmbH  
Aluminium shutters  
Bahnhofstrasse 14-18  
77972 Mahlberg, Germany

declares that the product: **MoveTronic electric folding sliding shutter**

to which this guideline refers is in conformance with the stipulations of

**Directive 1999/05/EC** Radio equipment and telecommunications terminal equipment

as well as with the following standards:

**EN 301 489-3:2000** Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for radio equipment and services – Part 3: Specific conditions for short-range devices (SRD) operating on frequencies between 9 KHz and 40 GHz

**EN 300 220-3:2000** Electromagnetic compatibility and radio spectrum matters (ERM); Short-range devices (SRD); Radio equipment to be used in the 25 MHz to 1000 MHz frequency range with power levels ranging up to 500 mW – Part 3: Harmonized EN covering essential requirements under Article 3.2 of the R&TTE Directive

**98/37/EC** Machinery Directive

**EN 73/23/EEC** Low Voltage Directive

**EN 60730 + A1 + A2  
+A11 +A12 +A13  
+A14 +A15** Safety requirements for automatic electric regulators and controllers

Name and address of the individual who is authorised to assemble the technical documentation:

Ralf Gielen  
Head of Technology

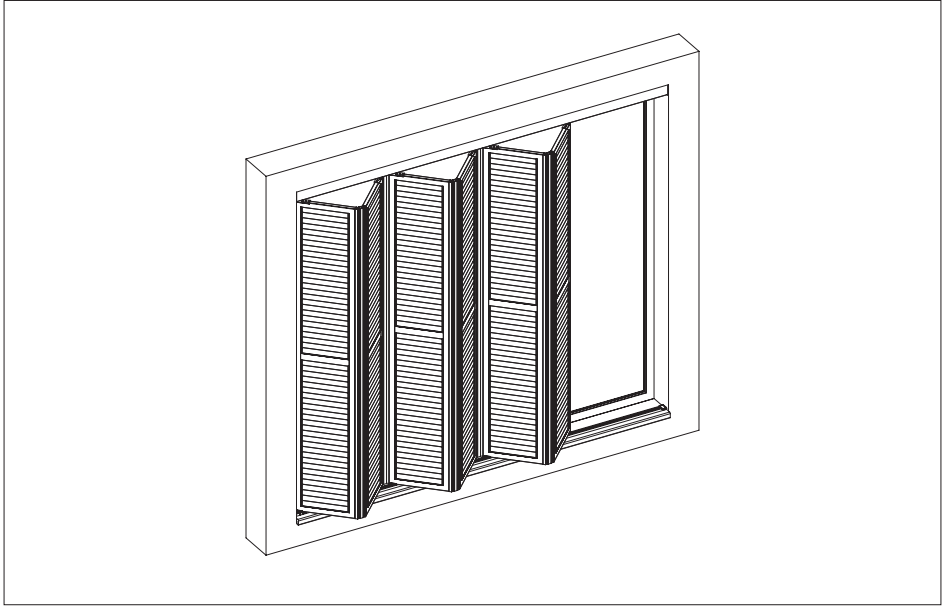
Location: 77972 Mahlberg, Germany  
Date: 01.06.2022



EHRET GmbH  
Eberhard Schopferer  
Management

# 1 Product description

## Product properties



## Technical data

<i>Operating voltage</i>	230 V - 50 HC
<i>Dimensions</i>	1150 to 3430 mm (L) 227 × 94 mm (W × H)
<i>Connection</i>	Cable approx. 0.5 m;
<i>Current 230 V AC:</i>	3-pin Hirschmann- plug STAK 2
<i>Light barrier:</i>	Circular connector TTAF M12
<i>Power consumption</i>	max. 2 × 260 W
<i>Stand-by</i>	< 1 W
<i>Degree of protection</i>	IP 44/IP 55
<i>Operating temperature</i>	–20 °C to +55 °C

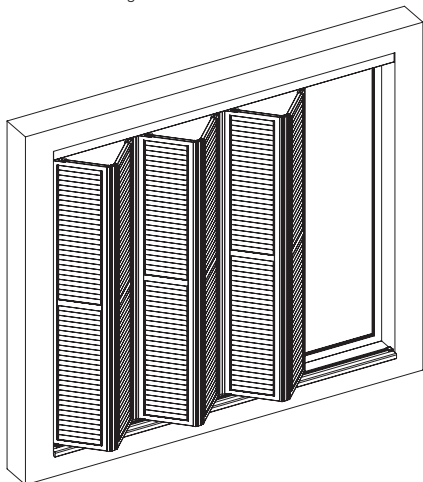
- Drive with integrated controller to activate folding sliding shutters
- Electric drive suitable for 230 V continuous mains operation with control supply line
- Connection cable (approx. 0.5 m) for 230 V power and light barrier
- externally, a wireless pushbutton or wireless hand-held transmitter is required
- also suitable for SmartHome connection
- preset travel speed, protection by light barrier and power shut-off

## Scope of delivery

### MoveTronic

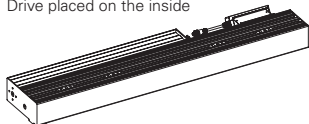
#### Electric folding sliding shutter

Complete with 230 V folding sliding shutter drive, sashes with fittings and accessories



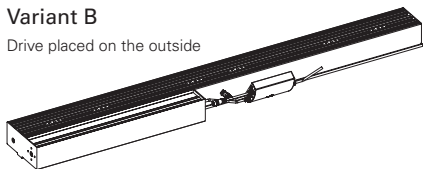
#### Variant A

Drive placed on the inside



#### Variant B

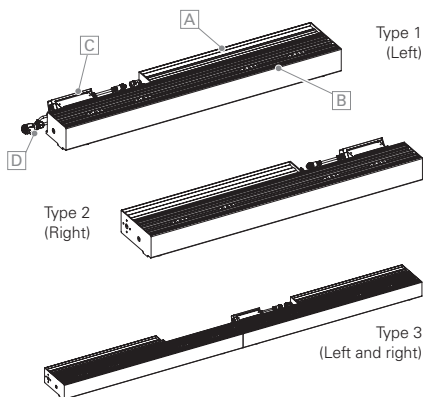
Drive placed on the outside



**Caution:** For variant B (drive placed on the outside), a distance of at least 30 mm must be maintained between the drive and the window!

### Drive schemes

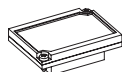
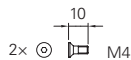
2- to 6-sash, depending on the variant



[A] Drive, [B] Top rail,  
[C] Control, [D] Connection

### Bottom guide rails

On one side  
(Type 1 / 2)

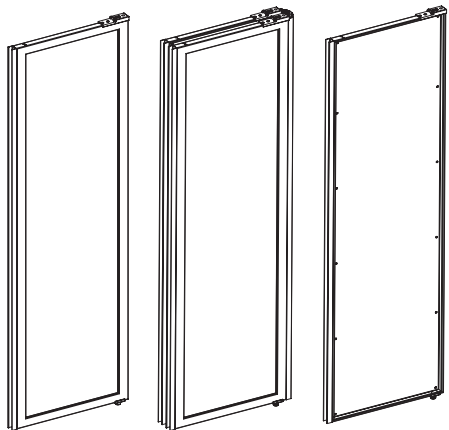


Reflector mirror



## Sash with fitting

2-, 4-, 6-sash, depending on the variant



First sash  
Sash 1 (L/R)

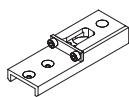
Sash packet  
Sash 2+3 / 4+5

Last sash  
Sash 2/4/6 (L/R)

## Accessories



Coupling profile



Pivot bearing, top



Bearing seat for  
pivot bearing



Rivet Ø 4 mm

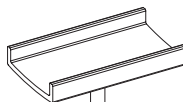
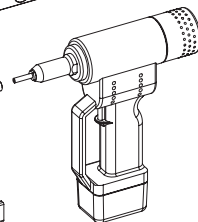
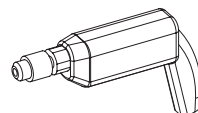
## Tools required

not included in the scope of delivery

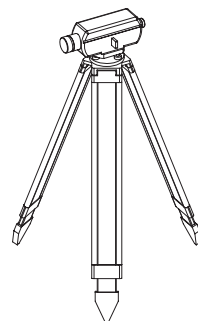
Size 2.5 / 3 / 4



extended  
mouthpiece



Mast



Level

Masonry drill



## 2 Installation instructions

### Preparation

#### **⚠ WARNING**

**Danger of injury/property damage caused by unsuitable fastening materials**

- ▶ Select the fastening material in accordance with the load capacity of the installation substrates!

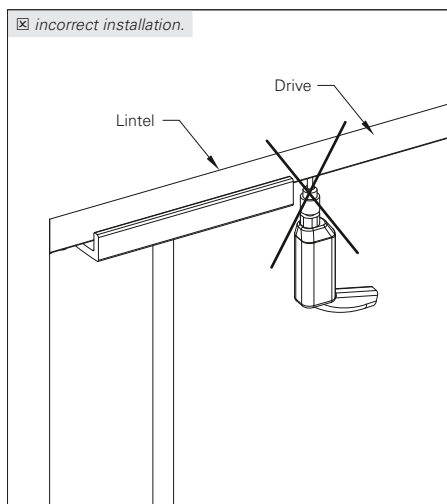
#### **NOTES**

- The selection of the fastening method is dependent on the base and is therefore exclusively your own responsibility.
- When installing the drive boxes, take into account the drive weight (approx. 5-7 kg per sash) in addition to the sash weight.

#### **⚠ IMPORTANT**

**Incorrect installation may lead to loss of function and warranty.**

- Mounting holes must not be drilled through the drive.



- Dirt must not be allowed to enter the drive housing.
- Do not attach any fastening screws or rivets to the drive, as this could lead to impairment of the drive.

## Header installation

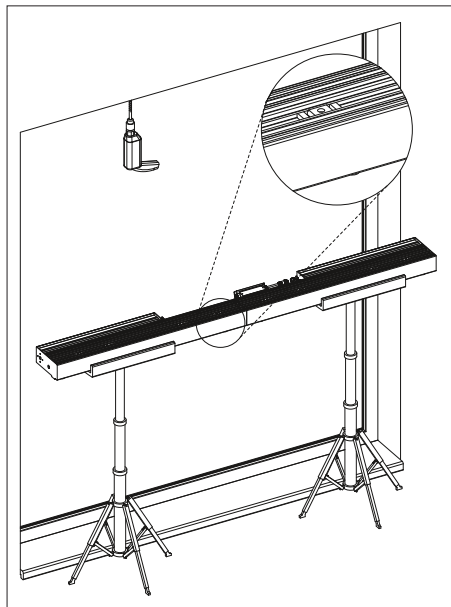
### Mounting type 1

#### ⚠ CAUTION

For variant B (drive placed on the outside), a distance of at least 30 mm must be maintained between the drive and the window!

#### NOTES

- Note that the drive must be mounted horizontally in both width and depth.
  - Use a mast as an assembly aid.
- Mark and drill mounting holes on the lintel



## Façade mounting

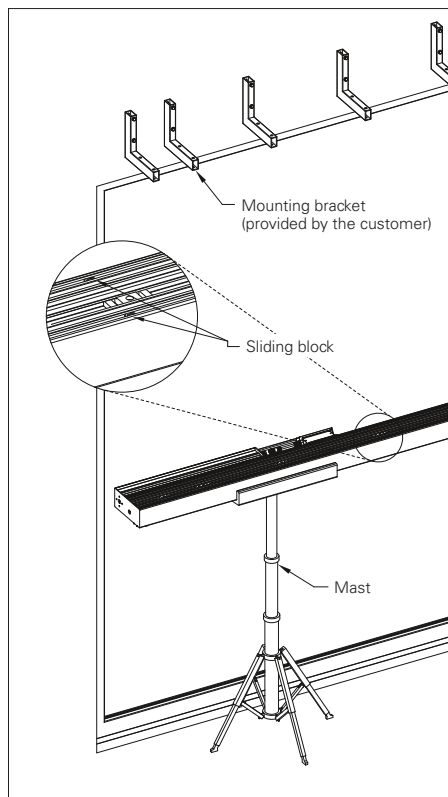
### Mounting type 2

#### ⚠ CAUTION

For variant B (drive placed on the outside), a distance of at least 30 mm must be maintained between the drive and the window!

#### NOTES

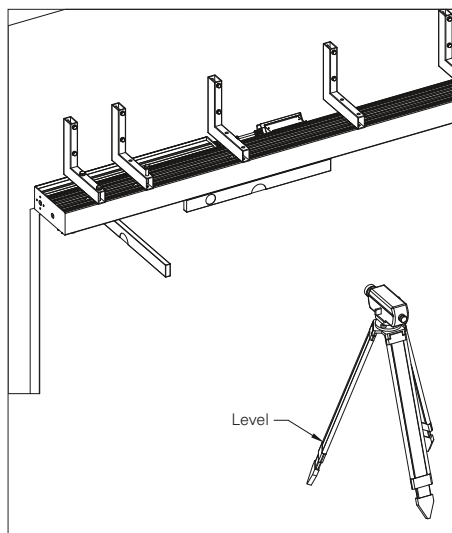
- Fastening material such as mounting brackets must be provided by the customer.
  - Use a mast as an assembly aid.
- Position sliding blocks in the drive box.
- Prepare screws for fastening the drive



## Installation of the drive

### NOTES

- The selection of the fastening method is dependent on the base and is therefore exclusively your own responsibility.
- ▶ Precisely align and mount the drive in all directions.

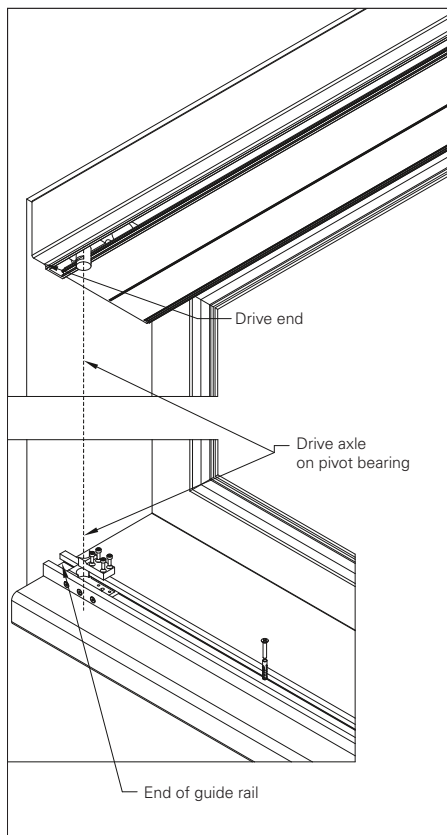


## Mounting the guide rail

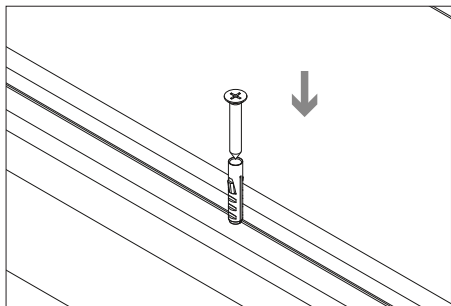
### Aligning the bottom guide rail

- ▶ Align the swivel bearing axis of the bottom guide rail with the top drive axle

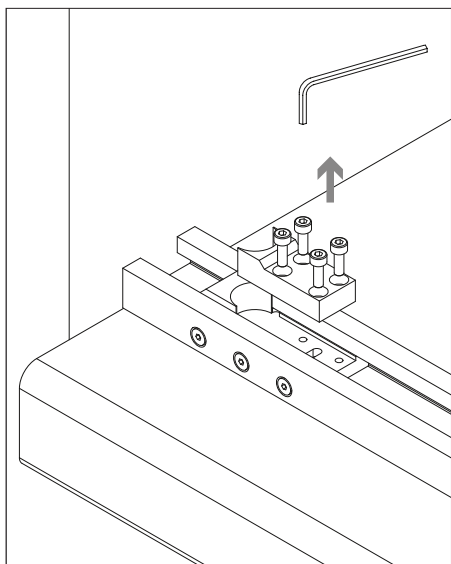
*The top drive end corresponds to the end of the bottom guide rail.*



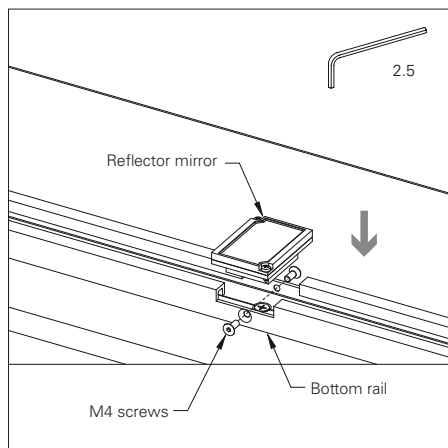
- ▶ Fasten guide rail



- ▶ Dismantle pivot bearing

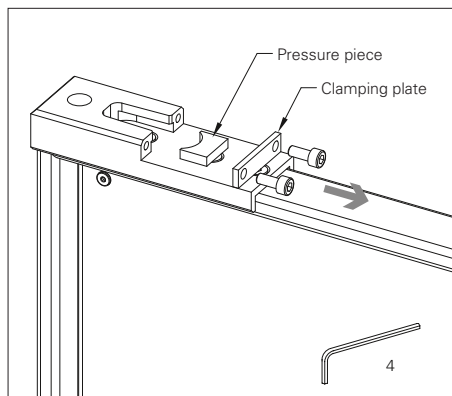


- ▶ Place the reflector mirror in the recess of the bottom guide rail.
- ▶ Fix the reflector mirror with the 2 M4 screws.

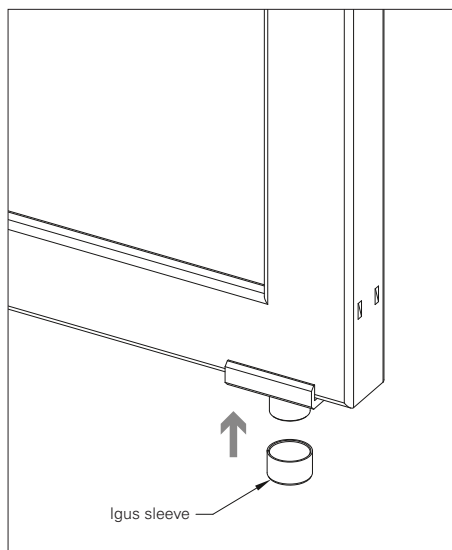


## Preparing the sash

- ▶ Remove screws from pivot bearing.
- ▶ Remove thrust piece from pivot bearing.



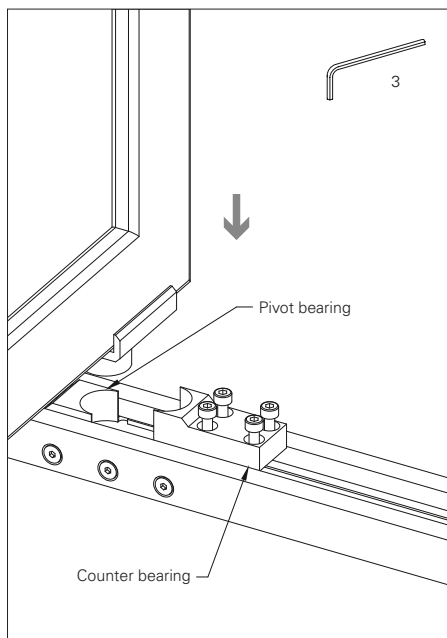
- ▶ Slide Igus sleeve over bottom pivot bearing.



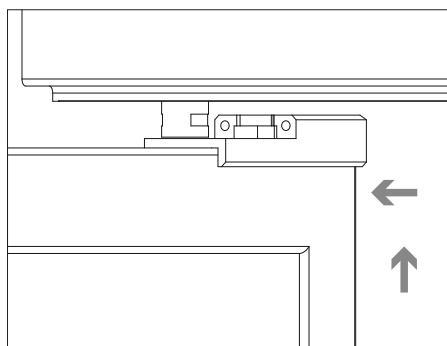
## Hook in the first sash

*Sash 1 (L/R)*

- ▶ Insert sash into pivot bearing
- ▶ Insert counter bearing and screw it on.



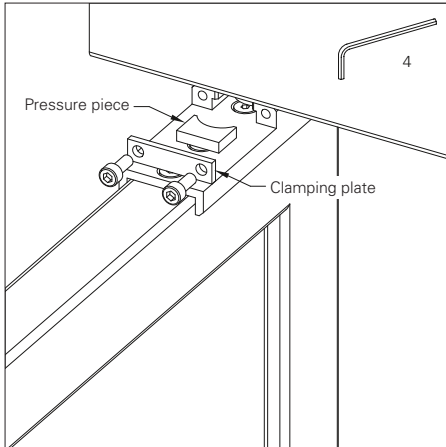
- ▶ Slightly lift the sash and push the top pivot bearing into the drive pin



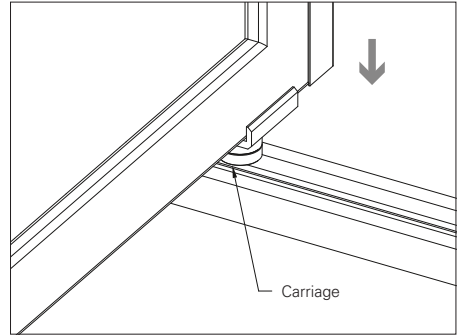
## Hooking in the sash package

*Sash 2+3 / 4+5*

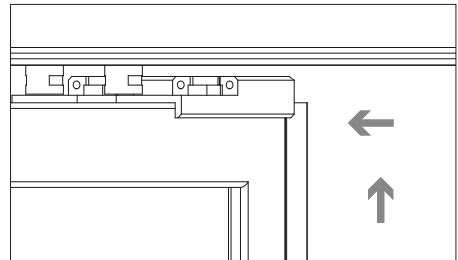
- ▶ Push thrust piece into pivot bearing
- ▶ Attach clamping plate and screw on with M5 screws



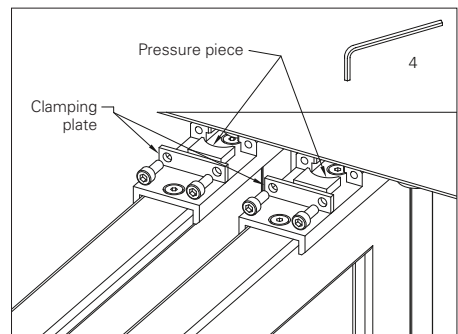
- ▶ Thread sash package into guide rail.



- ▶ Slightly lift the sash package and push the top pivot bearing into the drive pin



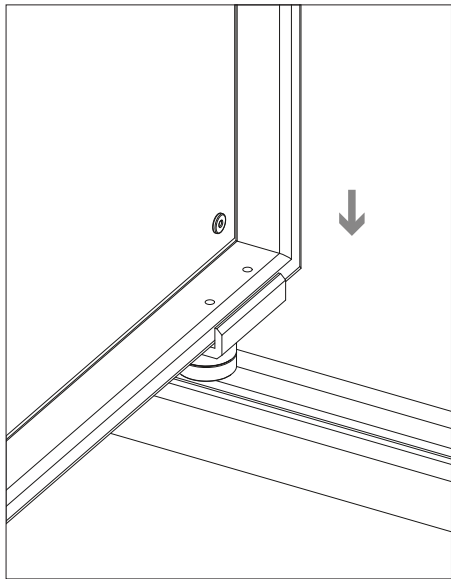
- ▶ Push thrust piece into pivot bearing
- ▶ Attach clamping plate and screw on with M5 screws



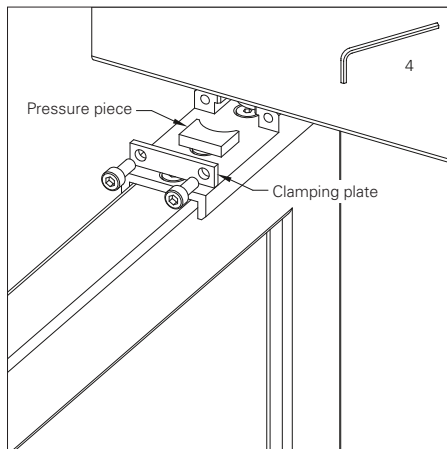
## Hooking in the last sash

*Sash 2 / 4 / 6 (L/R)*

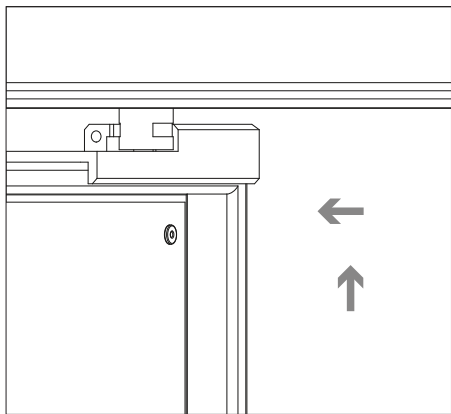
- ▶ Thread last sash into guide rail



- ▶ Push thrust piece into pivot bearing
- ▶ Attach clamping plate and screw on with M5 screws



- ▶ Slightly lift the sash and push the top pivot bearing into the drive pin

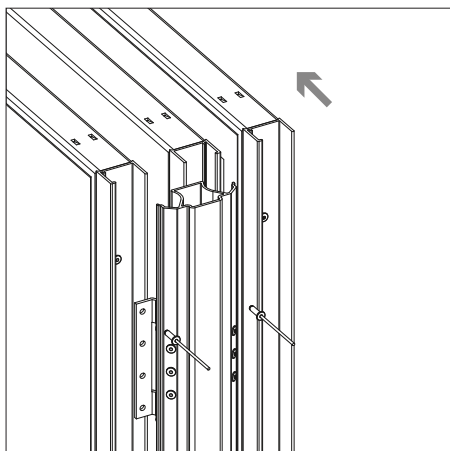




## Inserting the coupling profile

*Sash 1 and 2*

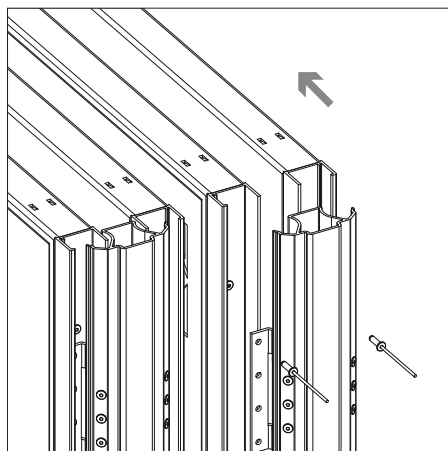
- ▶ Thread coupling profile into sash 1 and 2.
- ▶ Insert and clinch the rivets.



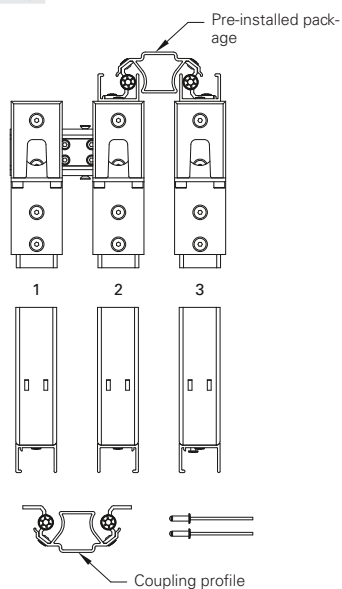
## Inserting the coupling profile

*Sash 3 and 4*

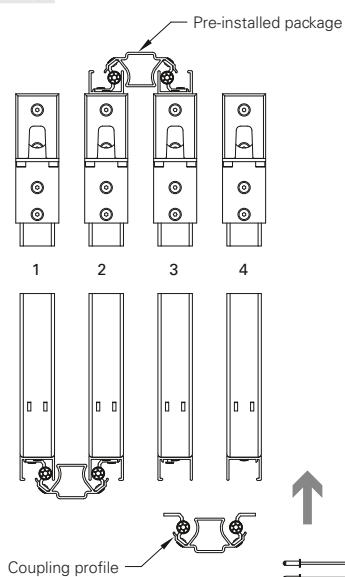
- ▶ Thread coupling profile into sash 3 and 4.
- ▶ Insert and clinch the rivets.



*View from top*

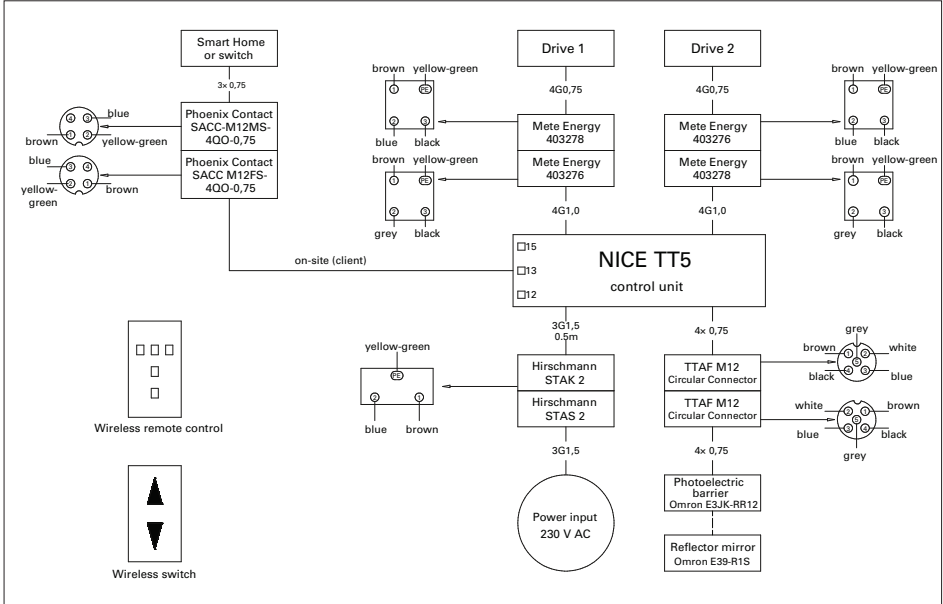


*View from top*

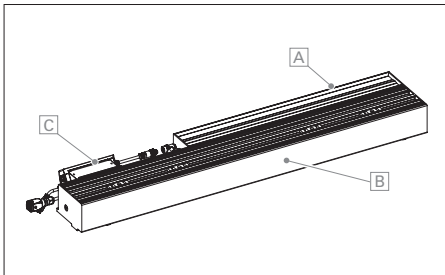


### 3 Operating instructions

#### Connection diagram

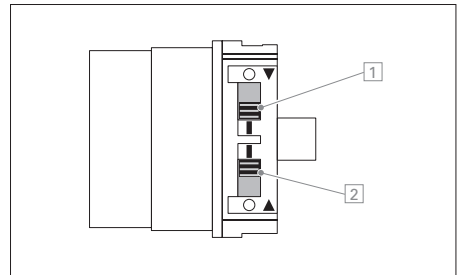


#### 230 V folding sliding shutter drive



- A Drive
- B Rail
- C Control unit NICE TT5

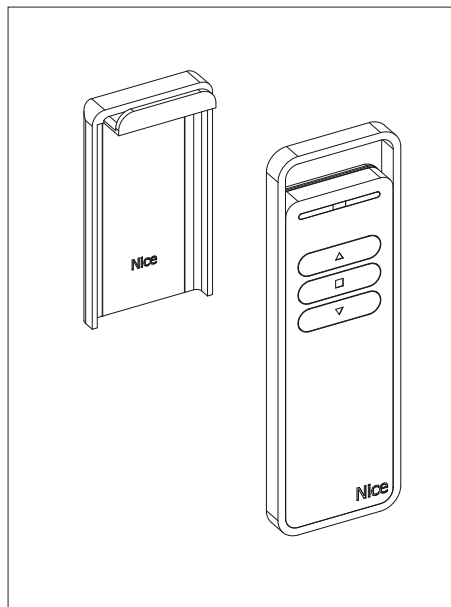
#### Program switch drive



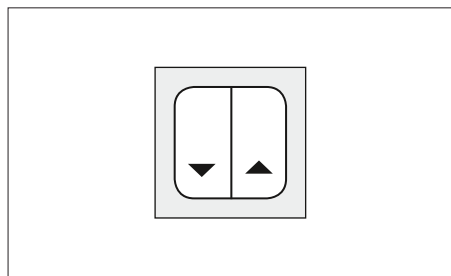
- 1 Switch RETRACT direction of rotation ▼
- 2 Switch EXTEND direction of rotation ▲
- Delete position
- Program position

## Controls

### NICE wireless remote control



### Wireless switch

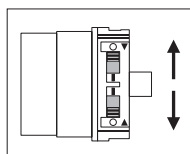


## Teaching in end positions

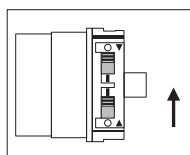
### NOTES

By stopping briefly and continuing to move, it is signalled that no end position has yet been set in the corresponding direction of travel.

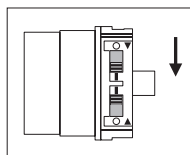
- ▶ Remove the cover on the actuator [A] with a screwdriver.
- ▶ Slide switches [1] and [2] on the drive to the delete position [O].



- ▶ Send a short drive command on the wireless transmitter.
- ▶ Move to the desired extension end position.
- ▶ Slide the switch [2] from the delete position [O] into the program position [I].



- ▶ Move to the desired retract end position.
- ▶ Slide the switch [1] from the delete position [O] into the program position [I].



*The end positions are now set.*

## **EHRET GmbH**

Aluminium shutters

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