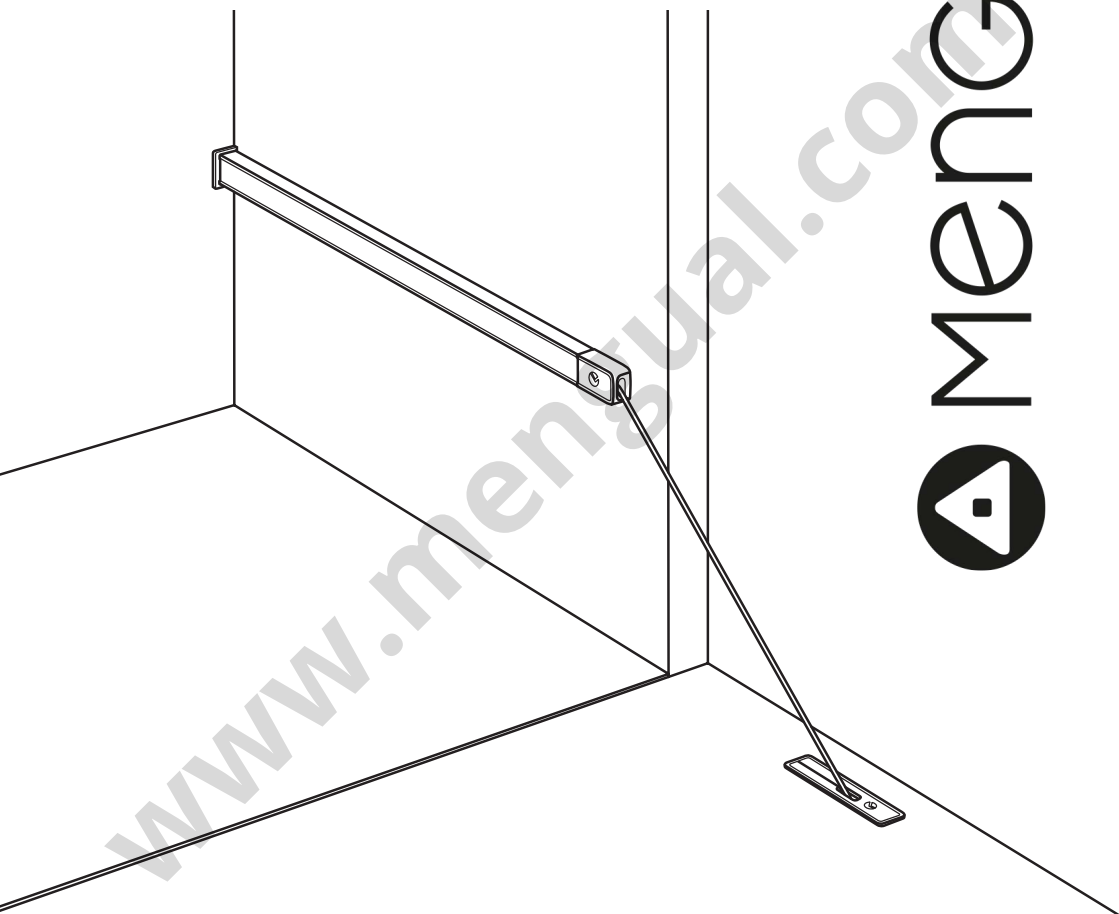


# KIARO

OPENING SYSTEM



MENGUAL<sup>®</sup>



F460001000 Rev. 0

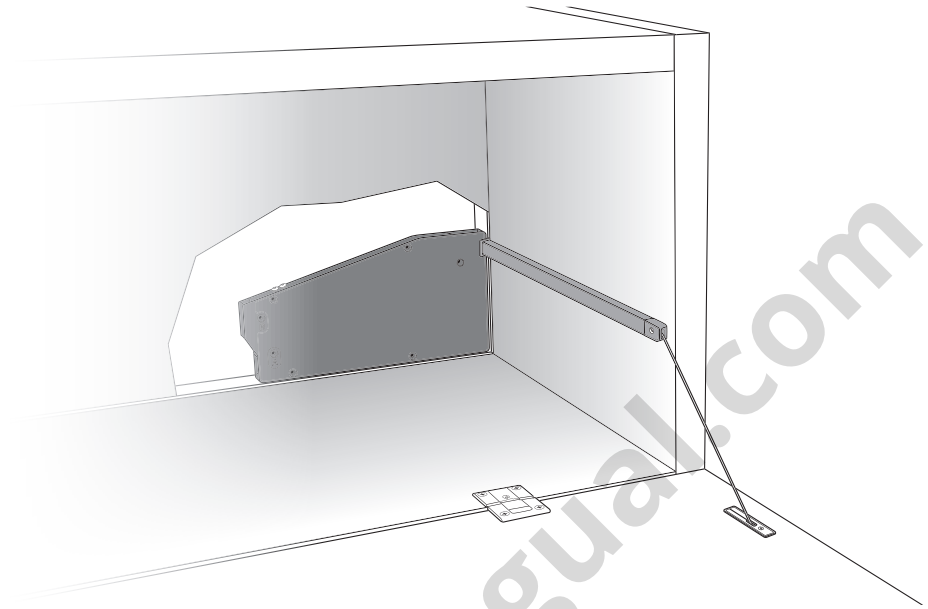
 **ITALIANA**<sup>®</sup>  
ferramenta



YouTube video instructions <sup>[1]</sup>

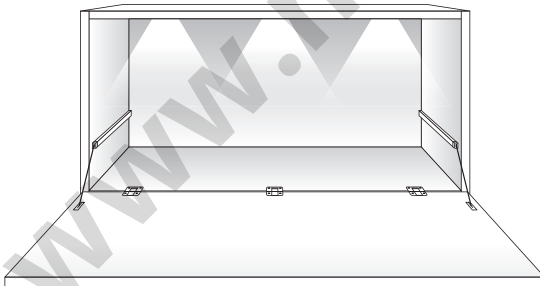
# 1

## KIARO OPENING SYSTEM



# 2

## OPTIONAL ACCESSORIES FOR INTERNAL LIGHTS (further info on page 14)



### 2a Sensor device



### 2b Connectors



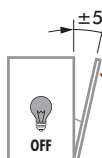
DOOR [2]  
CLOSED



OPENING [3]  
DOOR



DOOR [4]  
OPENED



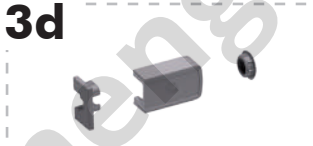
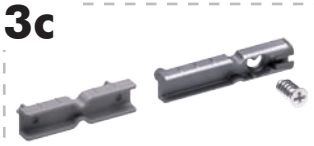
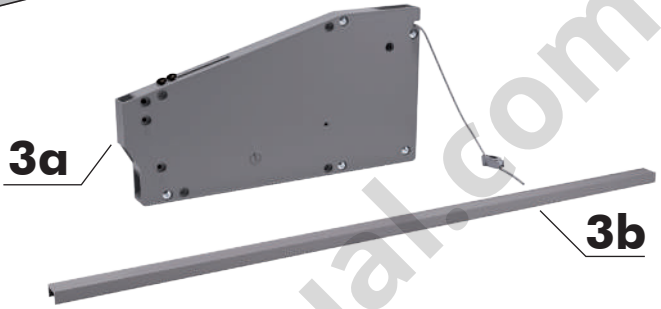
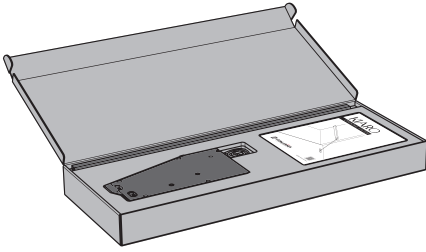
CLOSING [5]  
DOOR



DOOR [2]  
CLOSED

# 3

## KIARO BOX CONTENT



### Tools for assembling



Cutting tool



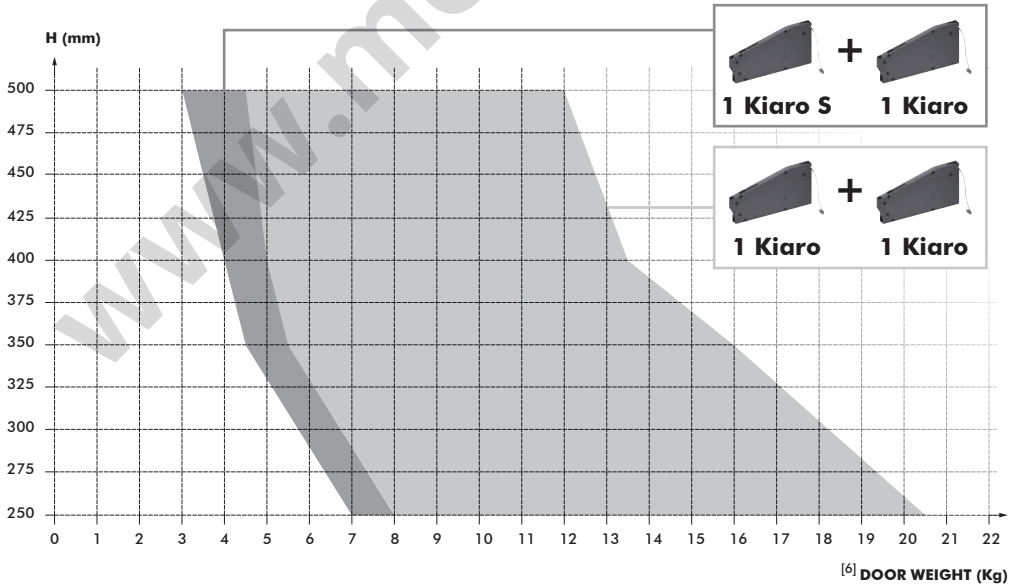
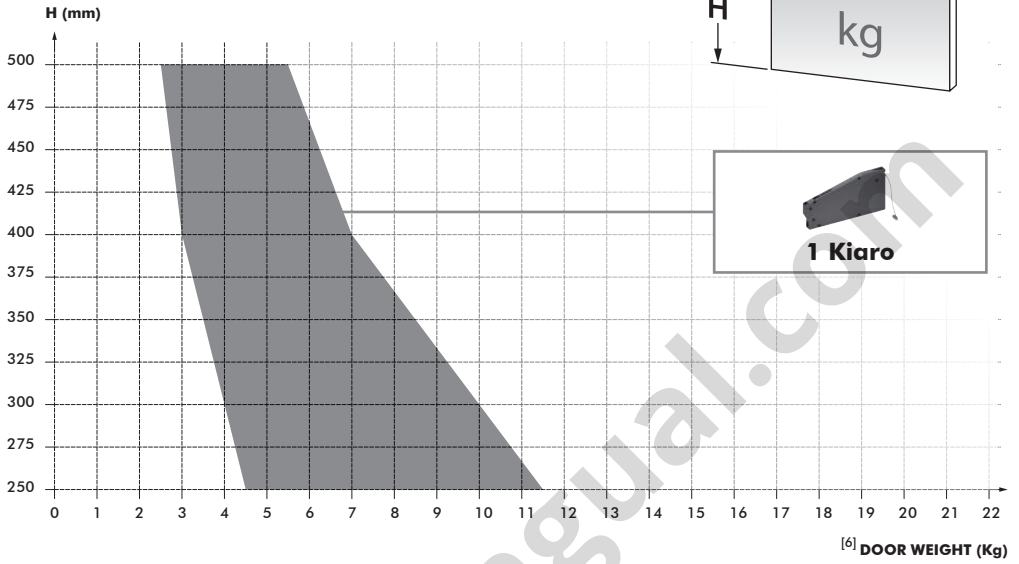
Plier

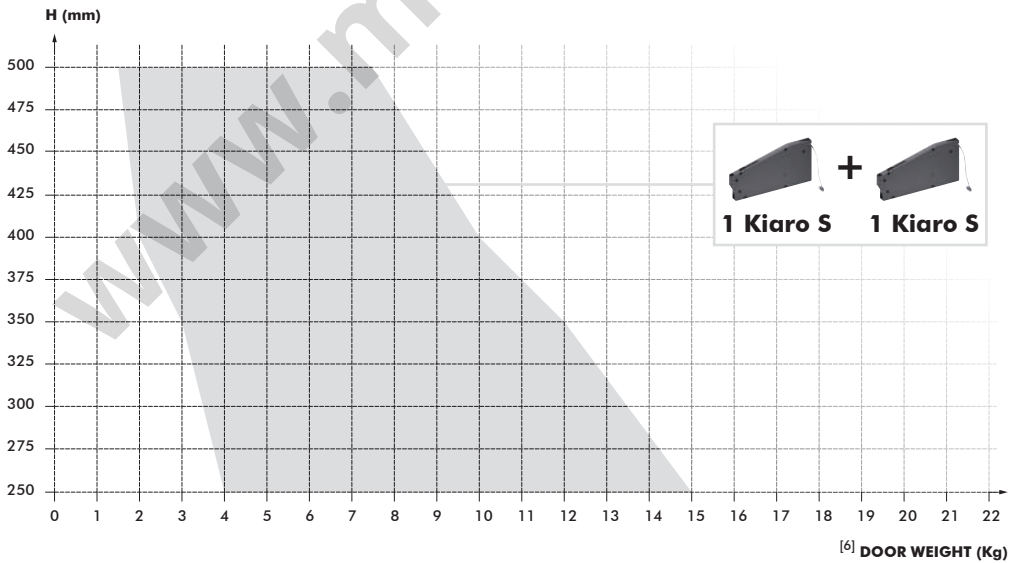
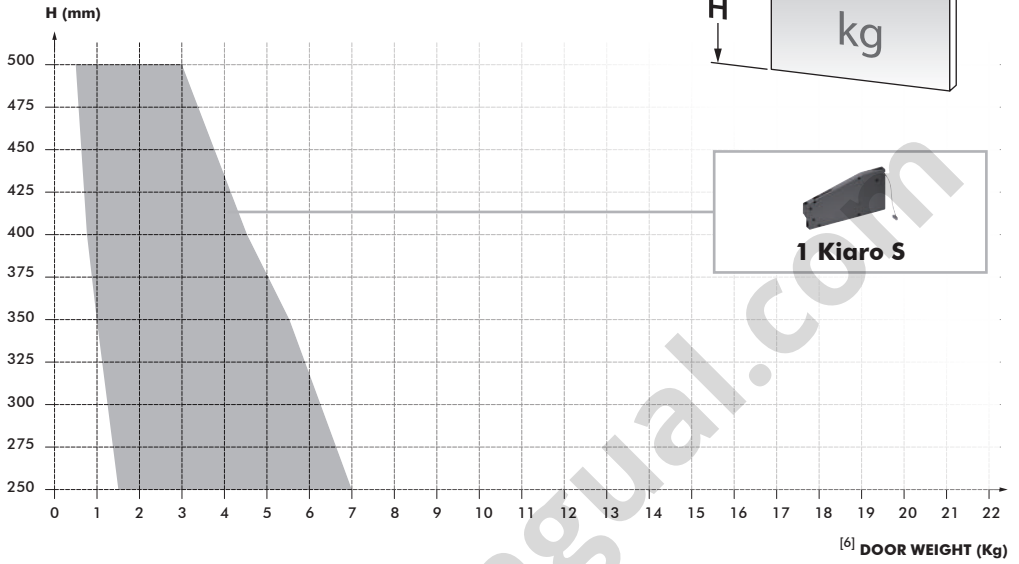


Cutter



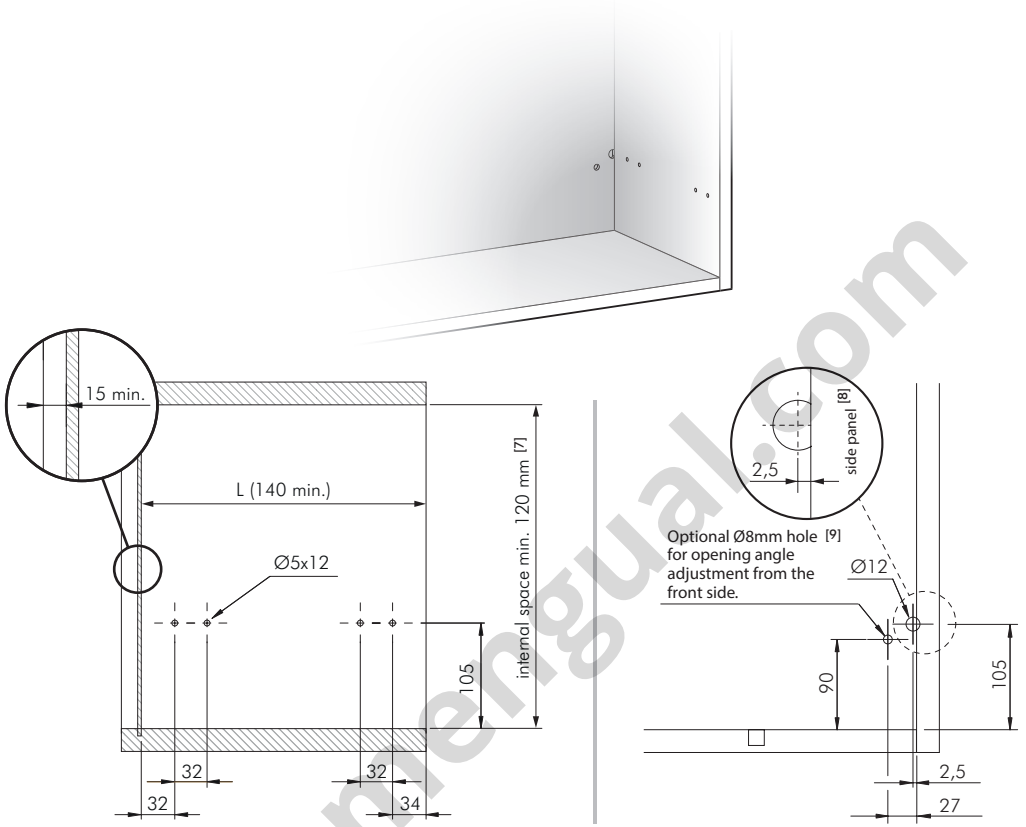
Screwdriver PH2





# 6

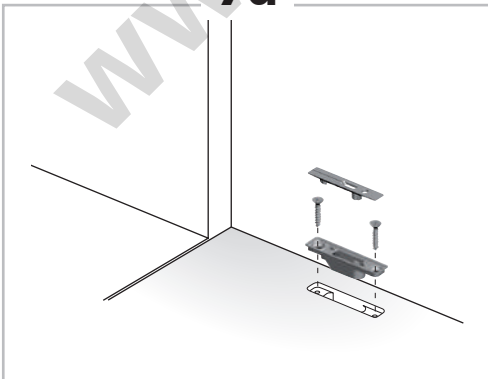
## CABINET DRILLING PLAN



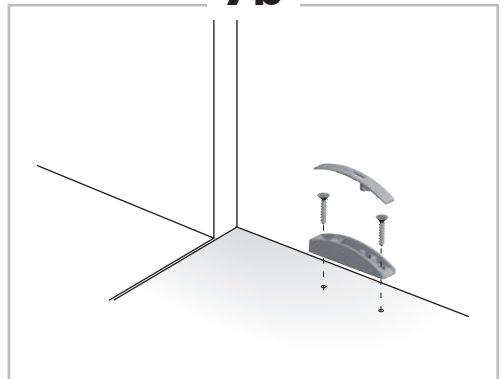
# 7

## DOOR BRACKET OPTIONS

### 7a

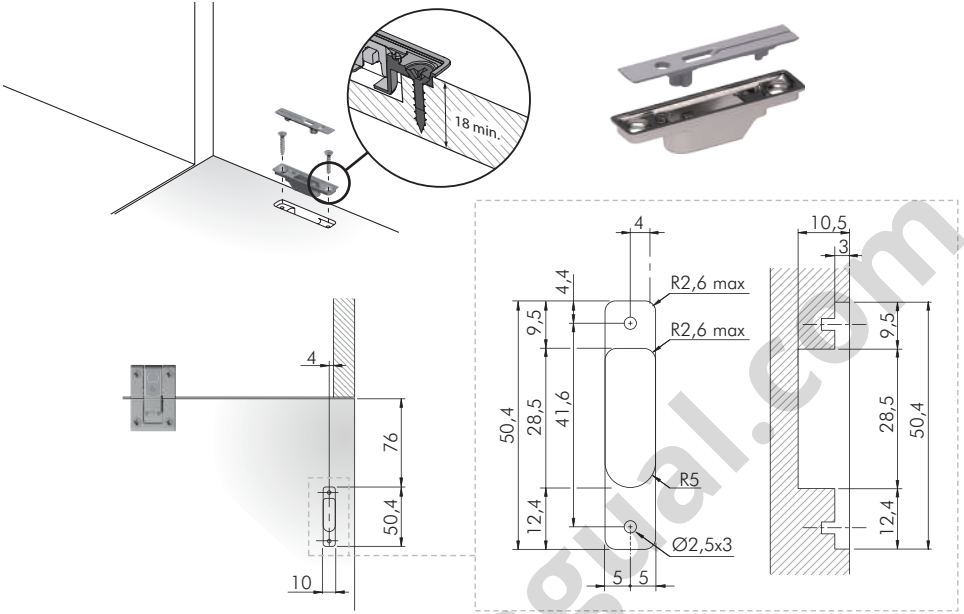


### 7b



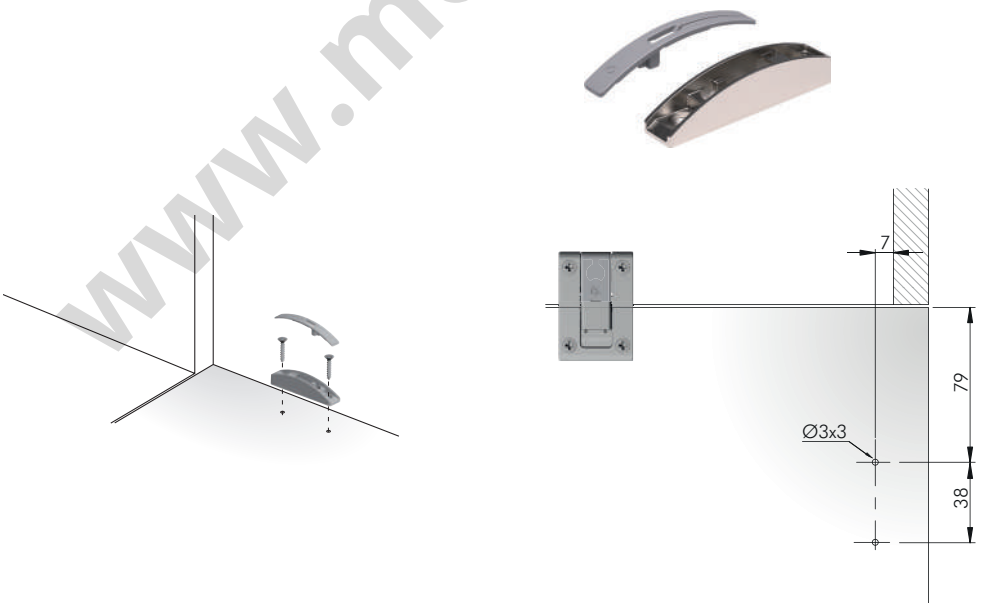
# 7a

## EMBEDDED DOOR BRACKET DRILLING PLAN



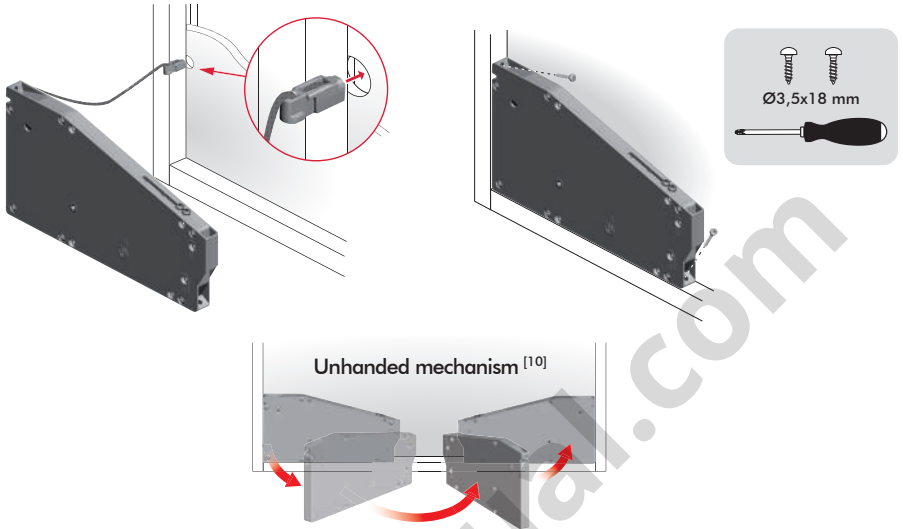
# 7b

## SCREW FIXING DOOR BRACKET DRILLING PLAN



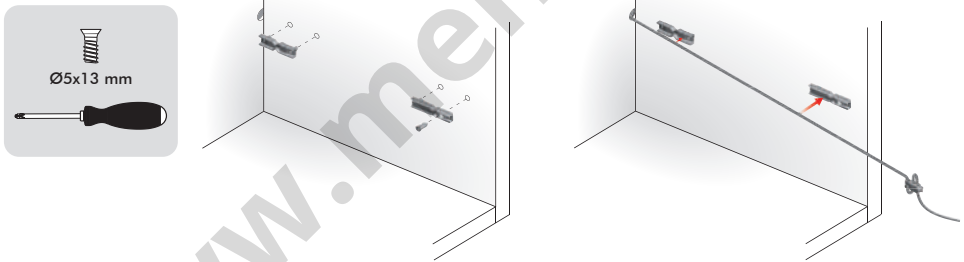
# 8

## MECHANISM FIXING



# 9

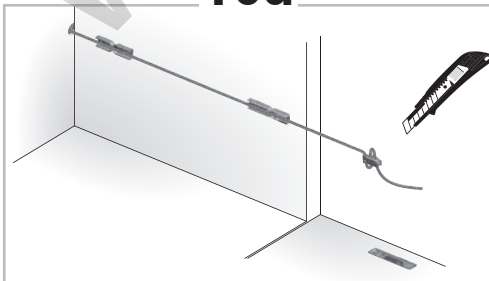
## SIDE BRACKETS FIXING



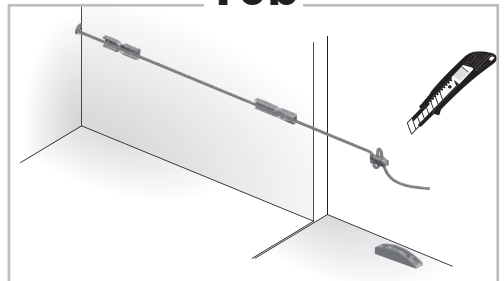
# 10

## WIRE CUTTING

### 10a



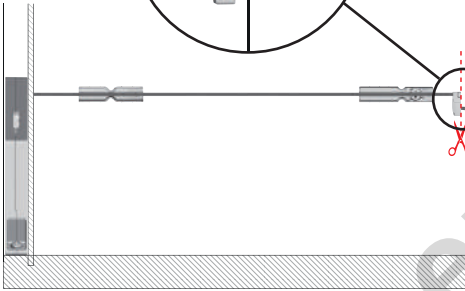
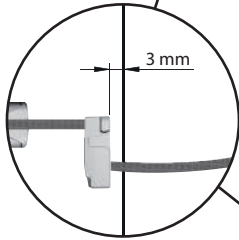
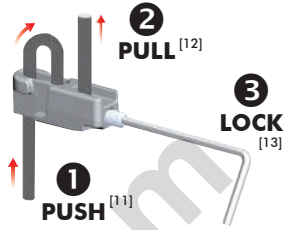
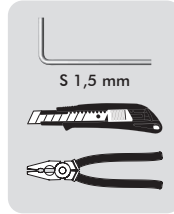
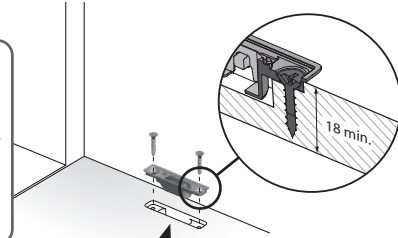
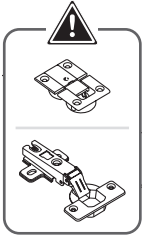
### 10b



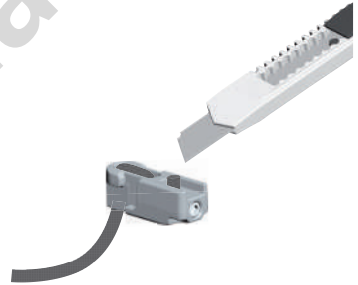


# 10a

## RULE FOR WIRE CUTTING - EMBEDDED DOOR BRACKET



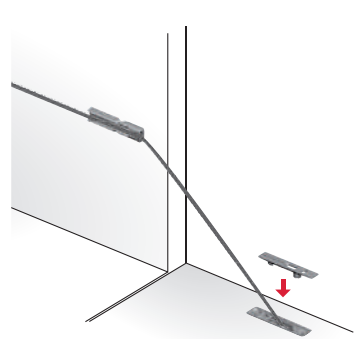
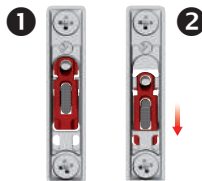
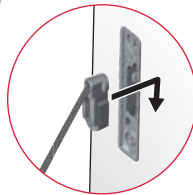
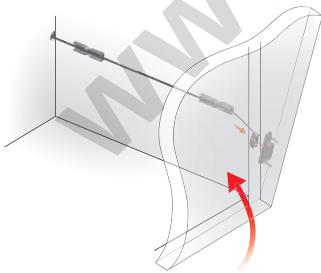
**VERY IMPORTANT:**<sup>[14]</sup>  
Before cutting, it is necessary to lock the grub screw heavily.



In order to obtain the exact length, it is necessary to stretch the wire without pulling it out.<sup>[15]</sup>

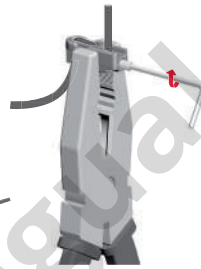
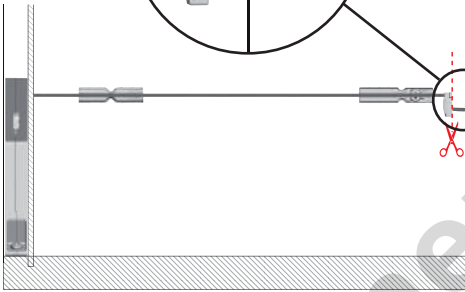
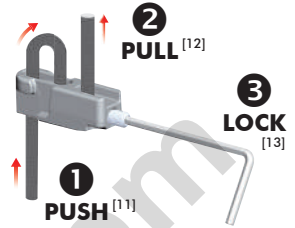
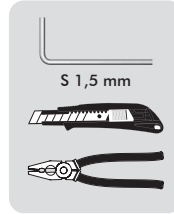
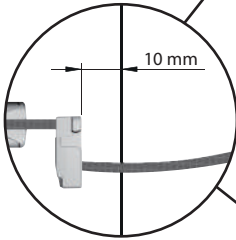
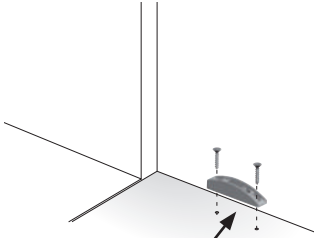
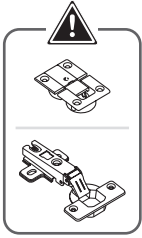
# 11a

## WIRE INSERTION ONTO THE DOOR BRACKET

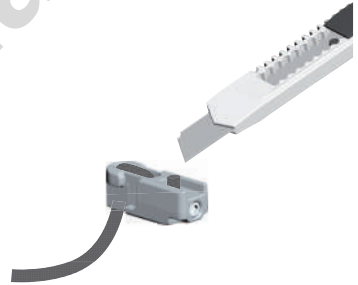


# 10b

## RULE FOR WIRE CUTTING - SCREW FIXING DOOR BRACKET



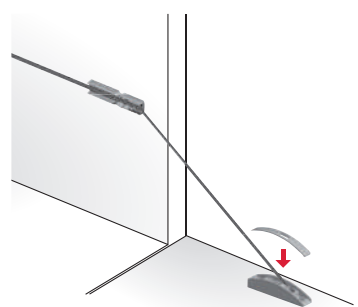
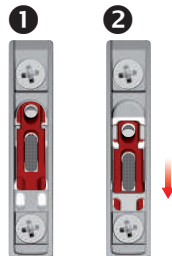
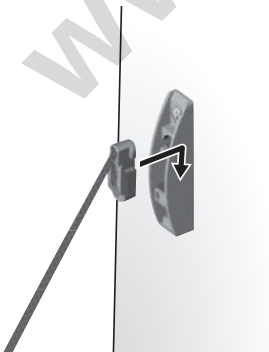
**VERY IMPORTANT:**<sup>[14]</sup>  
Before cutting, it is necessary to lock the grub screw heavily.



In order to obtain the exact length, it is necessary to stretch the wire without pulling it out.<sup>[15]</sup>

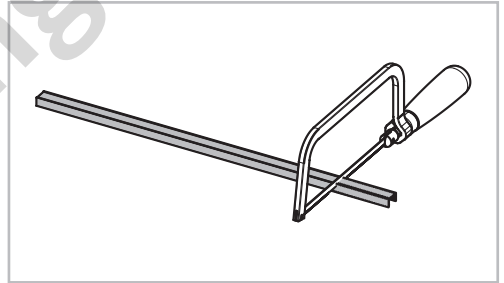
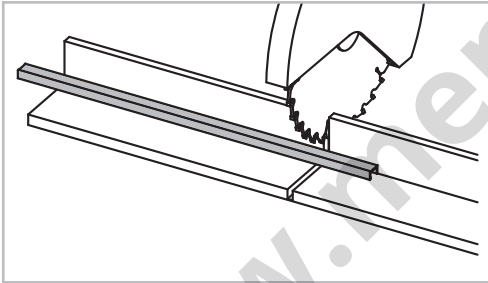
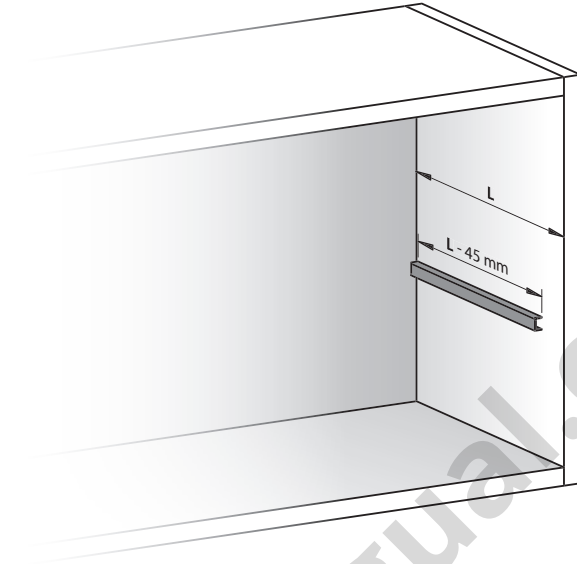
# 11b

## WIRE INSERTION ONTO THE DOOR BRACKET



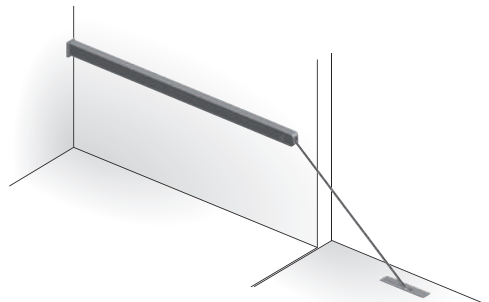
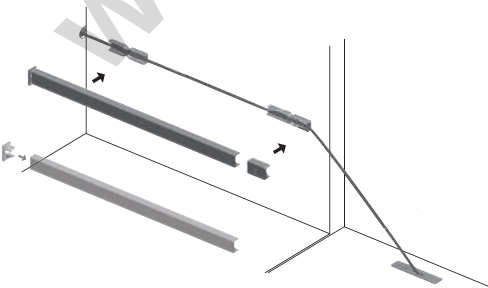
# 12

## ALUMINIUM PROFILE CUTTING



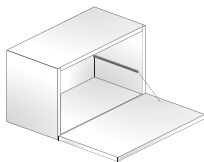
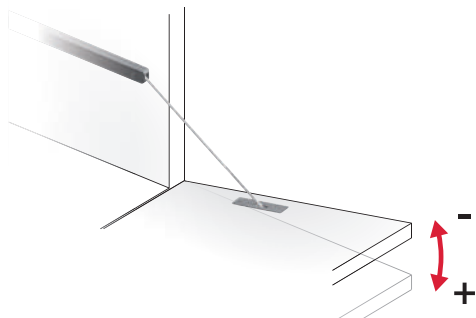
# 13

## ALUMINIUM PROFILE AND COVERS APPLICATION



# 14

## DOOR OPENING ANGLE ADJUSTMENT



**OK**

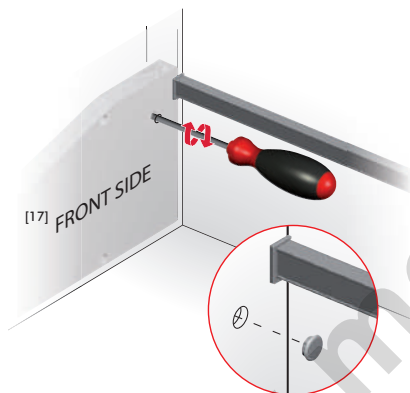


**NO**

The opening angle adjustment <sup>[16]</sup> can be carried out only with open door.

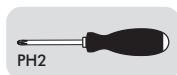
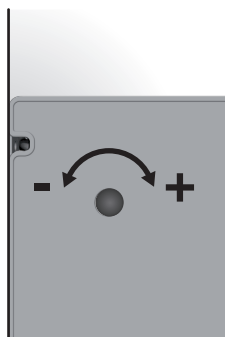
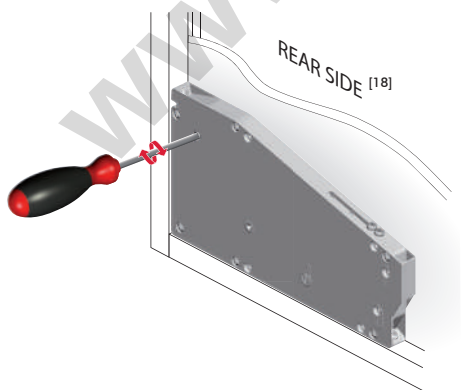
# 14a

## ADJUSTMENT FROM THE FRONT SIDE



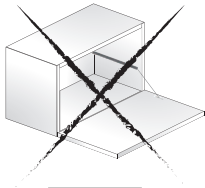
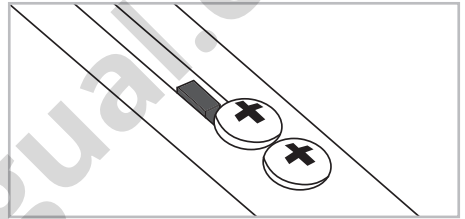
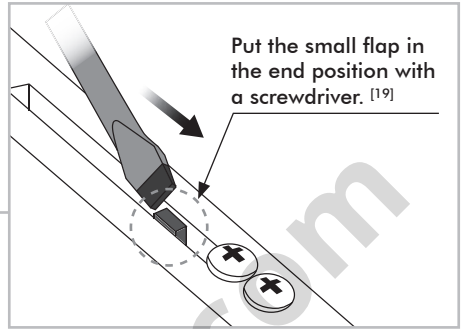
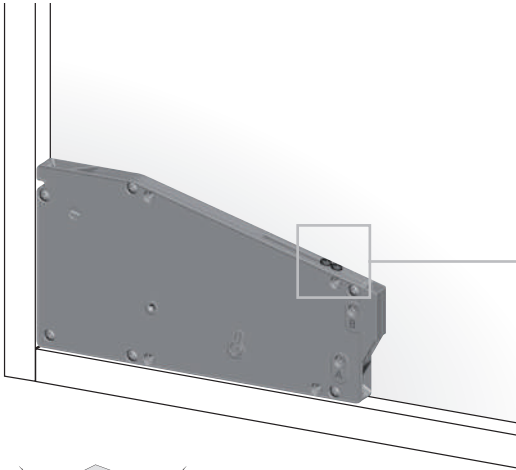
# 14b

## ADJUSTMENT FROM THE REAR SIDE

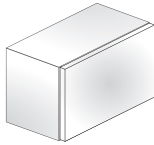


# 15

## ADJUSTMENT OF STRENGTH SETTING



**NO**



**OK**

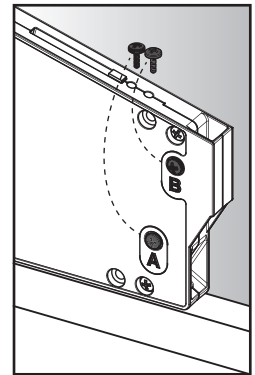
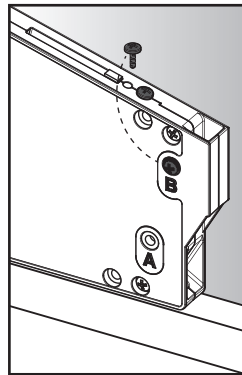
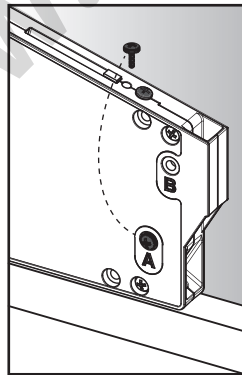
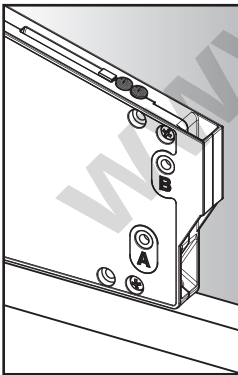
The setting adjustment <sup>[20]</sup> can be carried out only with closed door.

**No Setting** <sup>[21]</sup>

**Setting "A"** <sup>[22]</sup>

**Setting "B"**

**Setting "A+B"**



**LOAD** <sup>[23]</sup>  
(Minimum strength) <sup>[24]</sup>



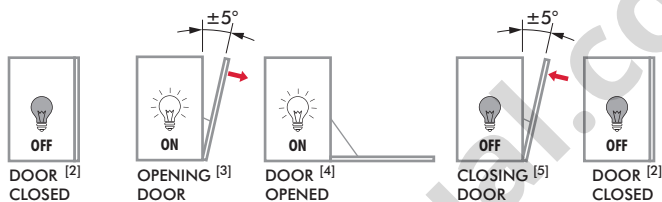
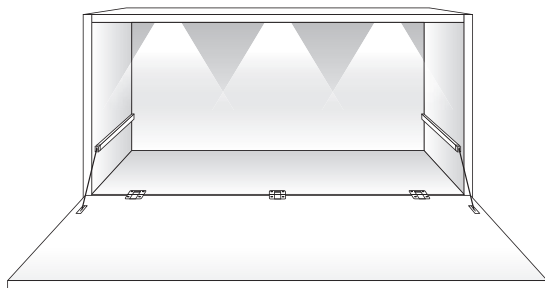
**LOAD** <sup>[23]</sup>



**LOAD** <sup>[23]</sup>

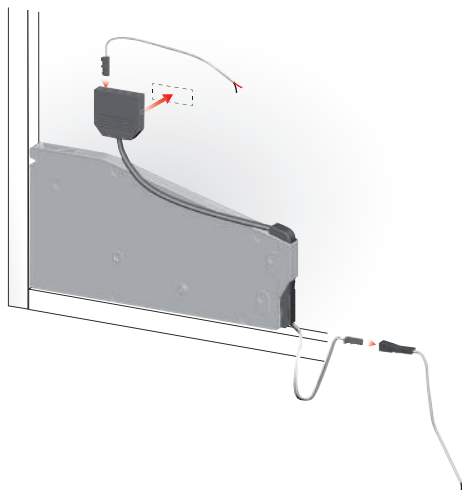
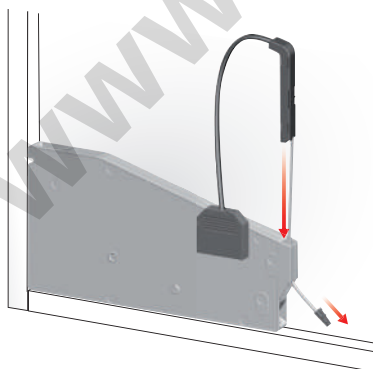
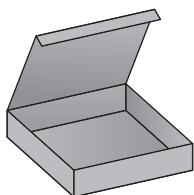


**LOAD** <sup>[23]</sup>  
(Maximum strength) <sup>[25]</sup>

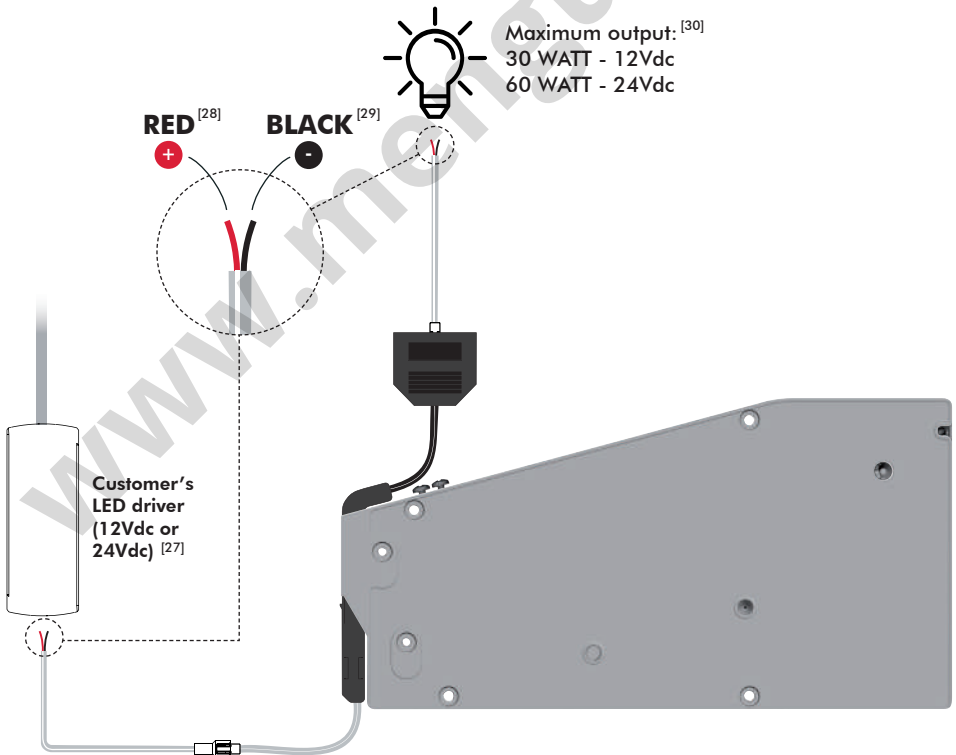
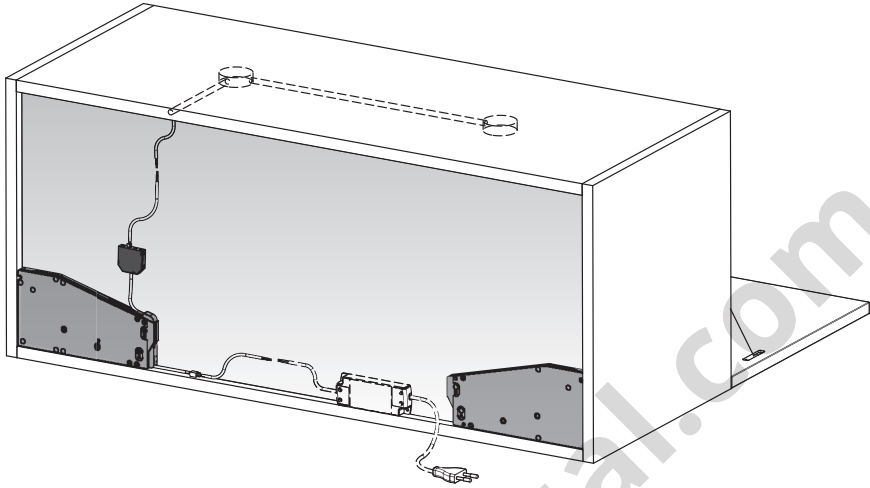


**Sensor device**

**Connectors**



Each door must be connected to only <sup>[26]</sup> one sensor, no matter how many mechanism are installed.



## 1. KIARO OPENING SYSTEM

KIARO is an opening system for drop down doors with a concealed mechanism placed on the rear of cabinet.

## 2. OPTIONAL ACCESSORIES FOR INTERNAL LIGHTS (further info on page 15)

**2a** Sensor device

**2b** Connectors

The mechanism installed with the optional accessories can be used as an on-off switch for the internal light through the movement of the door.

## 3. KIARO BOX CONTENT

**3a** Mechanism

**3b** Aluminium lateral profile

**3c** Side brackets

**3d** Covers

**3e** Allen wrench S1,5

**3f** Embedded door bracket

**3g** Screw fixing door bracket

**3h** Screws

Tools for assembling: cutting tools, plier, cutter, screwdriver PH2.

## 4. SOFT OPENING

Range of application for soft opening door.

## 5. FRICTION OPENING

Range of application for friction opening door.

## 6. CABINET DRILLING PLAN

### 7. DOOR BRACKET OPTIONS

The set includes two different door bracket options:

- The embedded door bracket that requires a groove;
- The screw fixing door bracket that requires a simple pre-drilling operation.

### 7a. EMBEDDED DOOR BRACKET DRILLING PLAN

Make sure that the supplied screws are suitable for the thickness of the door. (Minimum panel thickness is 18 mm).

### 7b. SCREW FIXING DOOR BRACKET DRILLING PLAN

Make sure that the supplied screws are suitable for the thickness of the door.

## 8. MECHANISM FIXING

Place the mechanism on the rear side of the cabinet and fix it with the supplied screws.

It is a two-handed mechanism so it can be installed both on the right and on the left side.

## 9. SIDE BRACKETS FIXING

Install the side brackets into the holes on the side panel and fix them with the supplied screw.

## 10. WIRE CUTTING

Follow the correct cutting rule according to the type of door bracket.

### 10a. RULE FOR WIRE CUTTING - EMBEDDED DOOR BRACKET

The cutting rule refers to carcasses which use KIMANA hinges or STANDARD UNSPRUNG HINGES with overlay 16-18 mm; in case other hinges are used, it is necessary to contact an authorized dealer for further information. Insert the wire into the side brackets and stretch it without pulling it out. Bring the end element of the wire up to the distance stated in the technical drawing.

Lock the grub screw heavily keeping it firmly with a plier.

Remove the extra part of the wire by operating a clean cut with a cutter.

### 11a. WIRE INSERTION ONTO THE DOOR BRACKET

Lift the door almost completely to slot the end element of the wire into the door bracket.

Place the cover cap on the door bracket before lifting the door.

### 10b. RULE FOR WIRE CUTTING - SCREW FIXING DOOR BRACKET

The cutting rule refers to carcasses which use KIMANA hinges or STANDARD UNSPRUNG HINGES with overlay 16-18 mm; in case other hinges are used, it is necessary to contact an authorized dealer for further information. Insert the wire into the side brackets and stretch it without pulling it out. Bring the end element of the wire up to the distance stated in the technical drawing.

Lock the grub screw heavily keeping it firmly with a plier.

Remove the extra part of the wire by operating a clean cut with a cutter.

### 11b. WIRE INSERTION ONTO THE DOOR BRACKET

Lift the door almost completely to slot the end element of the wire into the door bracket.

Place the cover cap on the door bracket before lifting the door.

## 12. ALUMINIUM PROFILE CUTTING

Cut the aluminium profile on size following the rule shown in the technical drawing. Perform a clean and precise cut using the tools at your disposal.

## 13. ALUMINIUM PROFILE AND COVERS APPLICATION

Apply the aluminium profile and the covers on the side panel.

## 14. DOOR OPENING ANGLE ADJUSTMENT

The mechanism provides an opening angle adjustment.

The adjustment can be carried out either:

- from the rear side of the cabinet;
- from the front side through a hole in the back panel.

For doors weighing more than 4 kg it is not possible to reduce the opening angle in this way; in this case, to reduce the opening angle, the wire must be shortened by a few millimeters.

### 14a. ADJUSTMENT FROM THE FRONT SIDE

The opening angle adjustment can be carried out only with open door.

Turn the adjustment screw with a PH2 screwdriver through the Ø8 mm hole in the back panel. Refer to the drawing for information on the correct direction of rotation.

### 14b. ADJUSTMENT FROM THE REAR SIDE

The opening angle adjustment can be carried out only with open door.

Turn the adjustment screw with a PH2 screwdriver through the special hole in the mechanism. Refer to the drawing for information on the correct direction of rotation.

## 15. ADJUSTMENT OF STRENGTH SETTING

The setting adjustment can be carried out only with closed door.

Before performing the adjustment make sure that the mechanism is completely in position, otherwise put the small flap in position with a blade screwdriver.

Use the black screws positioned on the upper side of the mechanism and screw them into the holes (A) and (B) to activate the additional strengths according to the size and weight of the door.

## 16. OPTIONAL ACCESSORIES FOR INTERNAL LIGHTS

The mechanism installed with the optional accessories can be used as an on-off switch for the internal light through the movement of the door.

- Sensor device
- Connectors

## 17. SENSOR DEVICE INSTALLATION

Insert the sensor device into its special compartment of the mechanism as shown in the picture.

Make the connections between the sensor device and the connectors supplied.

## 18. TECHNICAL DATA AND GENERAL WARNINGS

Installation may require qualified personnel to be involved.

RED wire connector: positive polarity

BLACK wire connector: negative polarity

Use power supply with output voltage 12Vdc or 24Vdc

LED spotlight maximum output flying power:

12Vdc → 30W

24Vdc → 60W