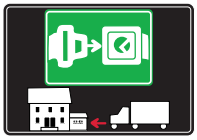
ITALIANA ferramenta

Kiaro

OPENING SYSTEMS FOR LIFT UP AND DROP DOWN DOORS

SYMBOLS AND FINISHES LEGEND

SYMBOLS



= SHELF SAFELY LOCKED DURING TRANSPORTATION AND AT HOME.

= ANTI-TURNOVER LOCKING SYSTEM

= NORMS / PATENTS

= PART NO.

= PCS. PER PACKAGE

= CAPACITY LOADING

= WOOD / GLASS THICKNESS

= HOLE DIAMETER

= DIAMETER

= LENGTH

= HEIGHT

= RIGHT VERSION

= LEFT VERSION

= SETTING CODE

= PCS. PER PAD

= CUT ON REQUEST

= SELF ADHESIVE

= PHILLIPS / POZIDRIV

= BLADE SLOT

= COMBI SLOT

= HEXAGONAL SOCKET

= HEXALOBULAR SOCKET

= COUNTERSUNK HEAD

= PAN HEAD

= FLANGE HEAD

= FLAT HEAD

= TRILOBULAR SCREW

= SELF-TAPPING SCREW

= EURO THREAD

= METRIC THREAD

= PRE-INSERTED SCREW

= PRE-INSERTED SCREW AND SPREADING BUSH

= WITH BUFFER

= WITH MAGNET

= NEWTON

= FRICTION

= AUTOMATIC

= DROP DOWN

= STANDARD HINGE

= KIMANA HINGE

= FLAP HINGE

= WITH SPRING

= WITHOUT SPRING

= REVERSED SPRING

= WITH FLANGE

NOTE: Printing errors and omissions may exist despite our best efforts to ensure accurancy. We reserve the right to alter specifications without notice.

MATERIALS

ZA = Zinc Alloy

ST = Steel

HSS = High Speed Steel

BR = Brass

ABS = Acrylonitrile Butadiene Styrene

ZAnk = Nickel-plated Zinc Alloy

STzk = Zinc-plated Steel

AL = Aluminium

WD = Wood

EVA = Ethylene Vinyl Acetate

EP = ENGINEERING PLASTIC

\+ EP = other engineering plastic available on request

SR = SOFT RUBBER

\+ SR = other soft rubber available on request

EPn = Natural Engineering Plastic

EPc = Clear Engineering Plastic

SRn = Natural Soft Rubber

EPw = White Engineering Plastic

EPg = Grey Engineering Plastic

SRw = White Soft Rubber

EPwg = Water Green Engineering Plastic

EPa = Anthracite Engineering Plastic

SRb = Black Soft Rubber

FINISHES

\+ = OTHER FINISHES AVAILABLE ON REQUEST

PART NO.	FINISHES	PART NO.	FINISHES	PART NO.	FINISHES
00	Insignificant finish	IF	Middle Grey	RO	Red
AA	Natural	IJ	Light Grey	UT	T-Met 9007
AB	White	IL	Grey 20	UZ	T-Met
AE	White 9010	IN	Grey met. 26	WA	Bronzed
EA	Black	JB	Bright Aluminium	WI	Burnished
EC	Matt Black	JC	Aluminium - Chrome	XD	Satin-finished Steel
EE	Anthracite	JD	Matt Aluminium	YA	Nickel-plated
EW	Grey 9007	JE	Satin-finished Aluminium	YB	Bright Nickel-plated
FU	Gunmetal	JF	Aluminium - Brass	YC	Matt Nickel-plated
FV	Gunmetal V52	JG	Aluminium 5	YD	Satin-finished Nickel-plated
GR	Raw	JL	Aluminium PE 11	YQ	Black Nickel
HA	Brass-Plated	JM	Aluminium RAL 9006	Z9	Black Zinc
HH	Tropicalized	KA	Chrome	ZA	Zinc alloy
HL	Raw Brass	KB	Bright Chrome	ZN	Zinc-plated
HX	Graphite	KC	Matt Chrome	ZQ	Bright Gold
IA	Grey	LD	Brown 8019	ZY	Titanum
IB	Metallic Grey	NN	Metallic Beige	ZZ	Clear

KIARO

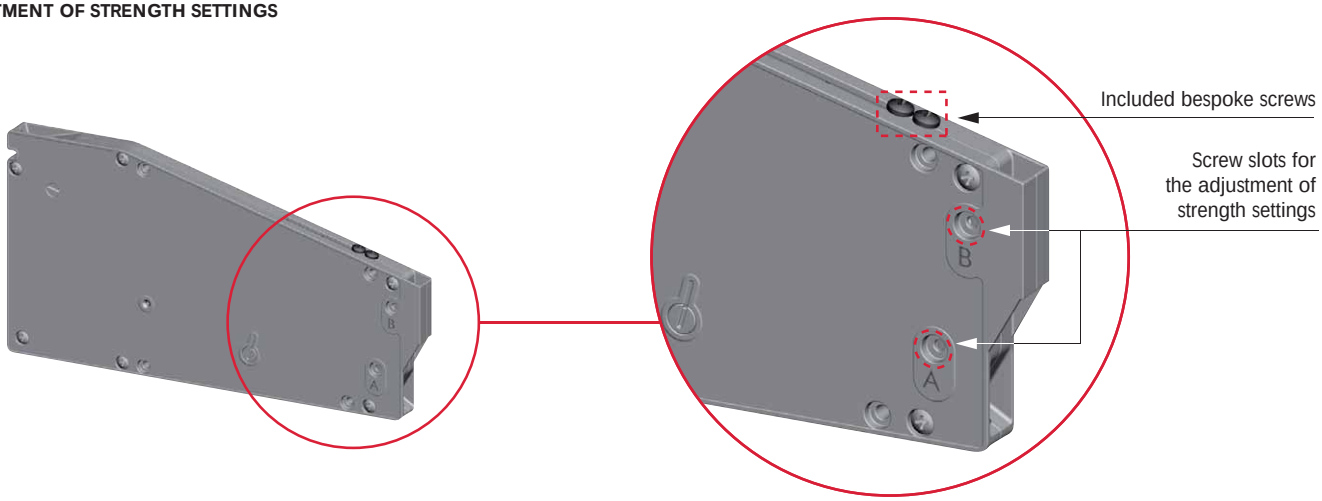
Kiaro is an opening system for drop down doors with a concealed mechanism which allows to adjust the settings depending on door weight and dimension, thus enabling to manage a wide range of doors with only one reference.
As it is a two-handed mechanism, it can be installed both on right and left side. A high resistance technical wire grants a significant loading capacity together with minimal shapes and elegant design.
Available in two finishes which respond to the current overriding trends in the furniture appliances industry.
It is conceived also to be installed with integrated led lighting.

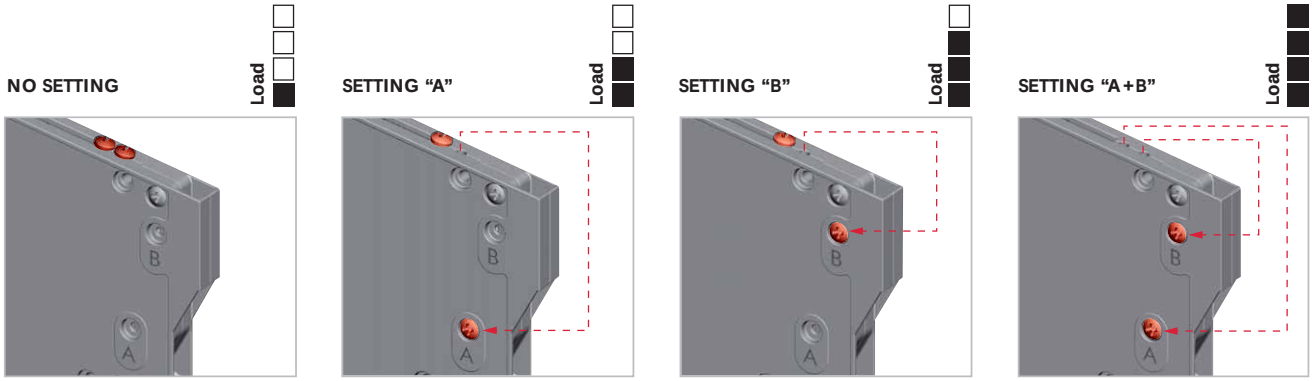
FEATURES AND BENEFITS

MINIMAL AND ELEGANT DESIGN: Wire opening system with reduced size and elegant shapes, becoming an element of design for the whole cabinet.
OPTIMIZED STOCK MANAGEMENT: One reference to cover a wide range of door weights and dimensions.
TWO-HANDED MECHANISM: The same mechanism can be installed both on right and left side.
EASY INSTALLATION: The opening system can be installed with an easy mounting of the lateral profile on the cabinet side and an easy fixation of the wire onto the door.
INTEGRATED LED LIGHTING: Available also with an integrated decorative led lighting which includes an innovative activation system.
HANDLELESS DOORS: Just one K PUSH TECH enables the door opening, with any door weight and size.
WIDE ADJUSTMENT: The mechanism allows a wide adjustment of the opening angle.

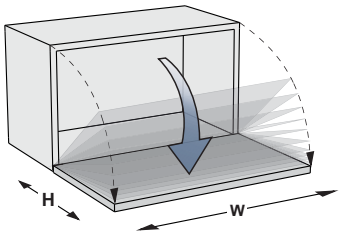
PAT. PENDING

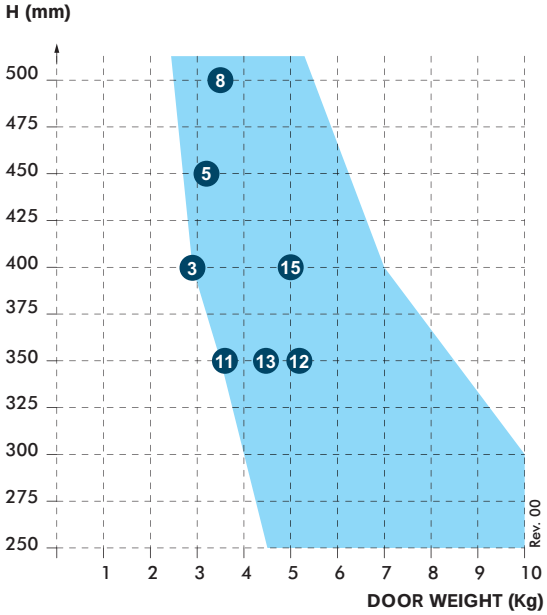
ADJUSTMENT OF STRENGTH SETTINGS



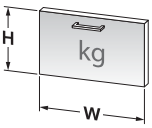


SOFT OPENING





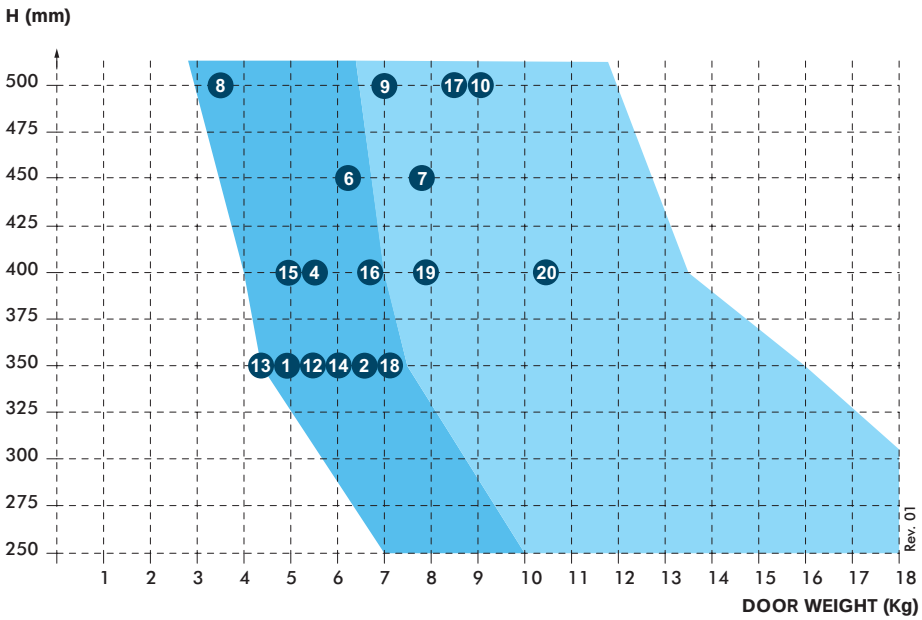
1 mechanism
KIARO



Door weight including the possible handle.

		H mm	W mm	Weight theoretical
1	Chipboard door thk 18mm	350	1200	4,9 kg
2	Chipboard door thk 18mm	350	1500	6,5 kg
3	Chipboard door thk 18mm	400	600	2,9 kg
4	Chipboard door thk 18mm	400	1200	5,8 kg
5	Chipboard door thk 18mm	450	600	3,2 kg
6	Chipboard door thk 18mm	450	1200	6,3 kg
7	Chipboard door thk 18mm	450	1500	7,9 kg
8	Chipboard door thk 18mm	500	600	3,5 kg
9	Chipboard door thk 18mm	500	1200	7,0 kg
10	Chipboard door thk 18mm	500	1500	9,1 kg
11	Chipboard door thk 25mm	350	600	3,5 kg
12	Chipboard door thk 25mm	350	900	5,2 kg
13	MDF door thk 18mm	350	900	4,4 kg
14	MDF door thk 18mm	350	1200	6,0 kg
15	MDF door thk 18mm	400	900	5,0 kg
16	MDF door thk 18mm	400	1200	6,8 kg
17	MDF door thk 18mm	500	1200	8,5 kg
18	Chipb. 18mm + glass 4mm	350	900	7,2 kg
19	Chipb. 18mm + glass 4mm	400	900	7,9 kg
20	Chipb. 18mm + glass 4mm	400	1200	10,4 kg

Weight considering: Chipboard 650 Kg/m³ and MDF 780 Kg/m³.



1 mechanism
KIARO

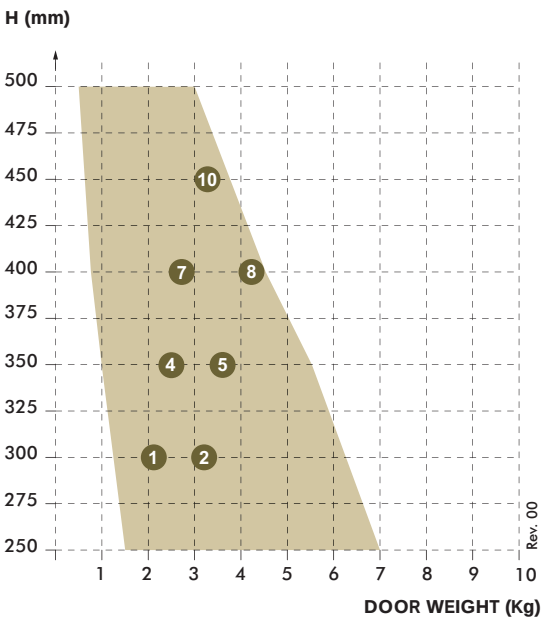
1 mechanism
+ KIARO S

2 mechanisms
KIARO

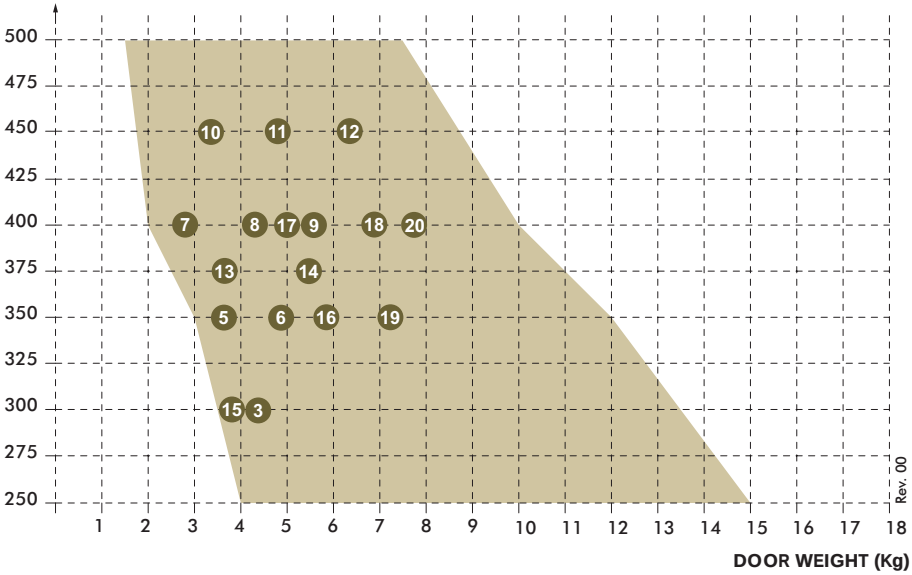
These are experimental results to be checked by the customer.
In accordance with the actual European regulation, we suggest where possible to use two KIARO mechanisms for each door.
Our technical department is at your disposal to analyze further cases out of this chart.

KIARO

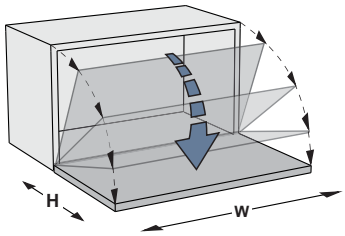
FRICTION OPENING

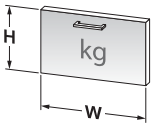


1 mechanism
KIARO S



2 mechanisms
KIARO S





Door weight including the possible handle.

		H mm	W mm	Weight theoretical
1	Chipboard door thk 18mm	300	600	2,1 kg
2	Chipboard door thk 18mm	300	900	3,2 kg
3	Chipboard door thk 18mm	300	1200	4,2 kg
4	Chipboard door thk 18mm	350	600	2,5 kg
5	Chipboard door thk 18mm	350	900	3,7 kg
6	Chipboard door thk 18mm	350	1200	4,9 kg
7	Chipboard door thk 18mm	400	600	2,8 kg
8	Chipboard door thk 18mm	400	900	4,2 kg
9	Chipboard door thk 18mm	400	1200	5,6 kg
10	Chipboard door thk 18mm	450	600	3,2 kg
11	Chipboard door thk 18mm	450	900	4,8 kg
12	Chipboard door thk 18mm	450	1200	6,3 kg
13	Chipboard door thk 25mm	375	600	3,7 kg
14	Chipboard door thk 25mm	375	900	5,5 kg
15	MDF door thk 18mm	300	900	3,9 kg
16	MDF door thk 18mm	350	1200	5,9 kg
17	MDF door thk 18mm	400	900	5,0 kg
18	MDF door thk 18mm	400	1200	6,8 kg
19	Chipb. 18mm + glass 4mm	350	900	7,2 kg
20	Chipb. 18mm + glass 4mm	400	900	7,9 kg

Weight considering: Chipboard 650 Kg/m³ and MDF 780 Kg/m³.

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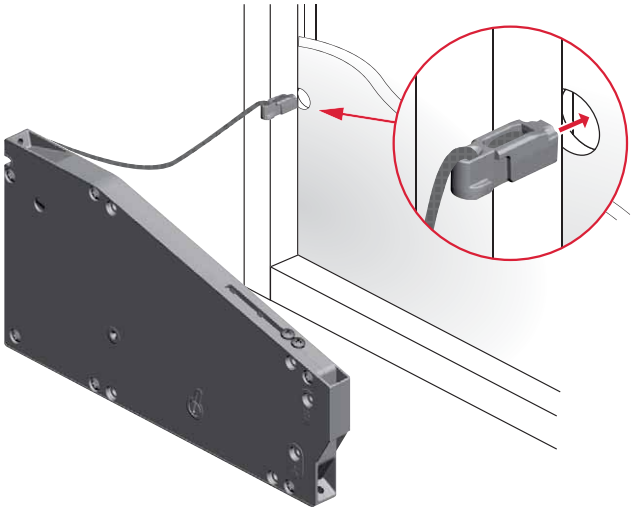
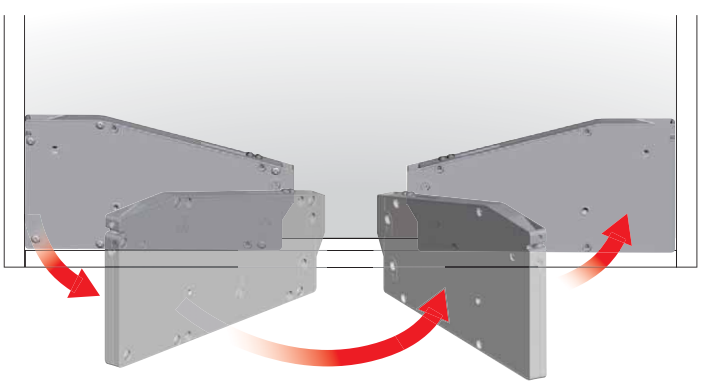
Our technical department is at your disposal to analyze further cases out of this chart.

MECHANISM INSTALLATION

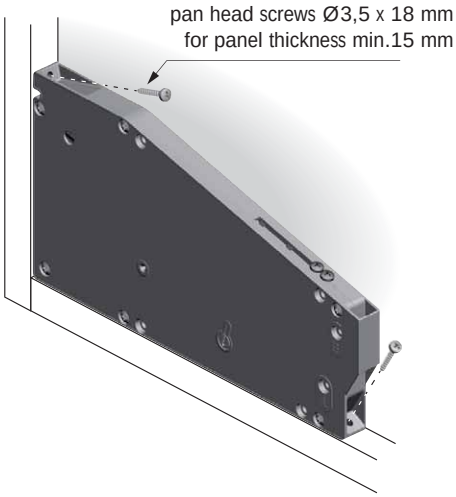


UNHANDED MECHANISM

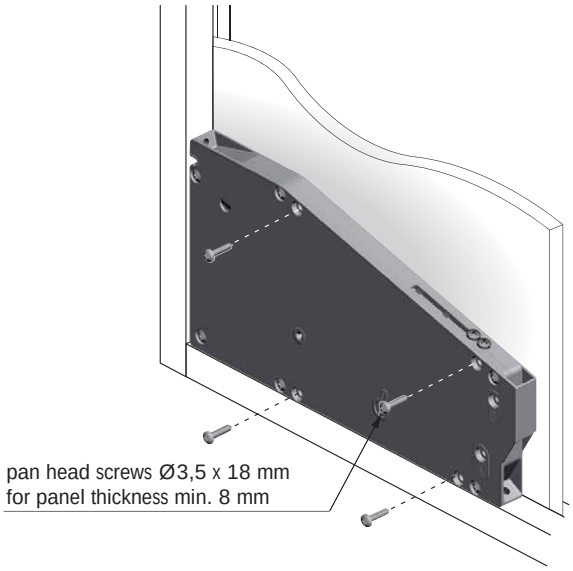


MECHANISM FIXING

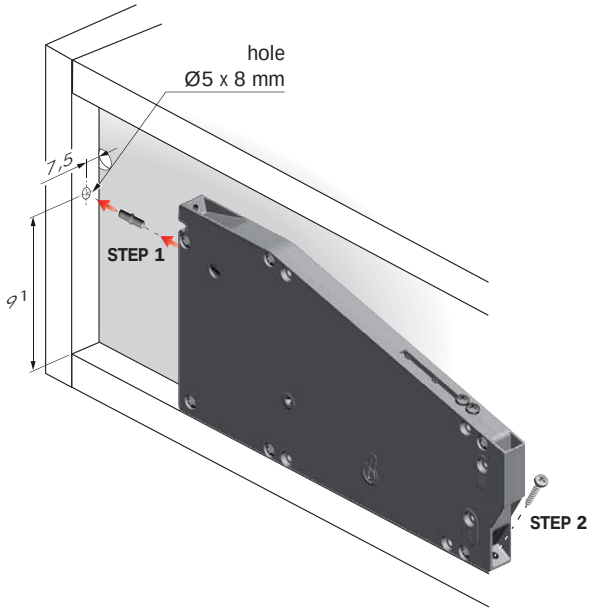
On the bottom and on the side panel with screws

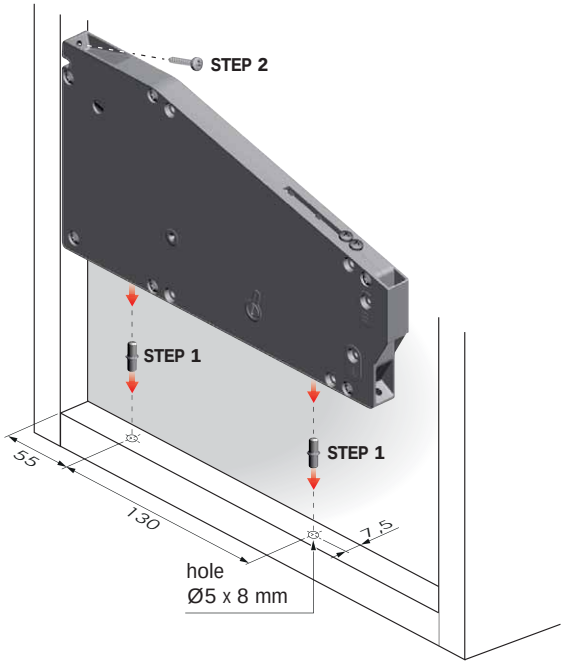


On the back panel with screws



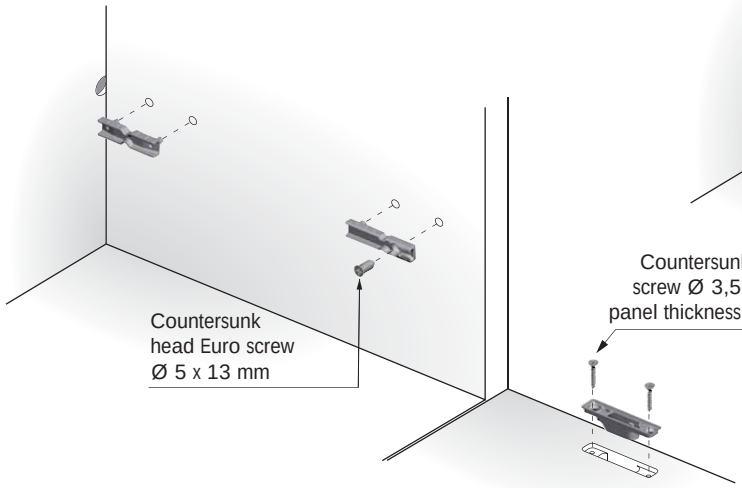
On the bottom and on the side panel with pin and screws



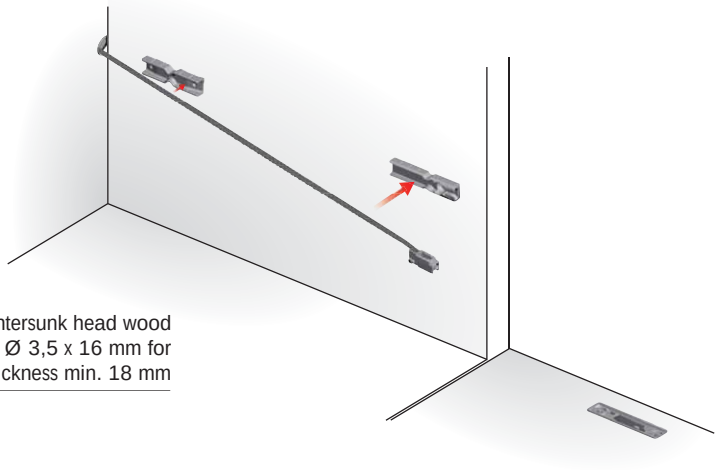


KIARO

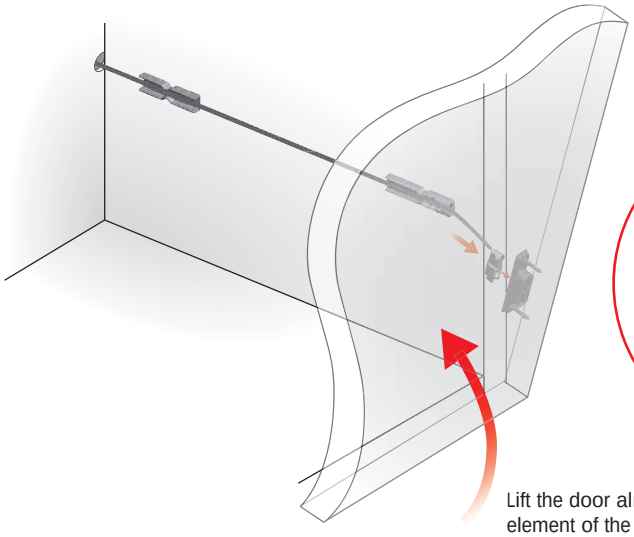
BRACKETS INSTALLATION

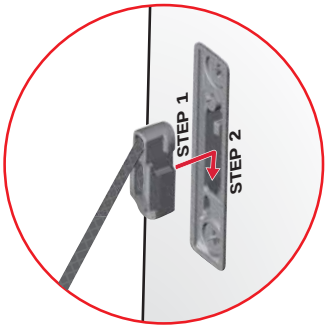


WIRE INSTALLATION



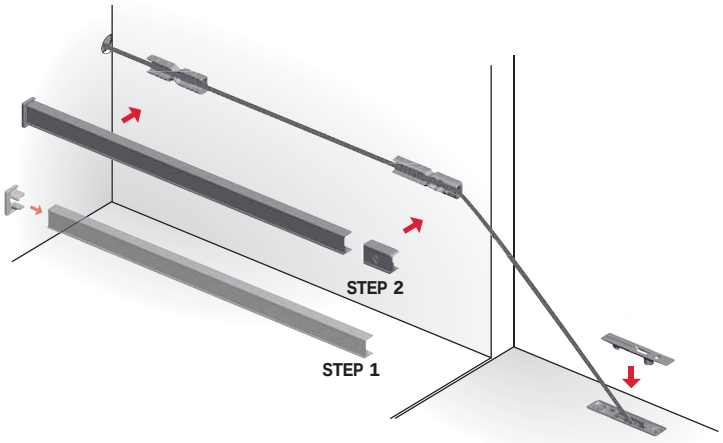
WIRE INSERTION ONTO THE DOOR BRACKET

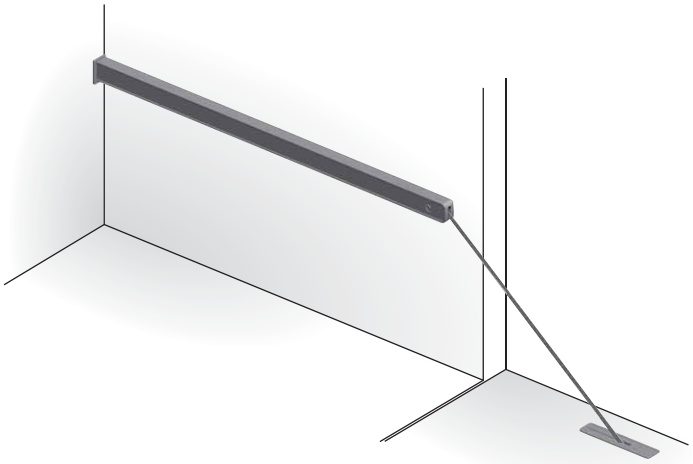




Lift the door almost completely to slot the end element of the wire into the door bracket.

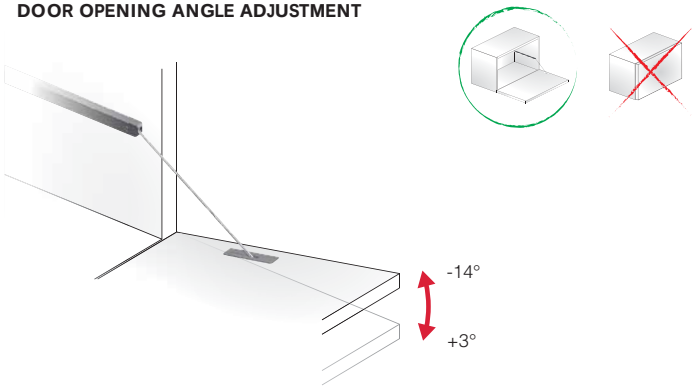
COVER CAP AND ALUMINIUM LATERAL PROFILE INSERTION





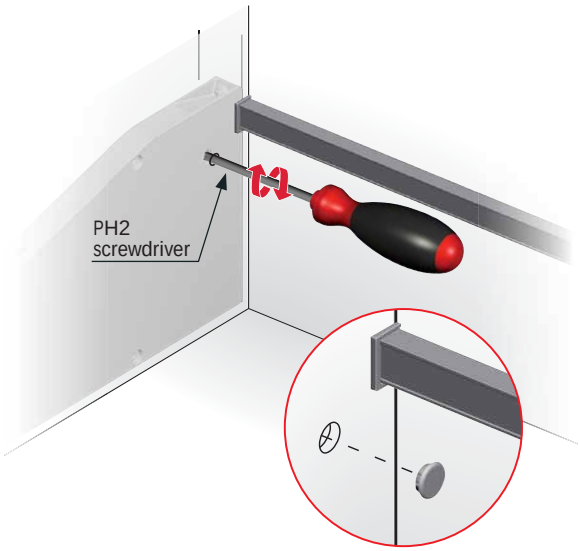
Place the cover cap on the door bracket before lifting the door.

DOOR OPENING ANGLE ADJUSTMENT

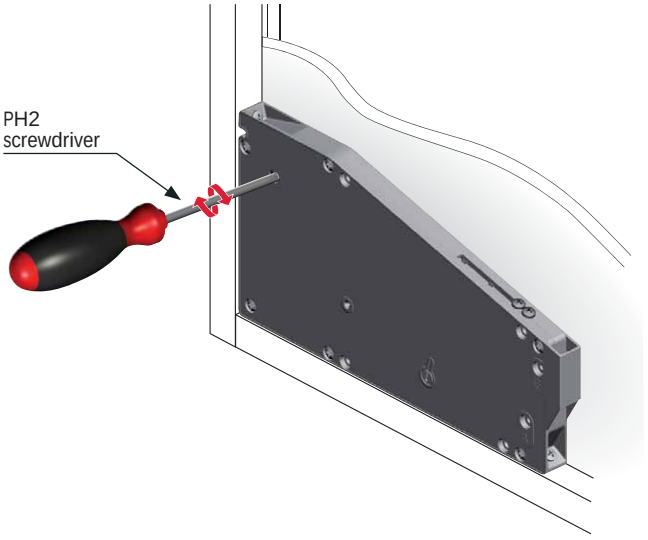


VERY IMPORTANT:
The opening angle adjustment can be carried out only with open door.

FROM THE INSIDE OF THE CABINET



FROM THE BACKSIDE OF THE CABINET

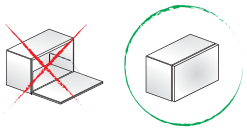


ADJUSTMENT OF STRENGTH SETTINGS

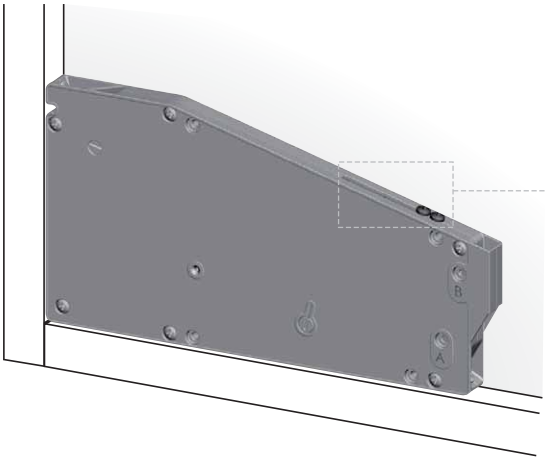
Possibility to adjust the settings of the mechanism also upon completed assembly.
For details refer to the related section.

VERY IMPORTANT:
Before proceeding, make sure:

1) The door is completely closed.

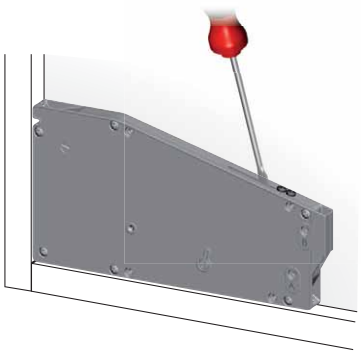


2) The mechanism is completely in position.



OK

NO

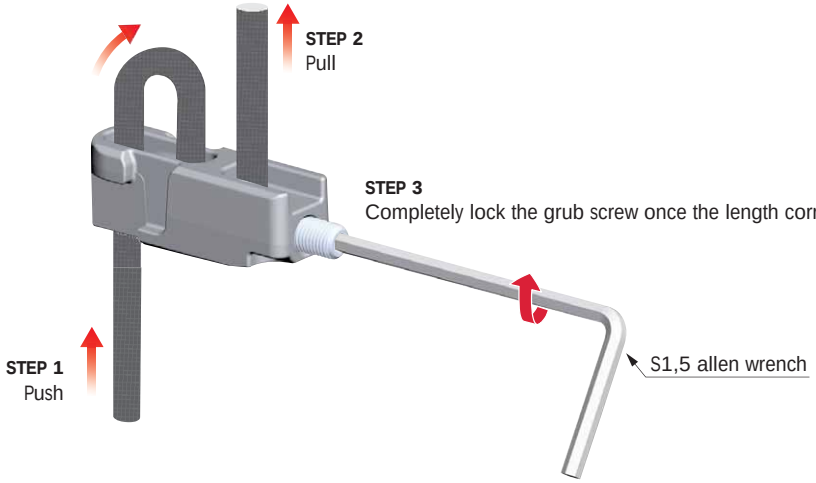


In this case put the small flap in position with a screwdriver.

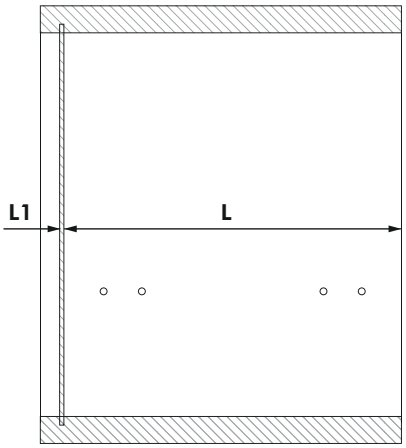
KIARO

INSTRUCTIONS FOR WIRE CUTTING

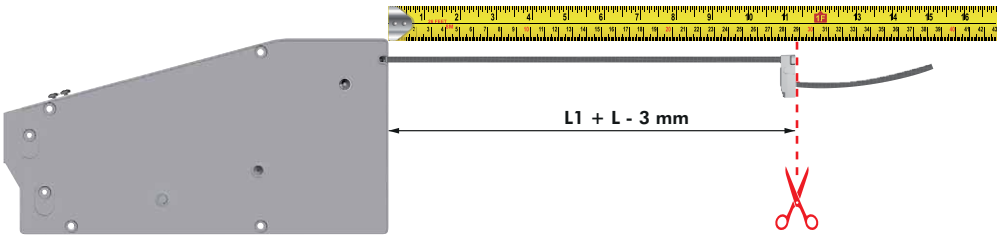
INSERTION OF THE WIRE INTO THE END PART AND LOCKING WITH M3 GRUB SCREW



WIRE CUTTING WITH UNMOUNTED MECHANISM

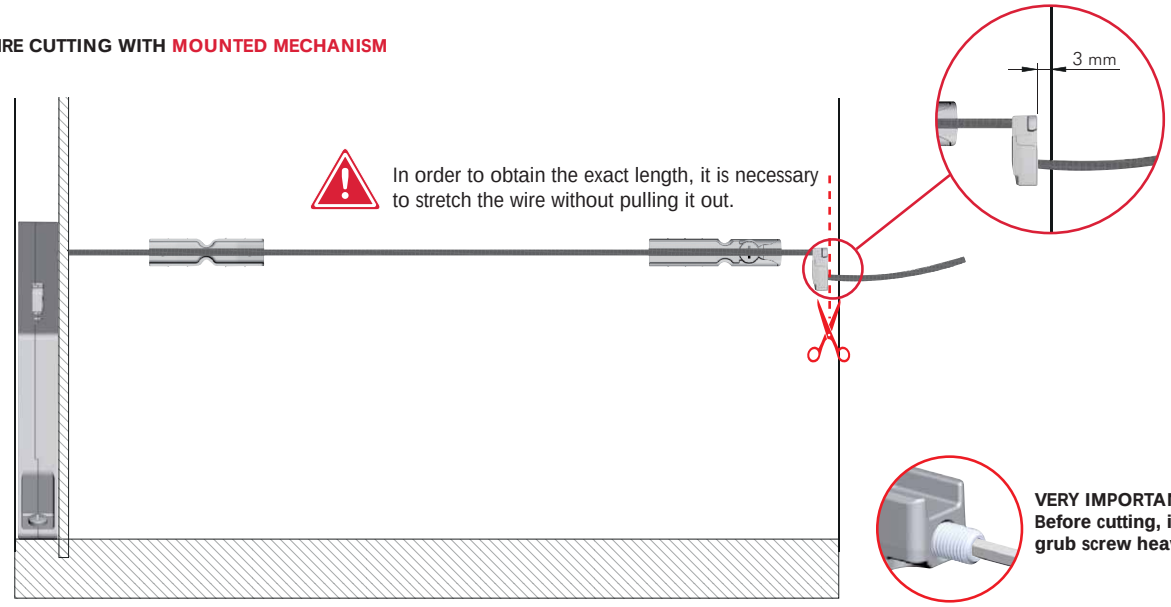


In order to obtain the exact length, it is necessary to stretch the wire without pulling it out.



VERY IMPORTANT:
Before cutting, it is necessary to lock the grub screw heavily.

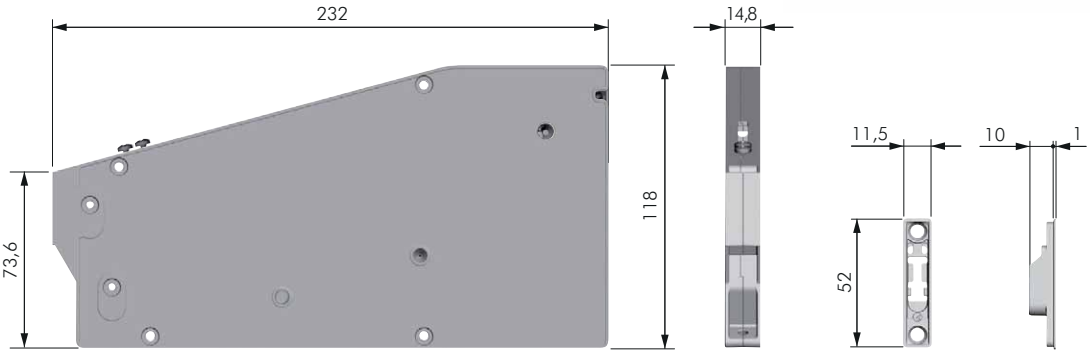
WIRE CUTTING WITH MOUNTED MECHANISM

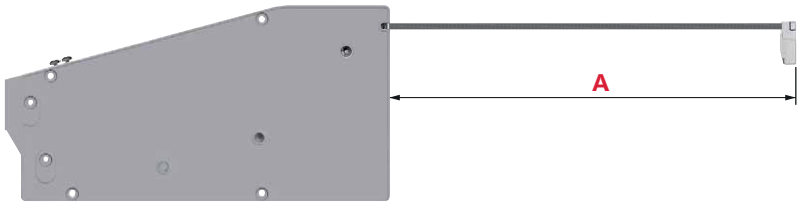


In order to obtain the exact length, it is necessary to stretch the wire without pulling it out.

VERY IMPORTANT:
Before cutting, it is necessary to lock the grub screw heavily.

KIT MECHANISM KIARO or KIARO S (with door brackets)

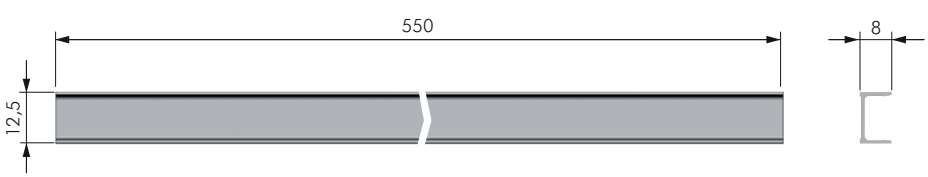




ZA EP ST = 12 pcs.

			A (mm)
KIARO	46006000YA	YQ	600
KIARO S	46106000YA	YQ	

NOTE: Possibility to supply the wire with customized length (**A**).



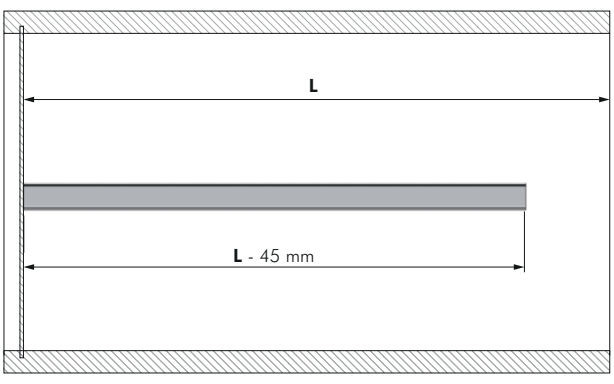
AL = 12 pcs.

46205500UT	FV

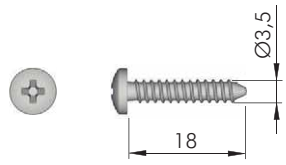
NOTE: Possibility to supply the aluminium profile with customized length.

Finishes matching between cover caps and alu. profiles:
YA → UT
YQ → FV

CUT TO SIZE RULE:



ACCESSORIES FOR MECHANISM FIXING



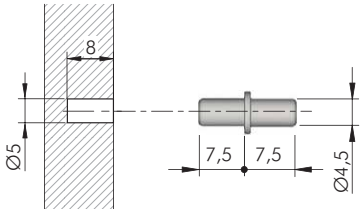
= Ø 3 mm

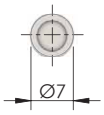
= PZ2

ST

= 10.000 pcs.

60103150ZN





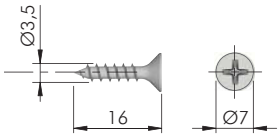
= Ø 5 mm

ST

= 5000 pcs.

10101010ZN

ACCESSORY FOR DOOR BRACKET FIXING



= Ø 3 mm +

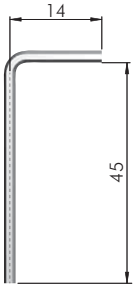
= PZ2

ST

= 10.000 pcs.

60101390ZN

ACCESSORY FOR LOCKING THE GRUB SCREW



= S1,5

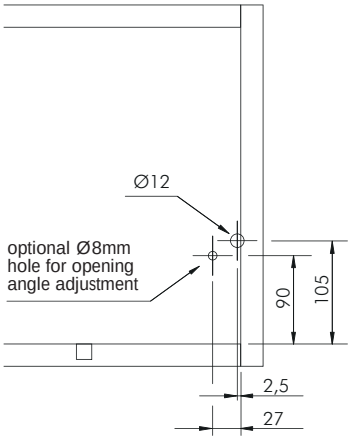
ST

= 1000 pcs.

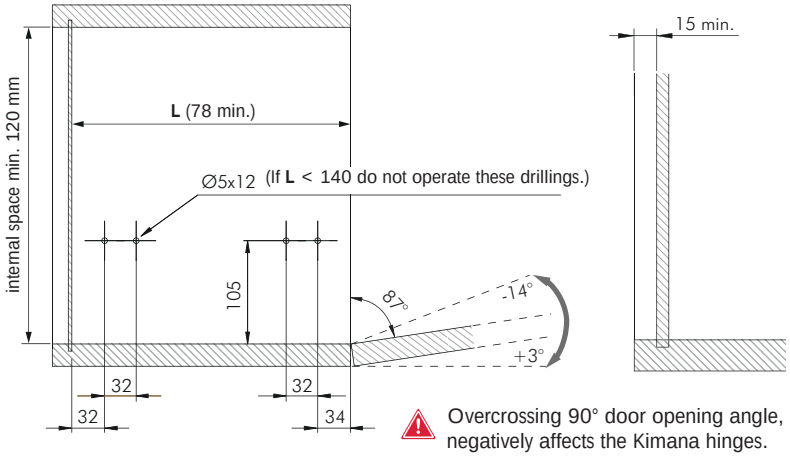
62501050ZN

KIARO WITH KIMANA HINGE

BACK-PANEL DRILLING OPERATIONS



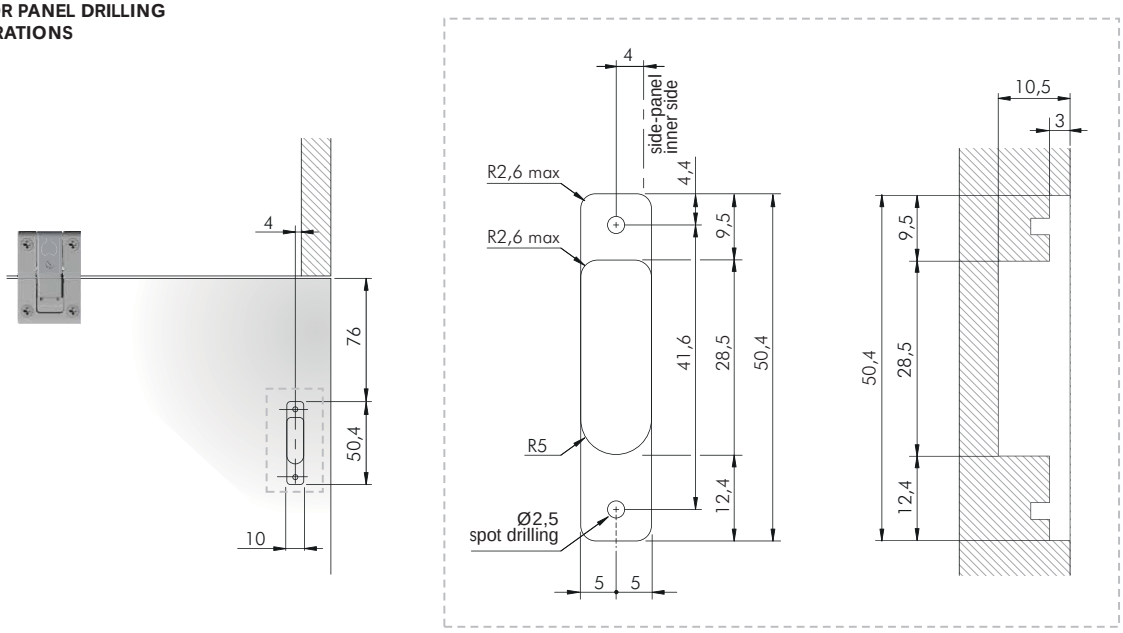
SIDE-PANEL DRILLING OPERATIONS



Overcrossing 90° door opening angle, negatively affects the Kimana hinges.

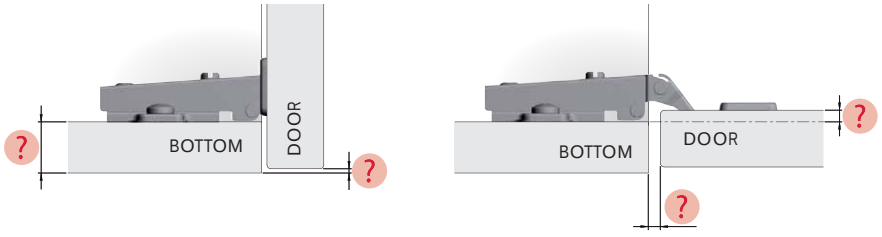
In case of door without handles it is recommended to use **K Push Tech with buffer**.

DOOR PANEL DRILLING OPERATIONS



KIARO WITH STANDARD UNSPRUNG HINGES

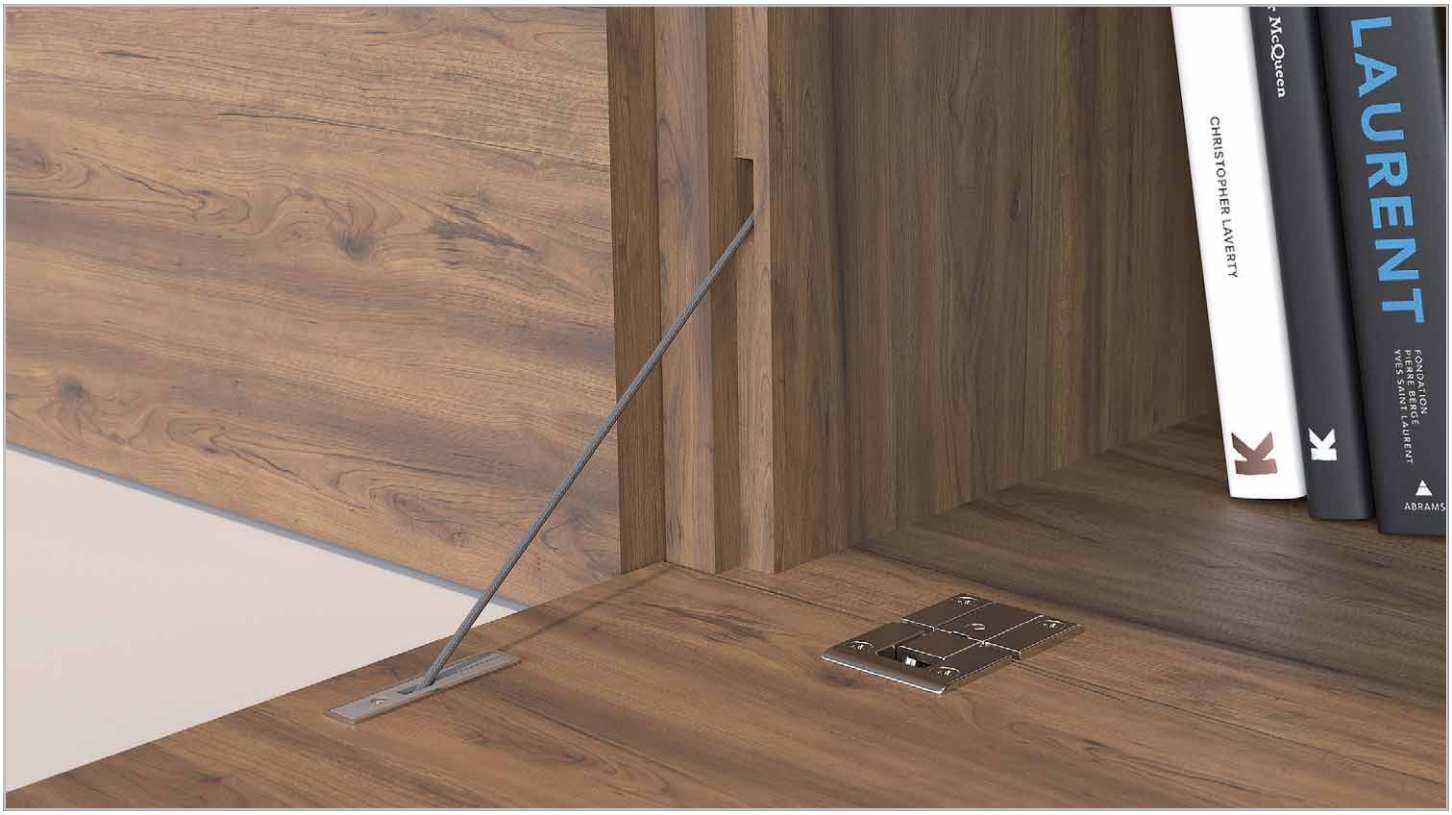
In case the hinges to be installed are not KIMANA hinges, please contact our technical department to receive the correct drilling plan. It is necessary to indicate all the values requested in the following diagram:



CLOSING CONDITION **OPENING CONDITION**

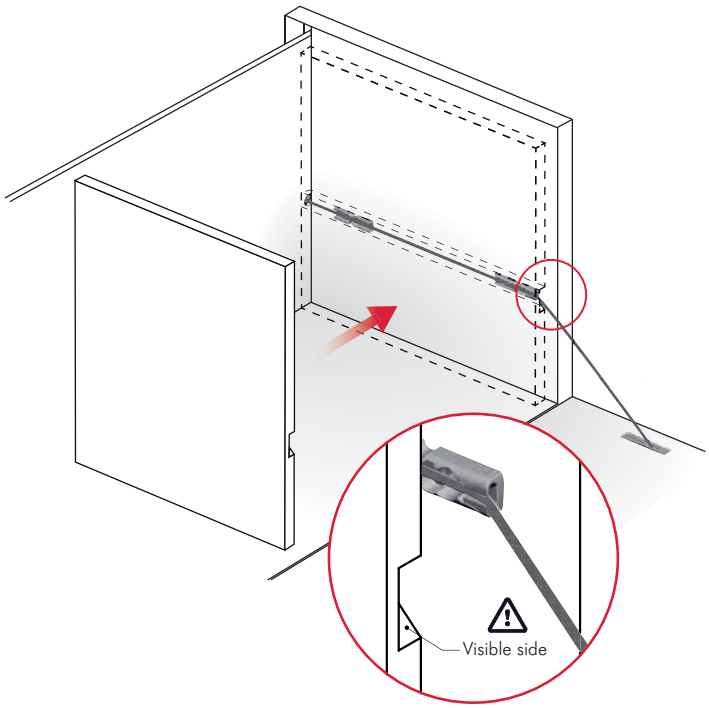
KIARO DECK - Alternative applications of Kiaro

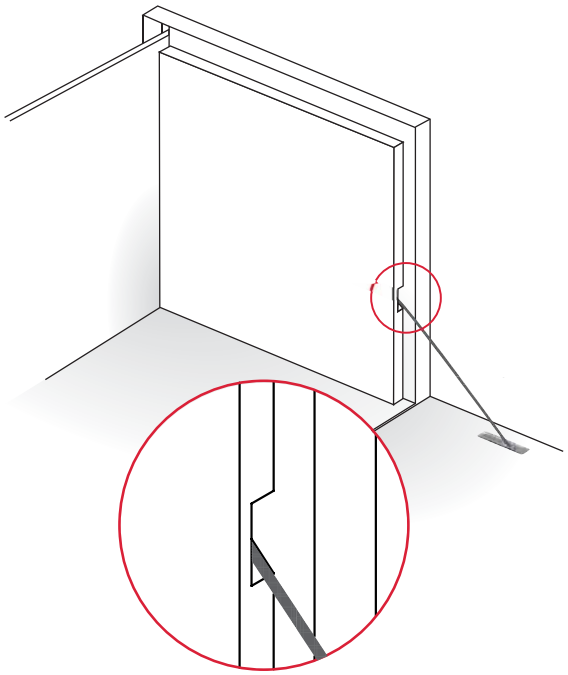
KIARO DECK - Version 1

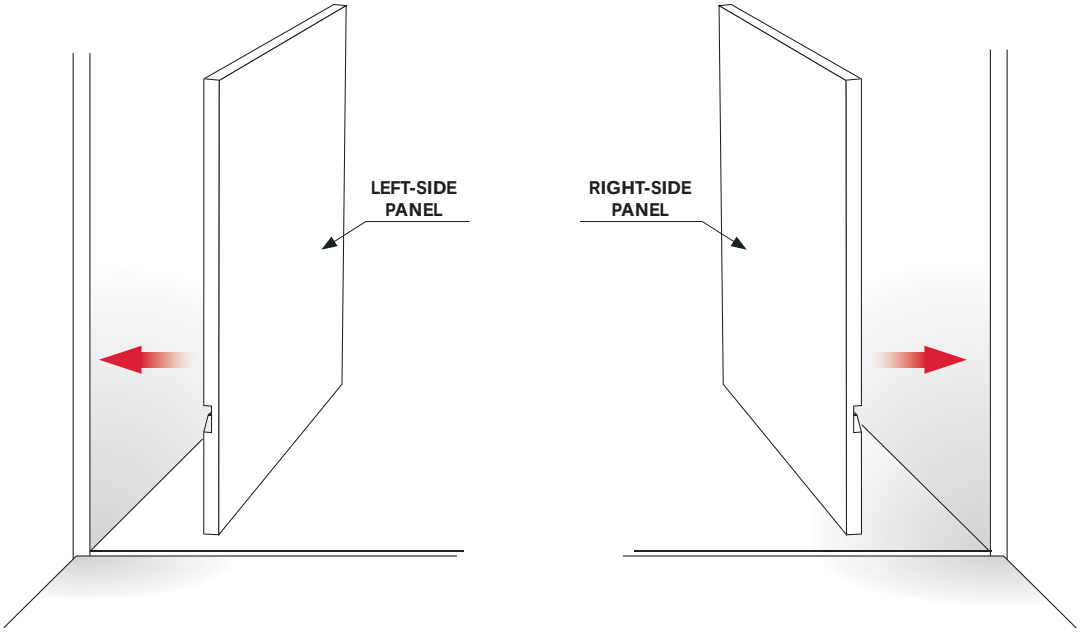


NOTE:
The following installation and technical drawings refer only to the cover panel for Kiaro Deck application**. For installation and drilling plans of Kiaro please refer to the dedicated brochure or catalogue section.**

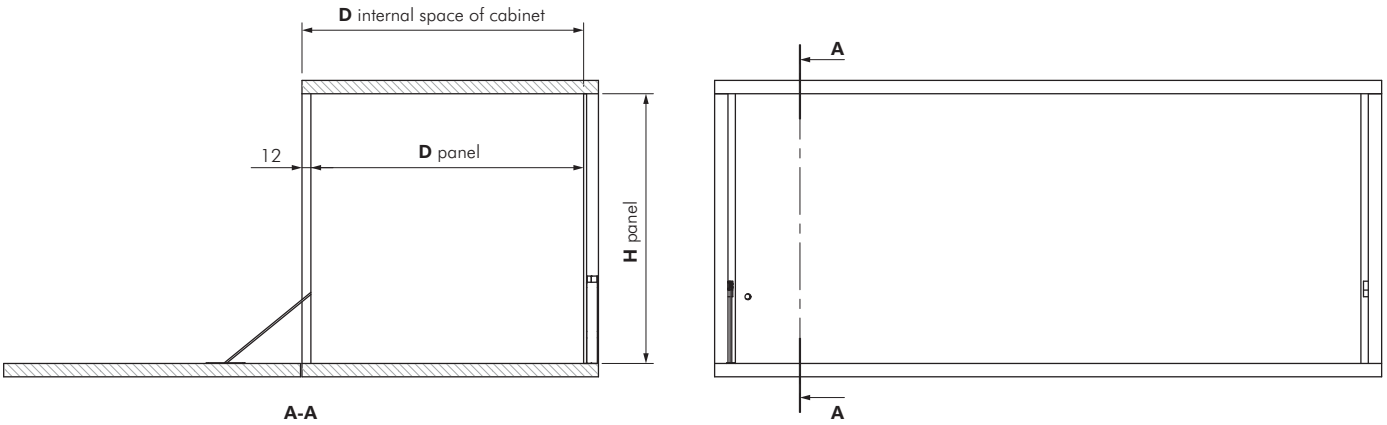
INTERNAL PANEL INSTALLATION

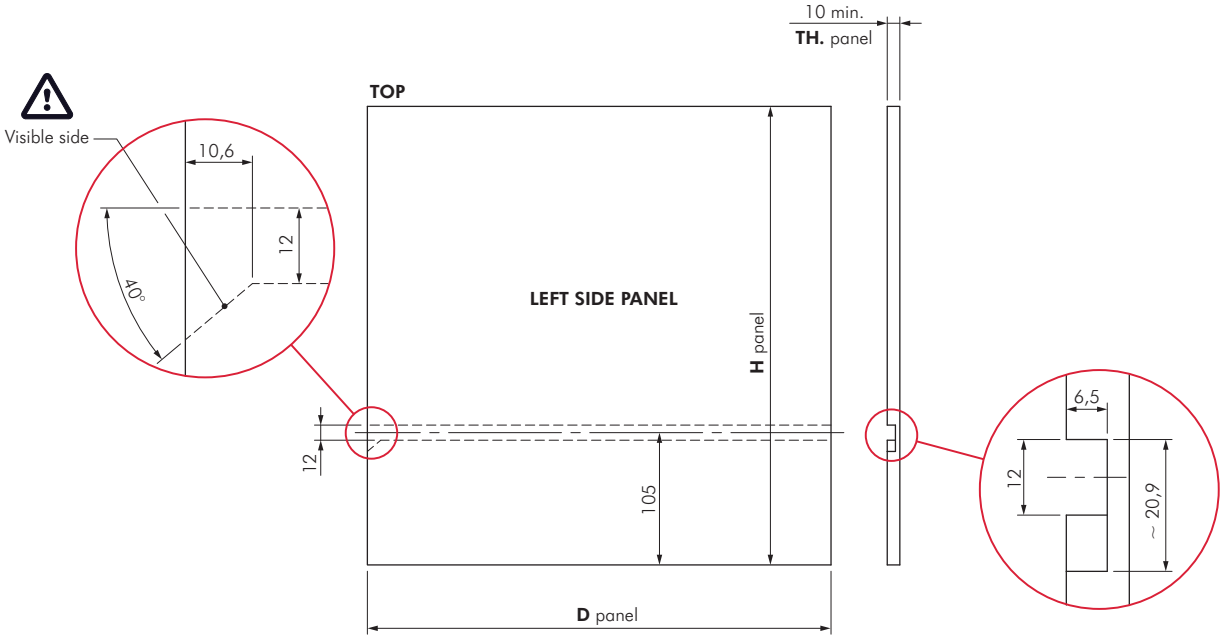






INTERNAL PANEL DIMENSIONS AND MILLING OPERATION

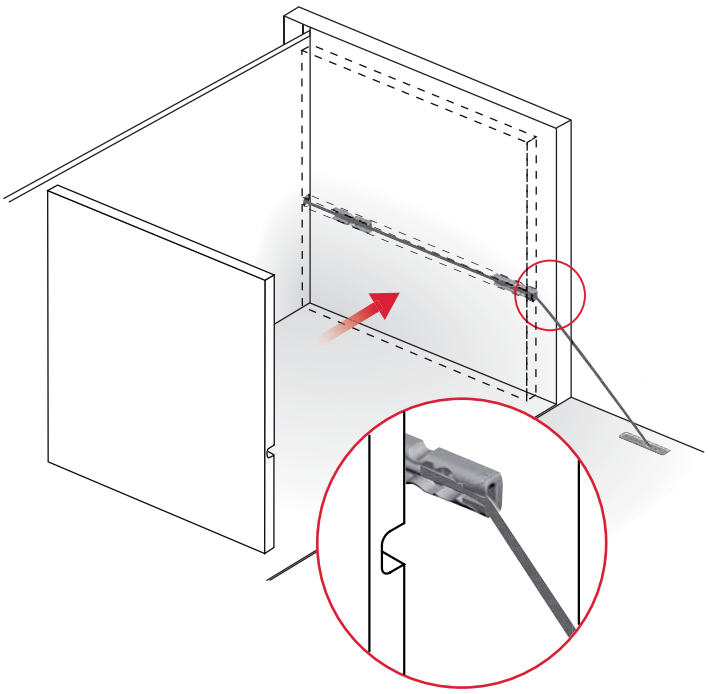


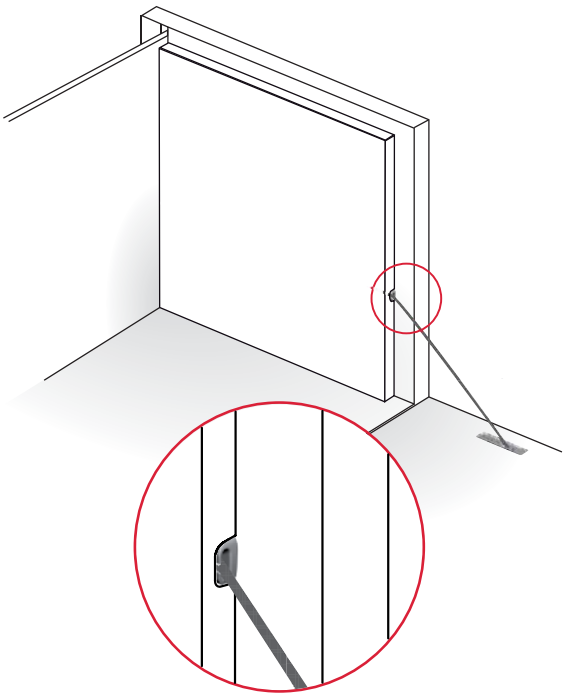


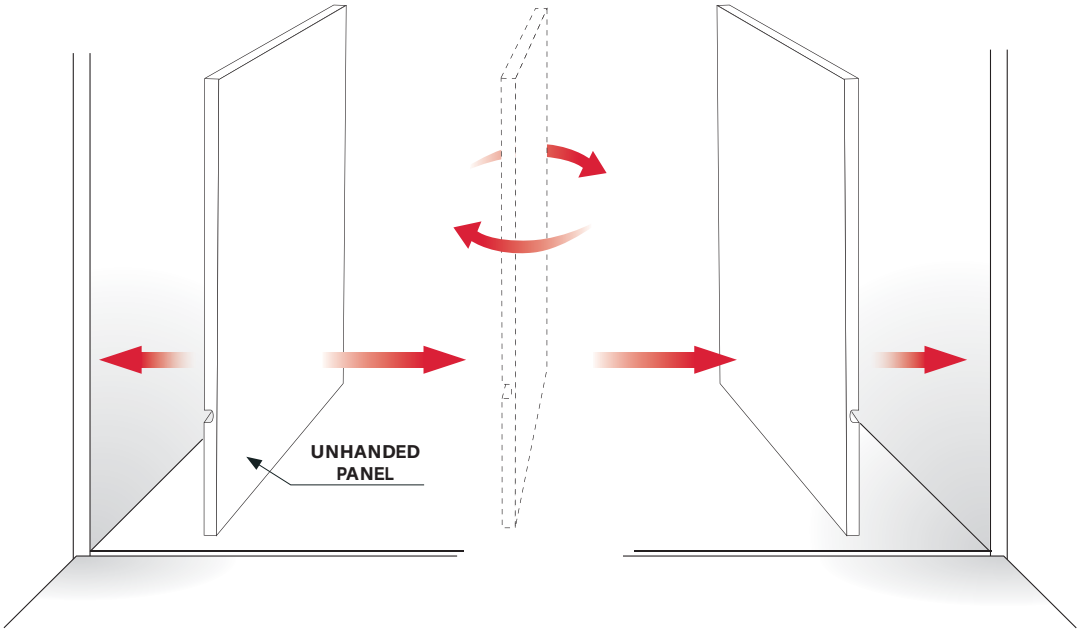
KIARO DECK - Version 2

NOTE:
The following installation and technical drawings refer only to the cover panel for Kiaro Deck application**. For installation and drilling plans of Kiaro please refer to the dedicated brochure or catalogue section.**

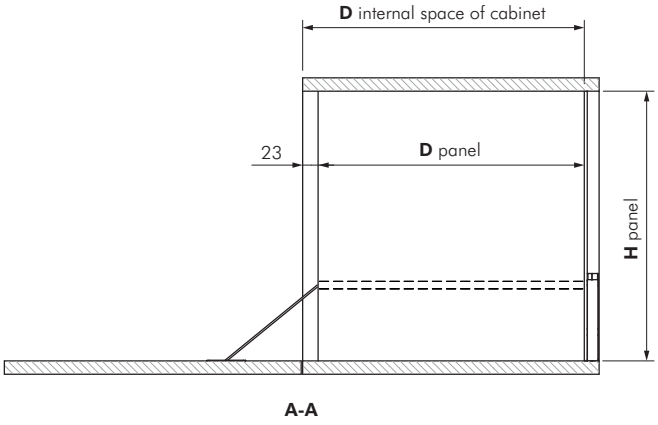
INTERNAL PANEL INSTALLATION

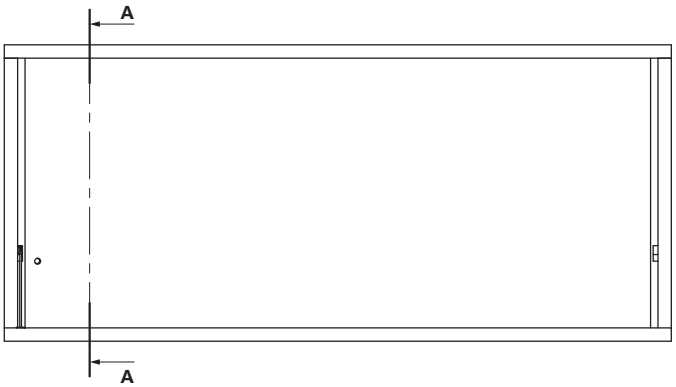


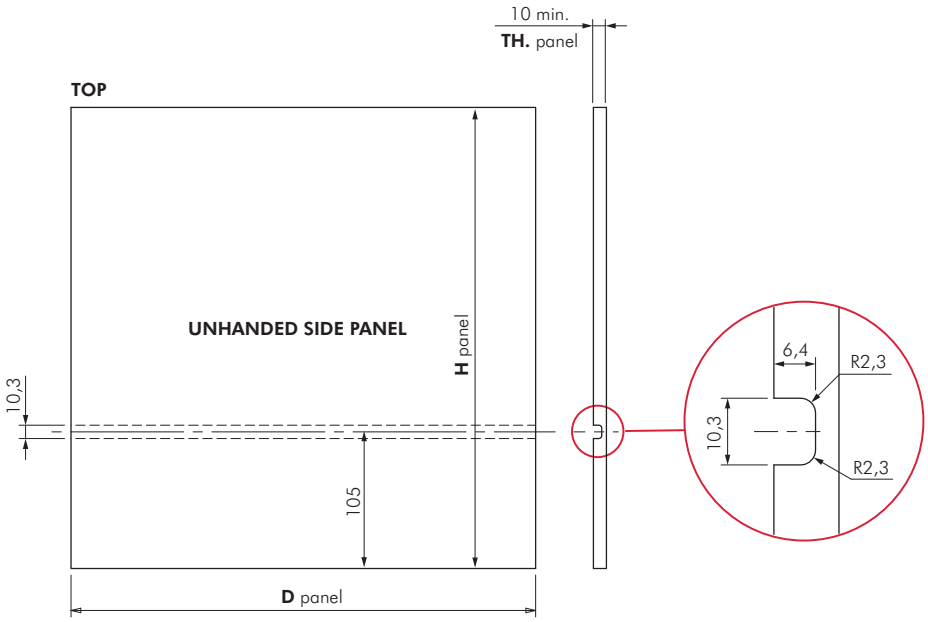




INTERNAL PANEL DIMENSIONS AND MILLING OPERATION





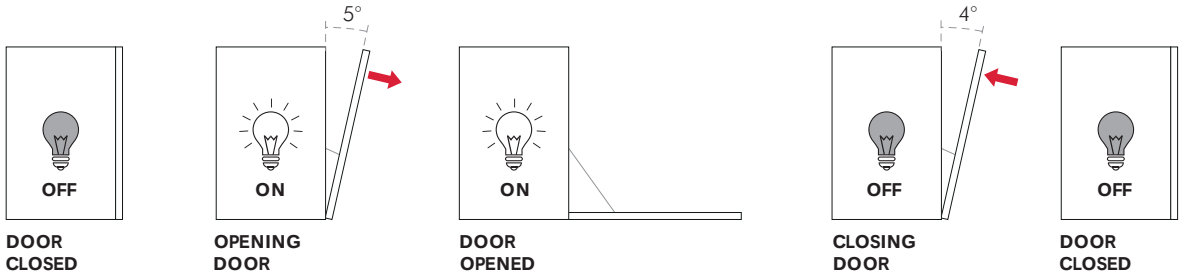


KIARO LED

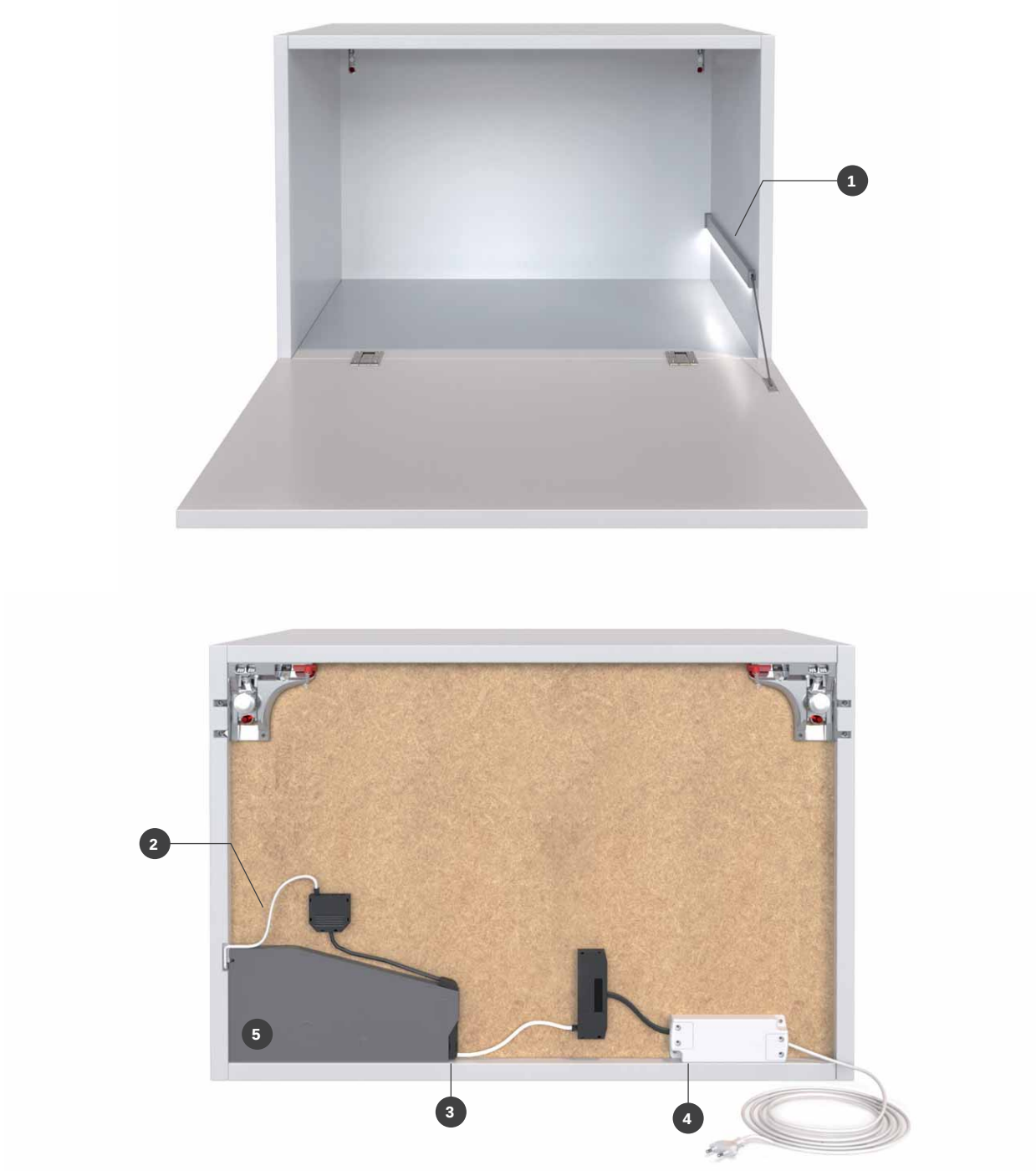
The mechanism can be supplied with an integrated device operating as an on-off switch for the internal light, coordinated with the door opening and closing, adding a homely ambiance and a touch of luxury.

The lighting device of KIARO is to be installed on the concealed mechanism and can work either for the lateral profile with integrated LED strip or for other lighting appliances placed inside the cabinet.

Thanks to this bespoke device, it is no longer required to make special drilling operations to install visible opening detectors.



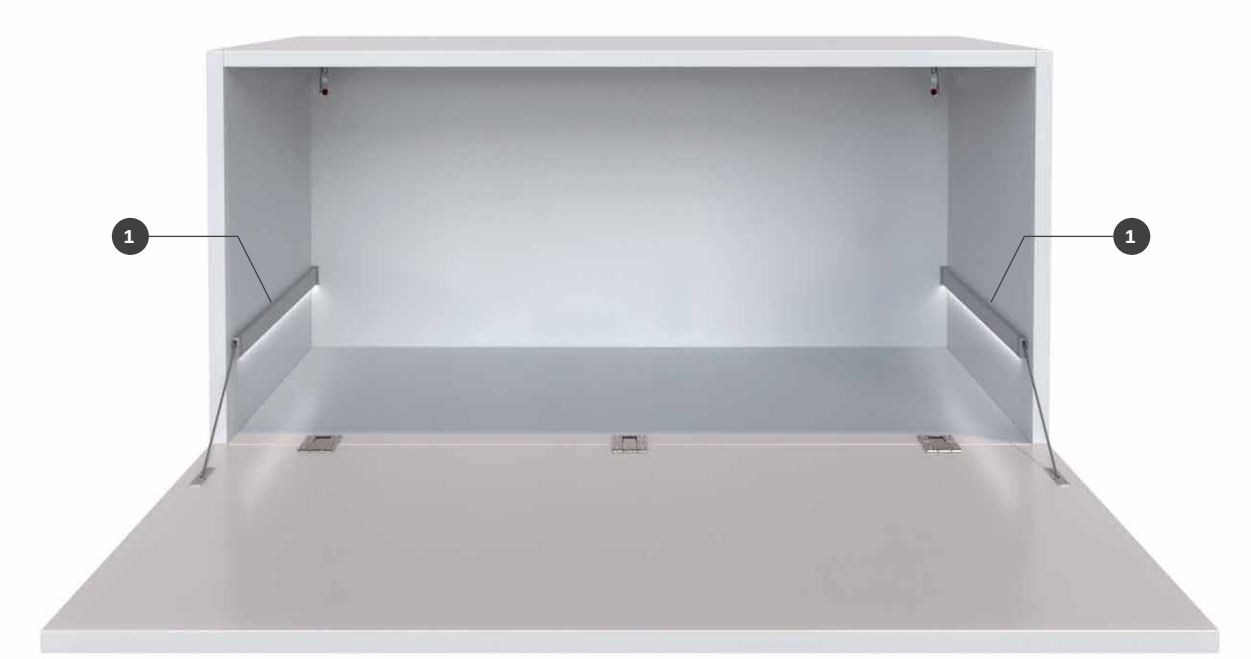
COMPONENTS FOR APPLICATIONS WITH 1 KIARO LED

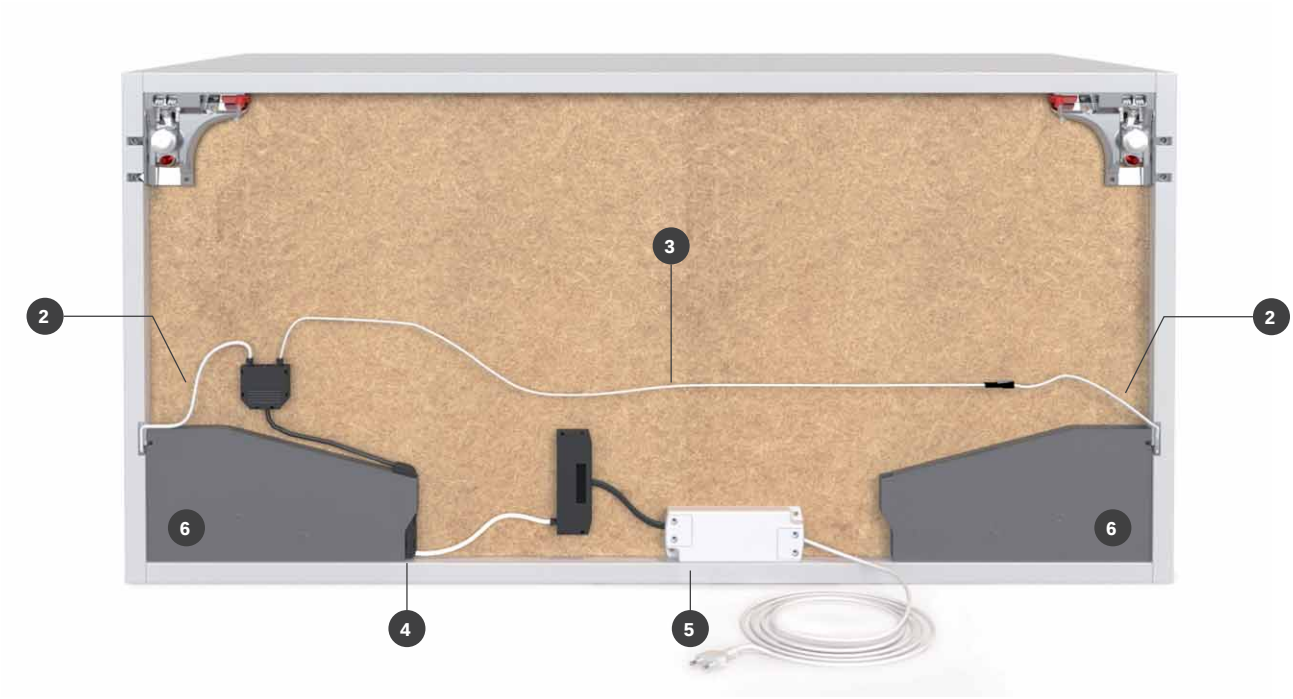


1. 1 x KIARO LED ALUMINIUM PROFILE (
   1 x COVER CAPS SET
2. 1 X LED FLEXIBLE STRIP
3. 1 X SENSOR FOR KIARO LED
4. 1 X CHARGER
5. KIT MECHANISM KIARO or KIARO S (with door brackets)

   For the correct mechanism settings please refer to the dedicated section.

COMPONENTS FOR APPLICATIONS WITH 2 KIARO LED

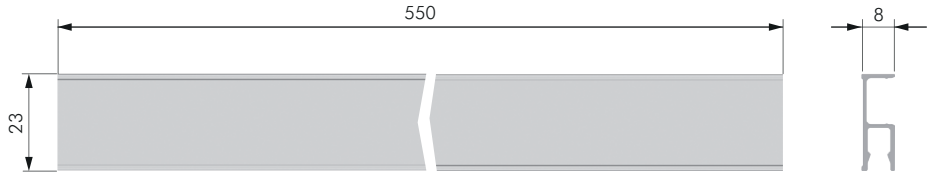




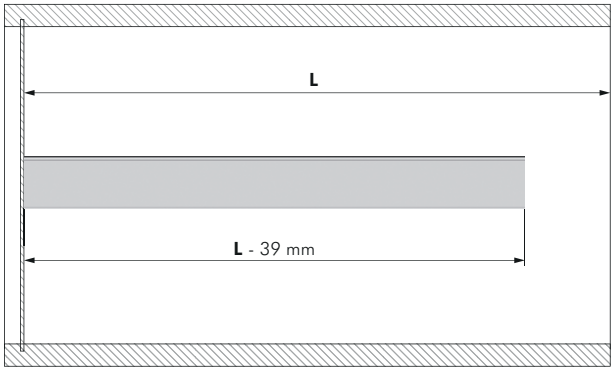
1. 2 x KIARO LED ALUMINIUM PROFILE
   1 x COVER CAPS SET
2. 2 X LED FLEXIBLE STRIP
3. 1 X EXTENSION CABLE
4. 1 X SENSOR FOR KIARO LED
5. 1 X CHARGER
6. KIT MECHANISM KIARO or KIARO S (with door brackets)

   For the correct mechanism settings please refer to the dedicated section.

KIARO LED ALUMINIUM PROFILE



CUT TO SIZE RULE:

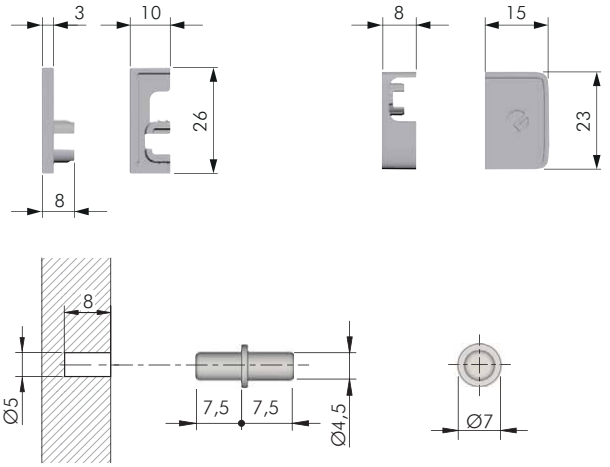


AL = 12 pcs.

46505500UT | **FV**

NOTE: Possibility to supply the aluminium profile with customized length.

COVER CAPS SET

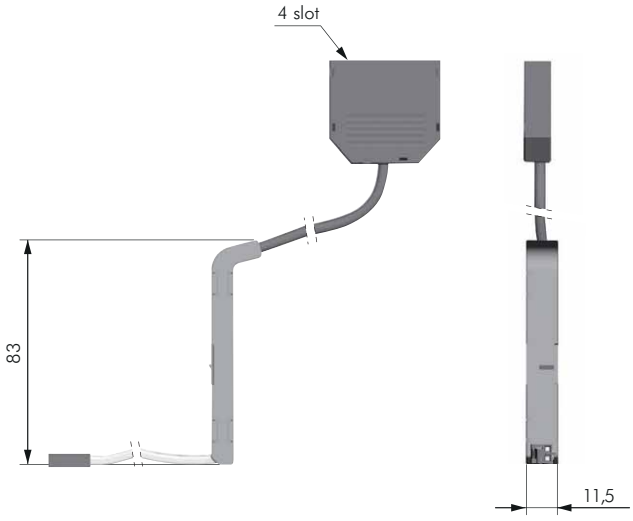


EP = 1 pc.

46303140EW | **EE**

NOTE: Finishes matching between cover caps and alu. profiles:
EW → UT
EE → FV

SENSOR FOR KIARO LED

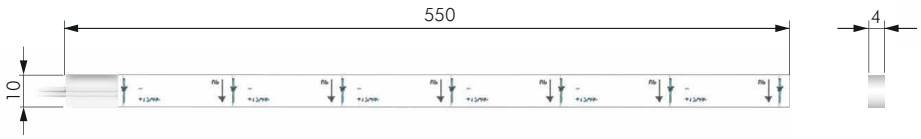


Maximum output:
30 Watt with light 12Vdc
60 Watt with light 24Vdc

= 12 pcs.

4670600000

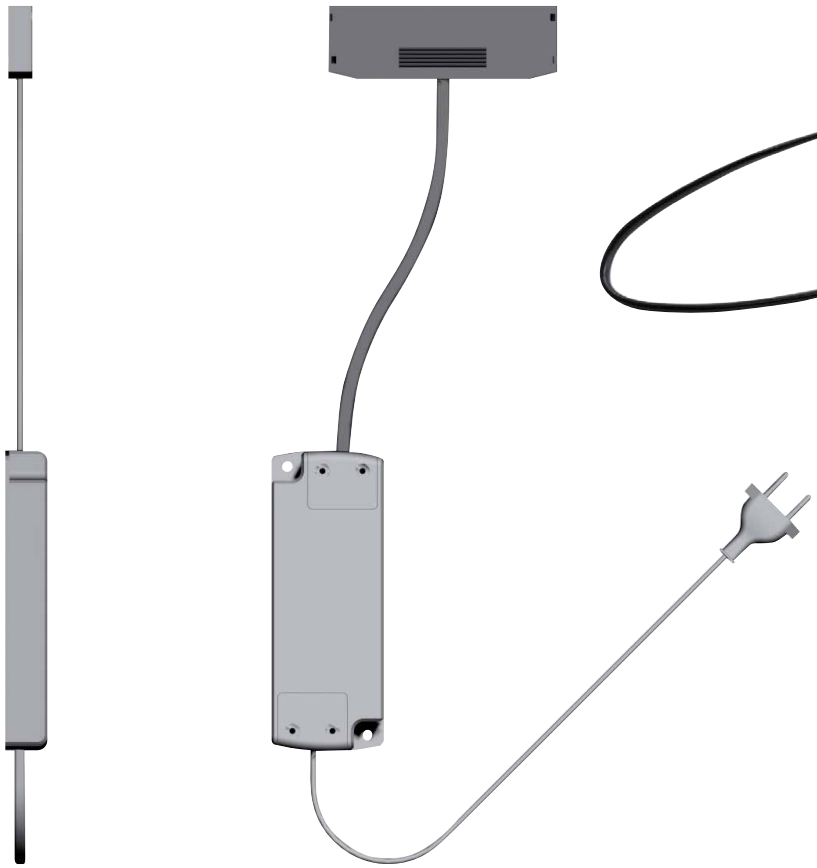
LED FLEXIBLE STRIP



= 12 pcs.

	LED Colour temperature
46601000AB	4000 K

CHARGER



= 12 pcs.

4670702000	110-120 Vac USA - CANADA socket
4670700000	220-240 Vac EUROPEAN socket

The chargers images shown here are for illustrative purposes only.

EXTENSION CABLE

Length: 2000 mm

= 12 pcs.

4670601000

CUSTOMER LIGHTING CONNECTORS

Length: 150 mm
Male connector

= 12 pcs.

4670602000

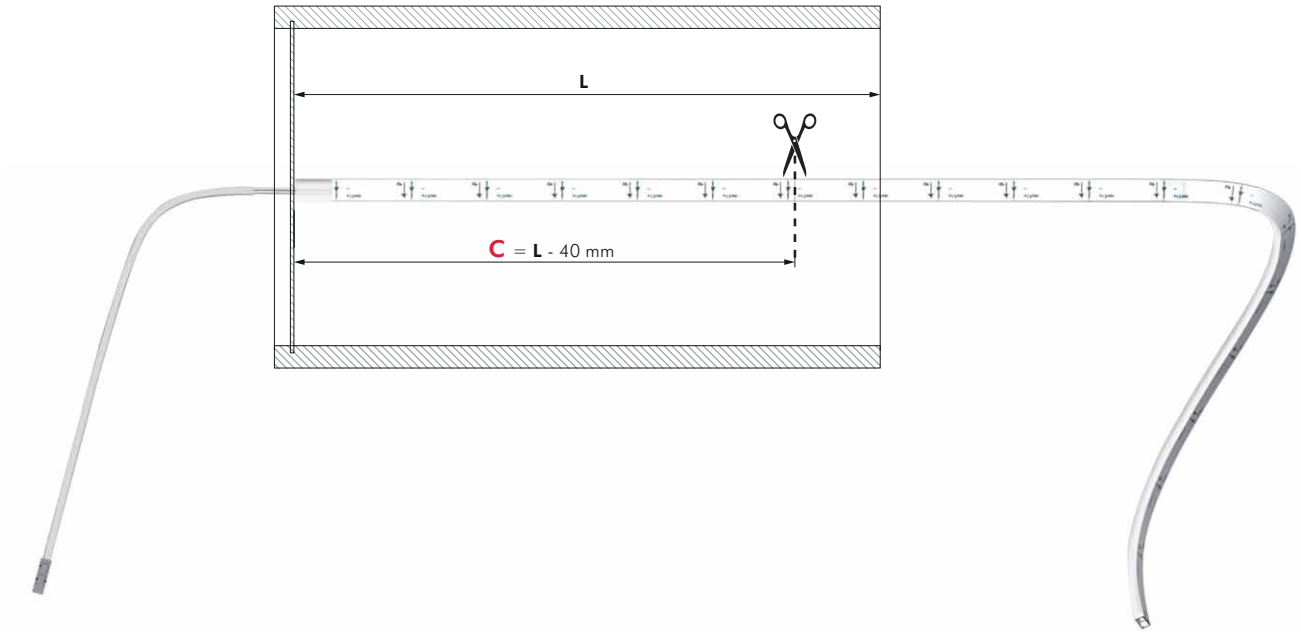
Length: 150 mm
Female connector

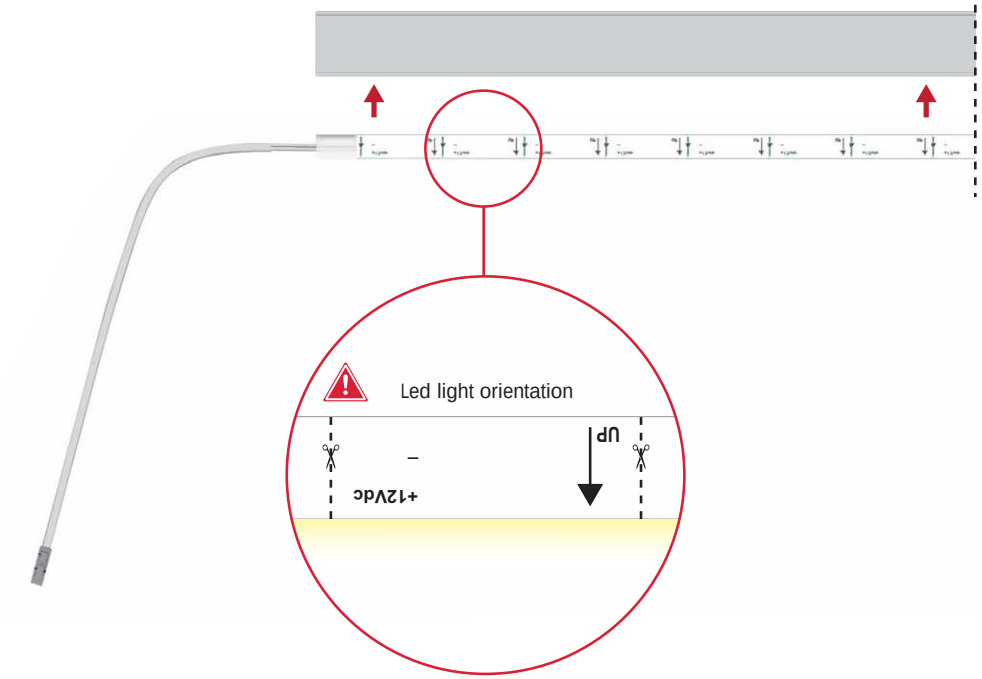
= 12 pcs.

4670603000

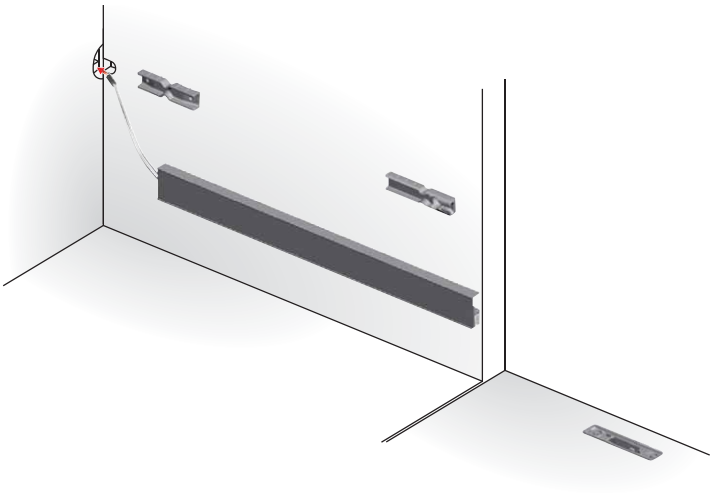
KIARO LED INSTALLATION

HOW TO CUT ON SIZE AND INSTALL THE LED FLEXIBLE STRIP.

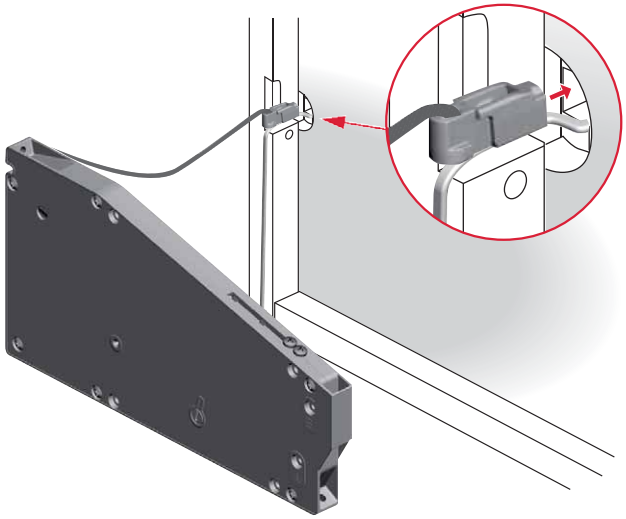




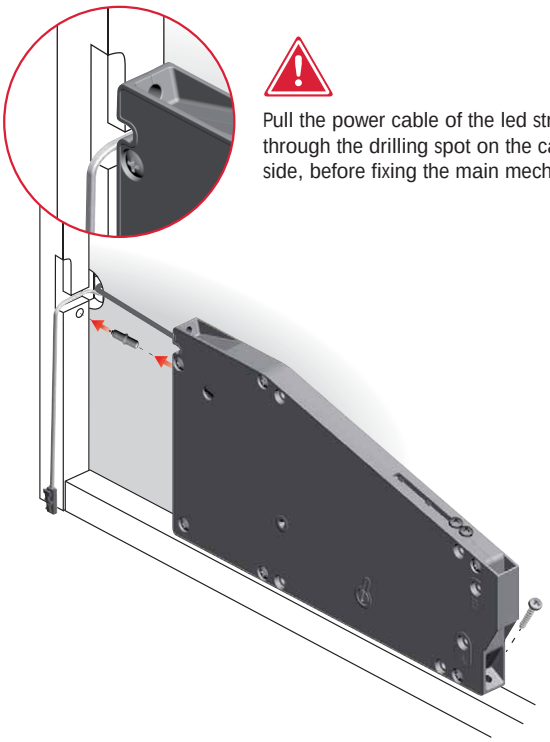
LED STRIP ELECTRICAL WIRE INSERTION THROUGH THE BACKSIDE HOLE



MECHANISM INSTALLATION

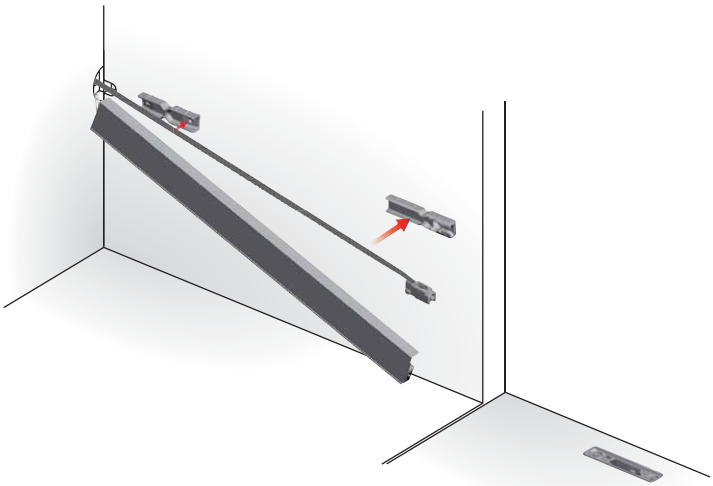


MECHANISM FIXING

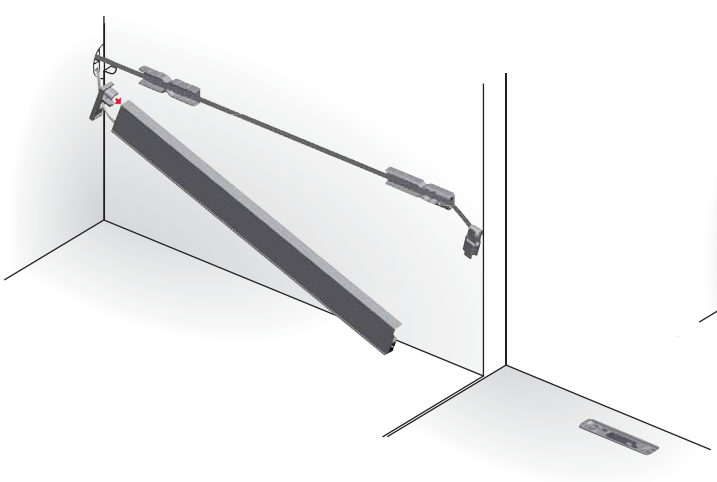


Pull the power cable of the led strip through the drilling spot on the cabinet side, before fixing the main mechanism.

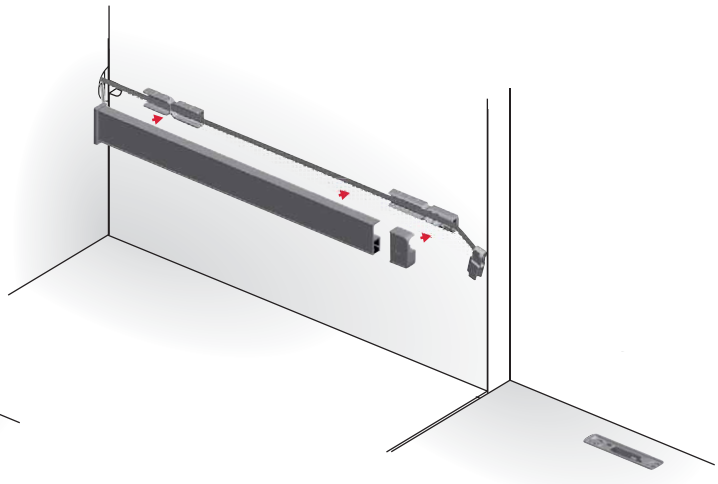
WIRE INSTALLATION



INSERTION OF THE BACKSIDE COVER FOR ALU. PROFILE

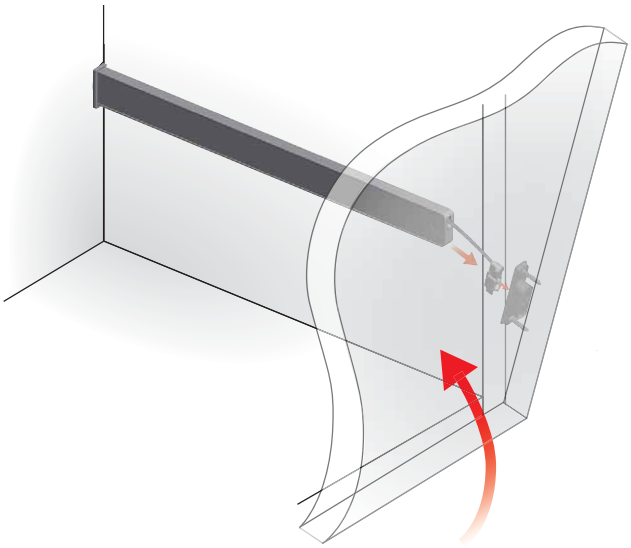


COVER CAPS AND ALUMINIUM LATERAL PROFILE INSERTION

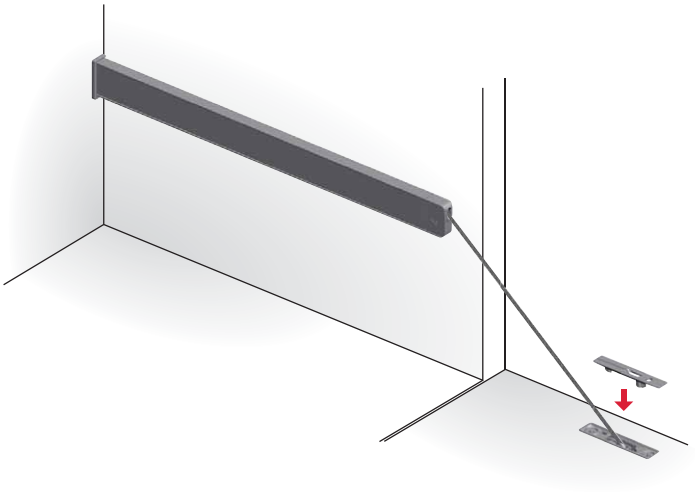


KIARO

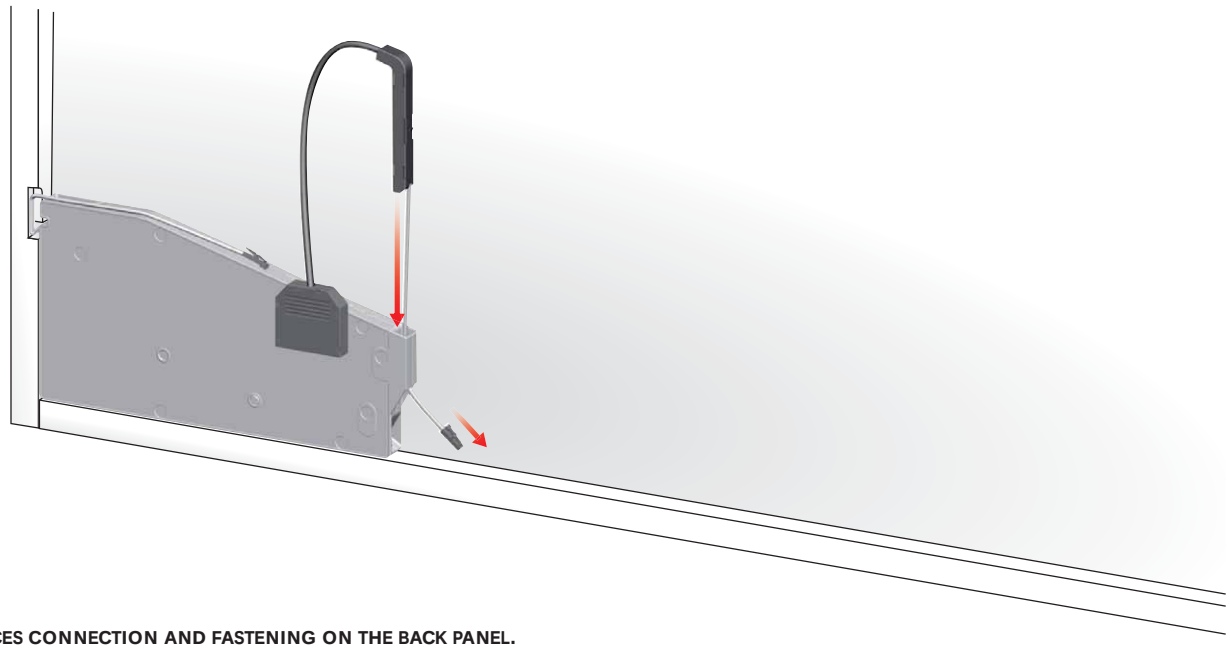
WIRE INSERTION ONTO THE DOOR BRACKET



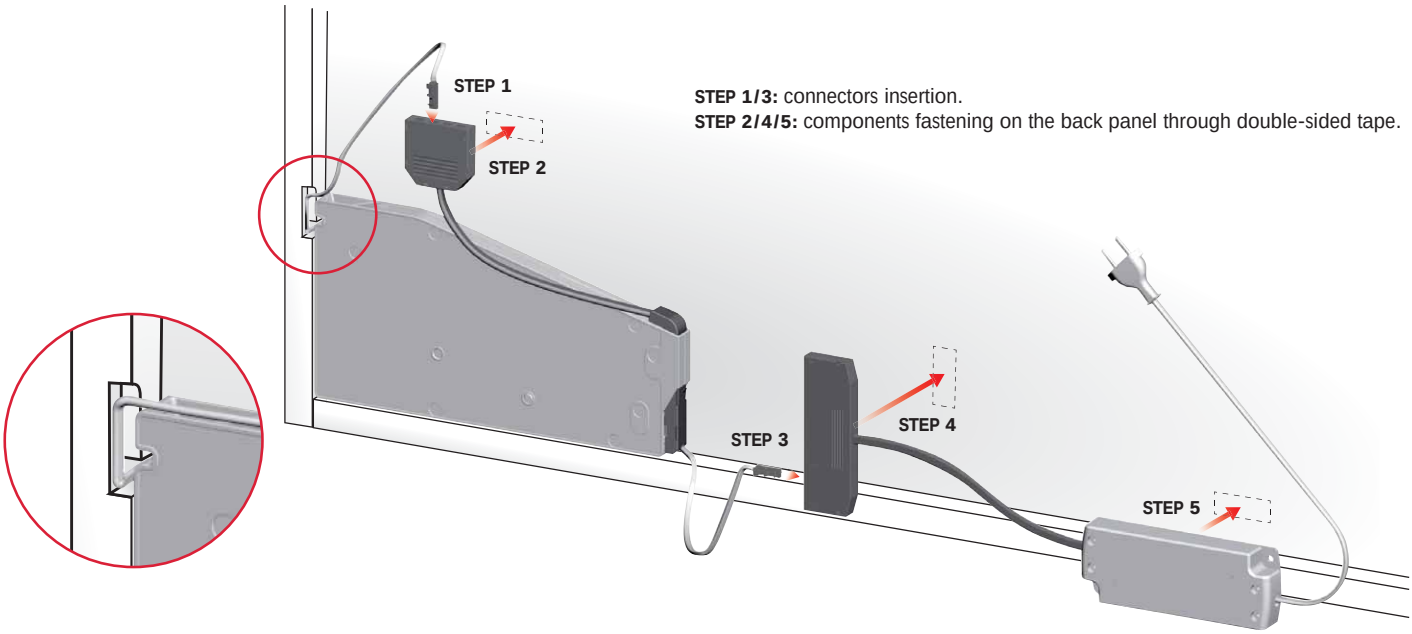
COVER CAP FOR DOOR BRACKET INSERTION



SENSOR INSTALLATION

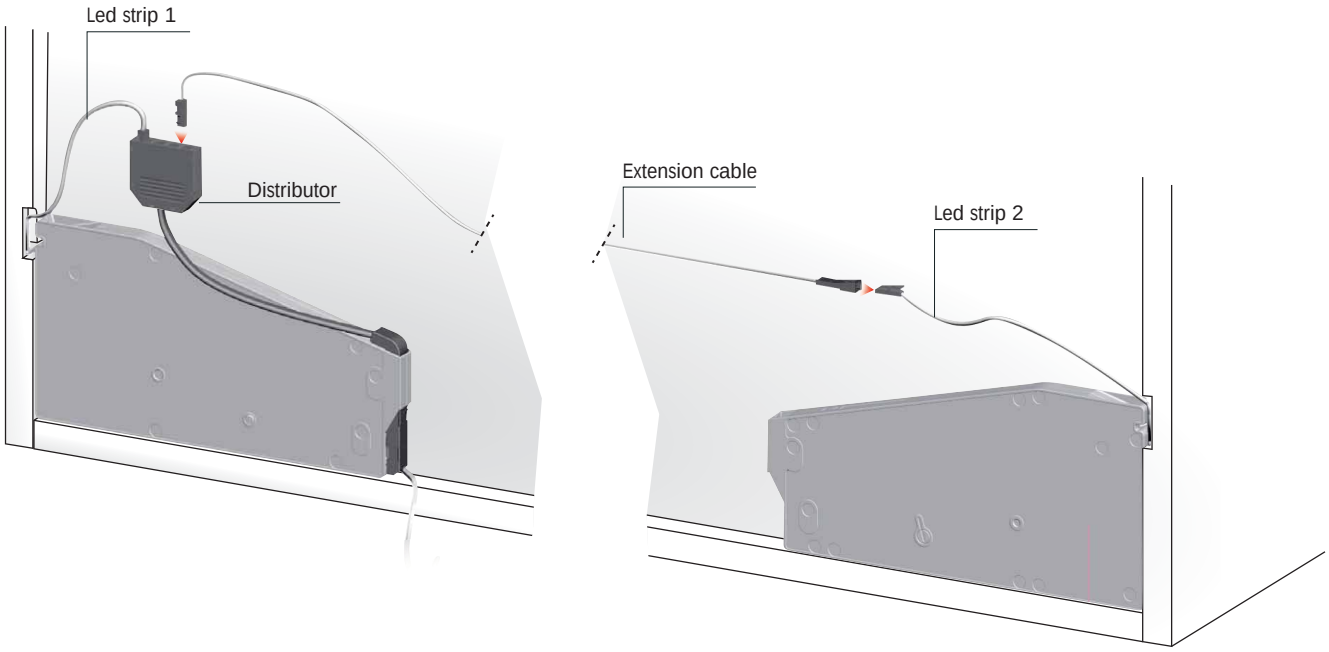


DEVICES CONNECTION AND FASTENING ON THE BACK PANEL.

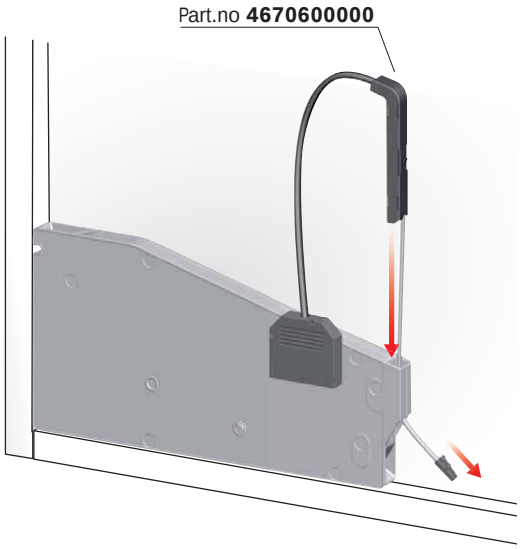


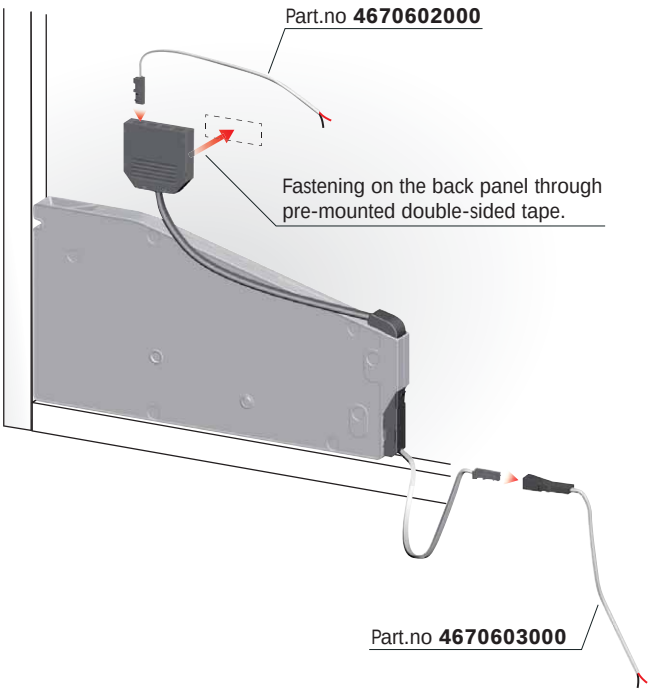
STEP 1/3: connectors insertion.
STEP 2/4/5: components fastening on the back panel through double-sided tape.

EXTENSION CABLE CONNECTION WITH LED STRIP CONNECTORS

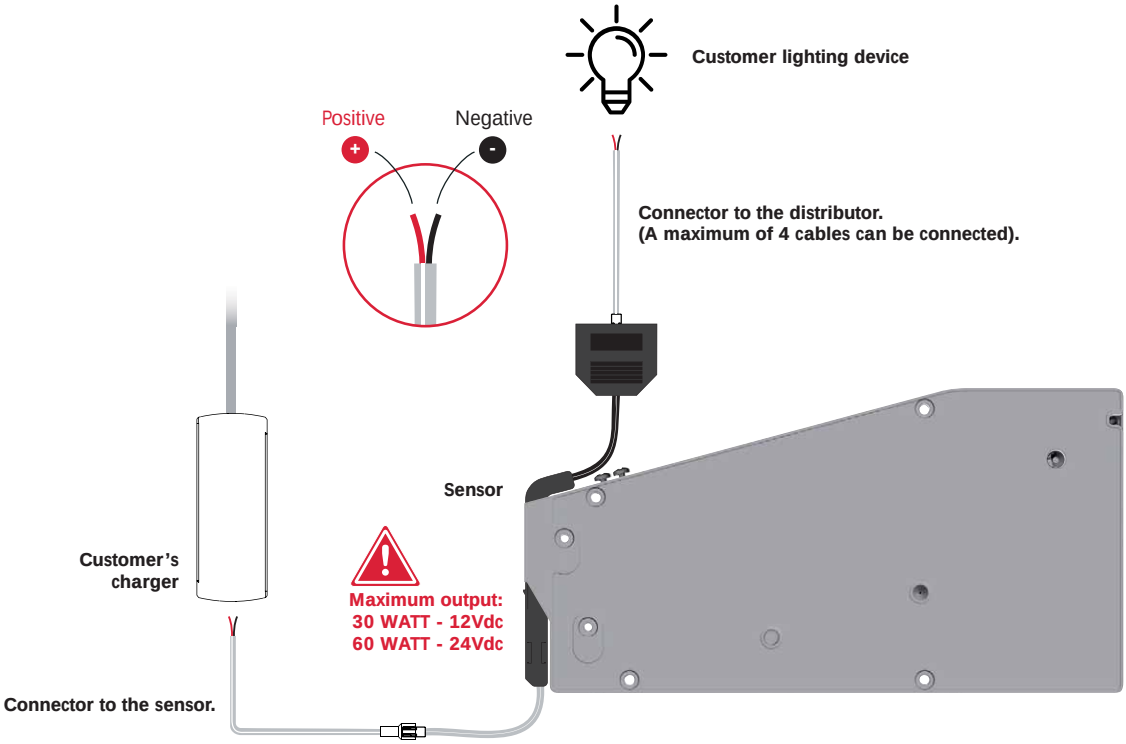


KIARO WIRING DIAGRAM FOR CUSTOMER LIGHTING



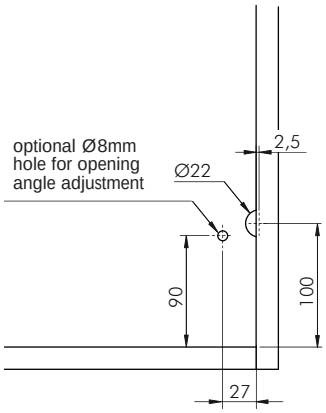


Each door must be connected to only one sensor, no matter how many mechanism are installed.

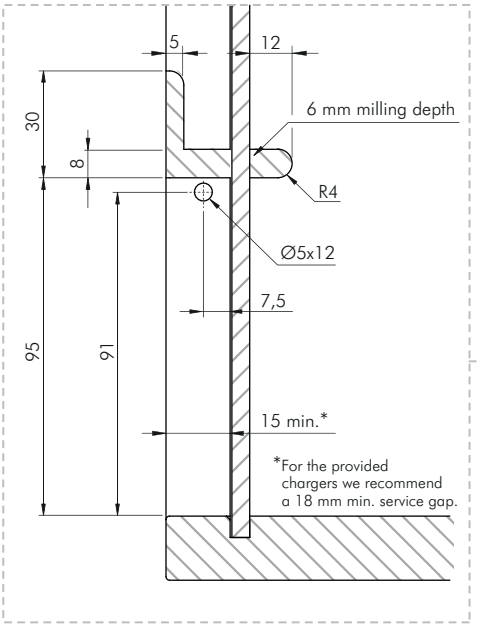


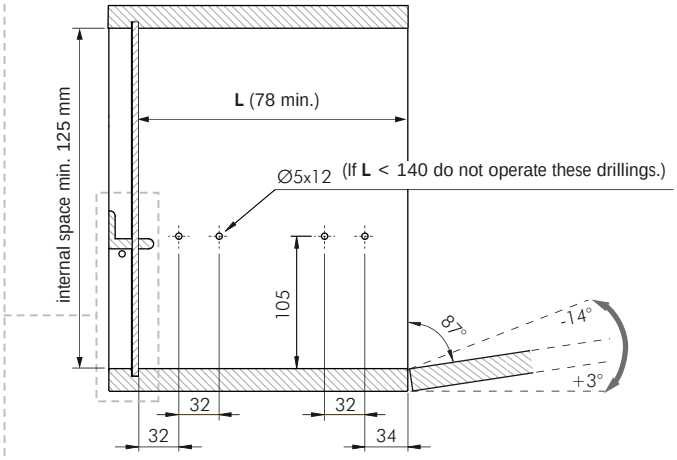
KIARO LED WITH KIMANA HINGE

BACK-PANEL DRILLING OPERATIONS



SIDE-PANEL DRILLING OPERATIONS

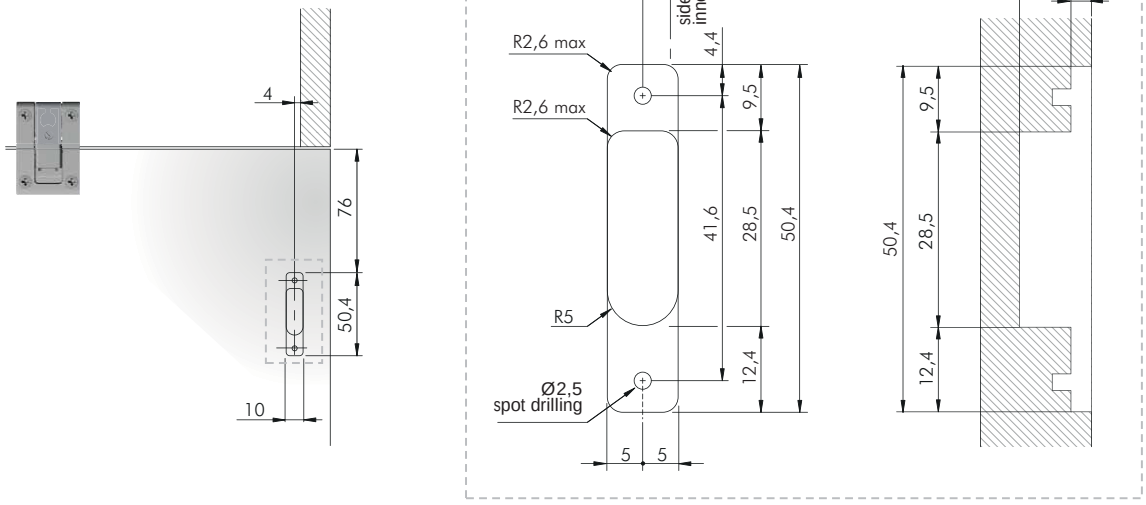




In case of door without handles it is recommended to use **K Push Tech with buffer**.

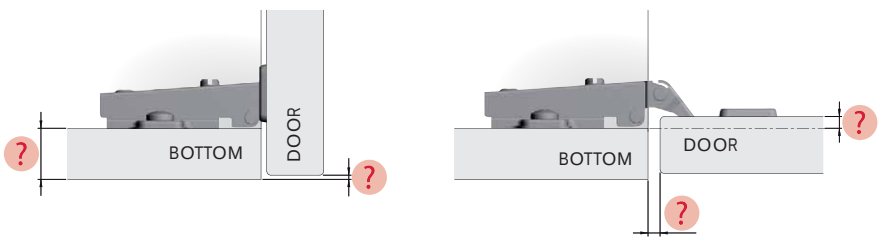
⚠ Overcrossing 90° door opening angle, negatively affects the Kimana hinges.

DOOR PANEL DRILLING OPERATIONS



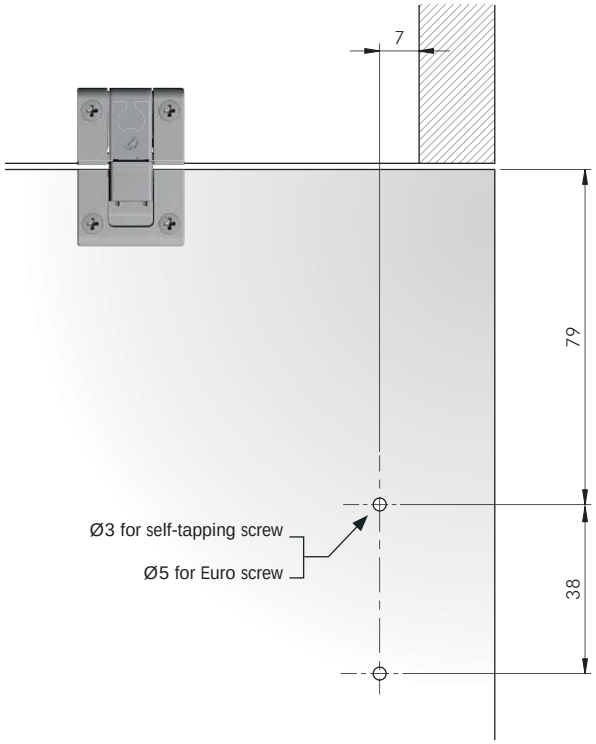
KIARO LED WITH STANDARD UNSPRUNG HINGES

In case the hinges to be installed are not KIMANA hinges, please contact our technical department to receive the correct drilling plan. It is necessary to indicate all the values requested in the following diagram:



CLOSING CONDITION **OPENING CONDITION**

KIARO WITH SCREW FIXING DOOR BRACKET WITHOUT MILLING ON THE DOOR

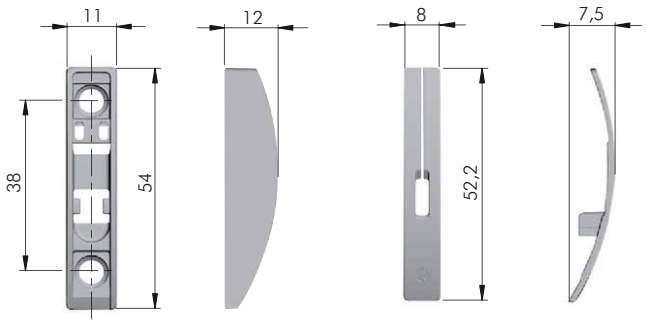


= Ø 3 mm, Ø 5 mm

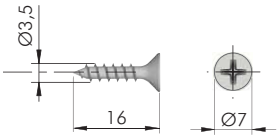
ZA EP

= 20 pcs.

49503500YQ	EE	YQ
49503500YA	EW	YA
49503510YQ	LD	YQ
49503510YA	AB	YA



FIXING ACCESSORIES



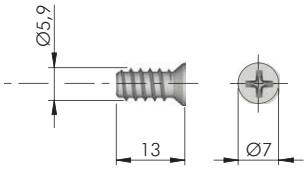
= Ø 3 mm +

= PZ2

ST

= 10.000 pcs.

60101390ZN



= Ø 5 mm +

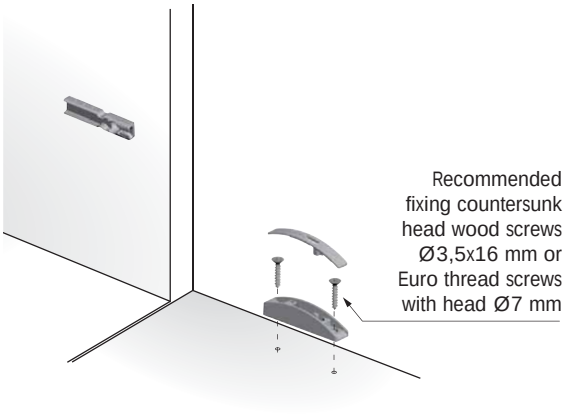
= PZ2

ST

= 5000 pcs.

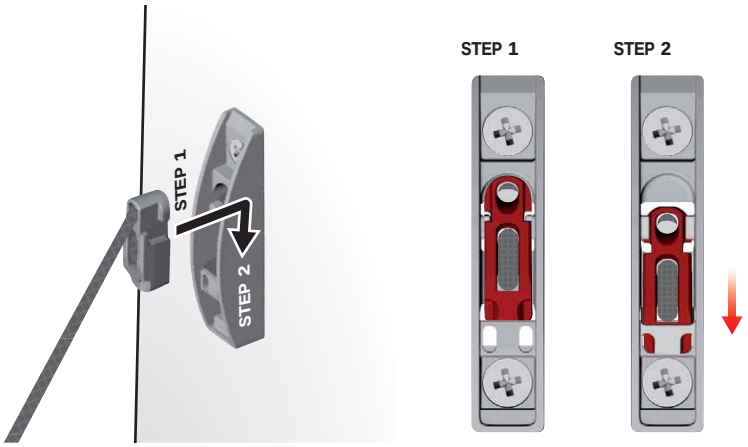
60503050ZN

DOOR BRACKET INSTALLATION



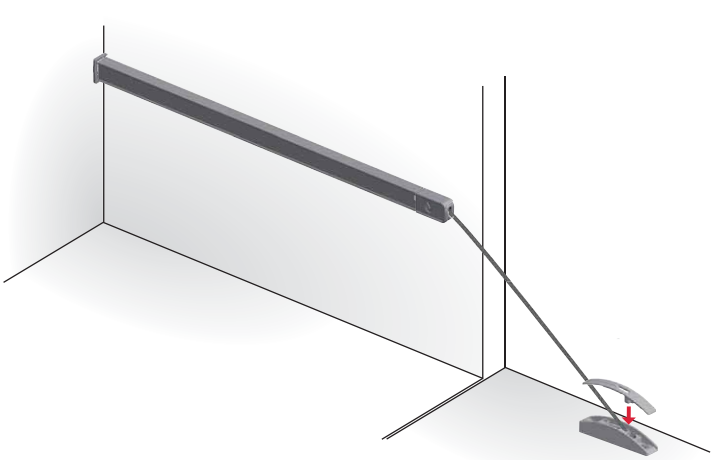
Recommended fixing countersunk head wood screws Ø3,5x16 mm or Euro thread screws with head Ø7 mm

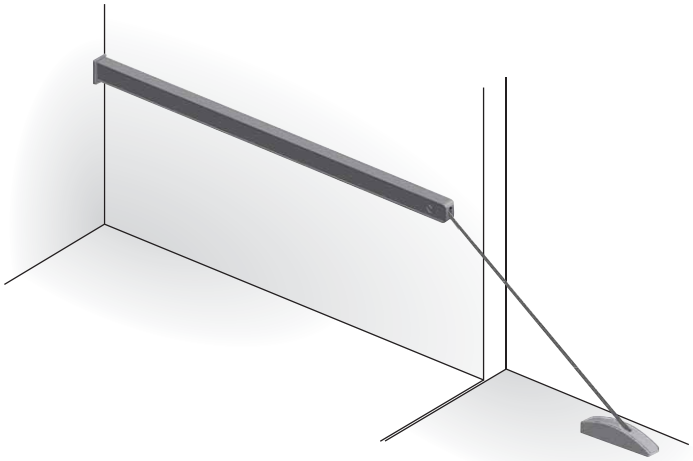
WIRE INSERTION ONTO THE DOOR BRACKET



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

DOOR BRACKETS COVER CAP INSERTION

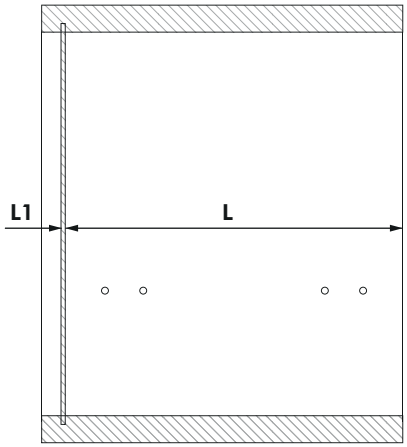




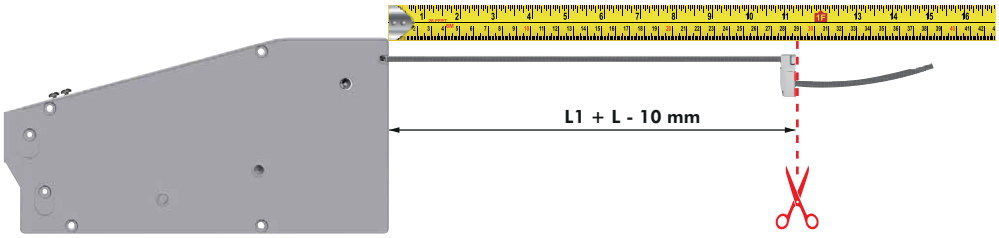
Place the cover cap on the door bracket before lifting the door.

INSTRUCTIONS FOR WIRE CUTTING

WIRE CUTTING WITH UNMOUNTED MECHANISM

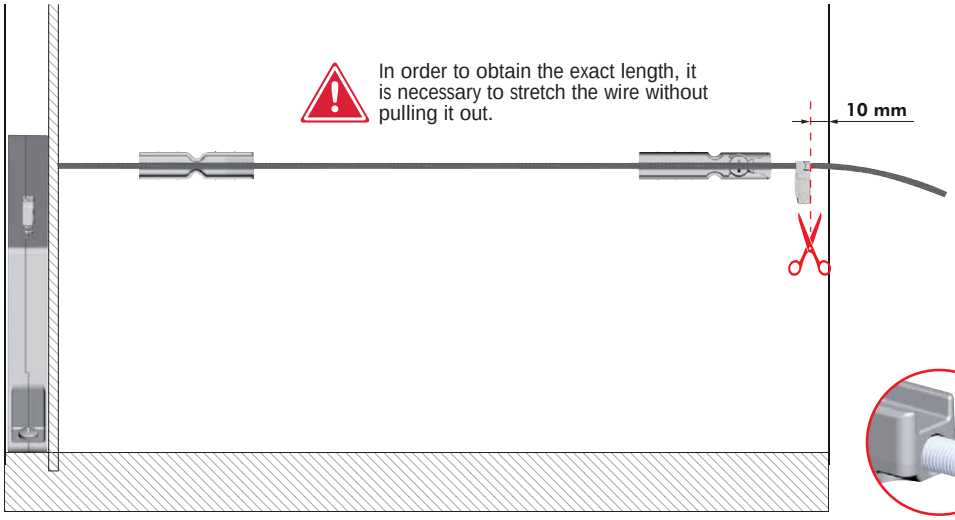


In order to obtain the exact length, it is necessary to stretch the wire without pulling it out.



VERY IMPORTANT:
Before cutting, it is necessary to lock the grub screw heavily.

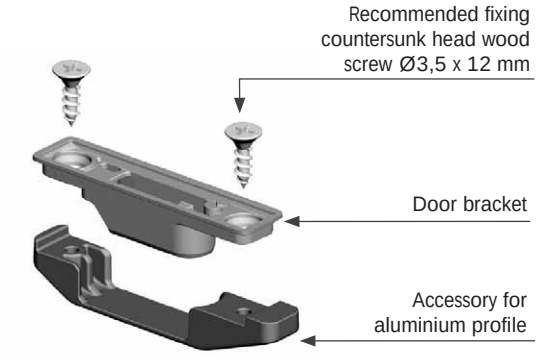
WIRE CUTTING WITH MOUNTED MECHANISM



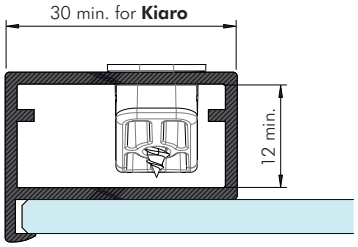
VERY IMPORTANT:
Before cutting, it is necessary to lock the grub screw heavily.

DOOR BRACKET ACCESSORY FOR DOORS WITH ALUMINIUM PROFILE

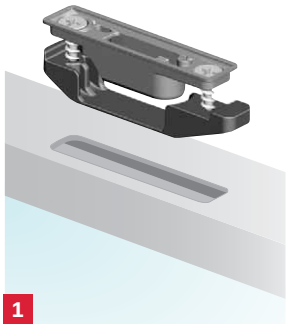
DOOR BRACKET INSTALLATION

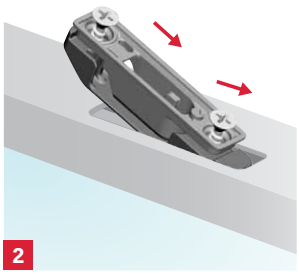


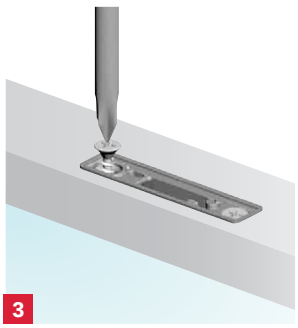
DOOR SPECIFICATION

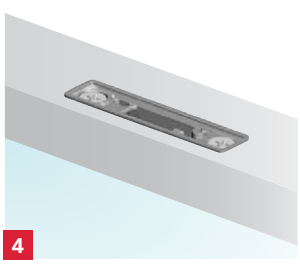


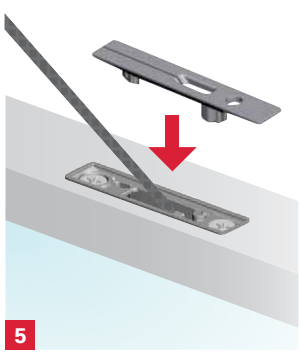
Join the door bracket with the accessory keeping the screws loose



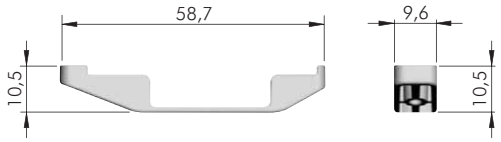








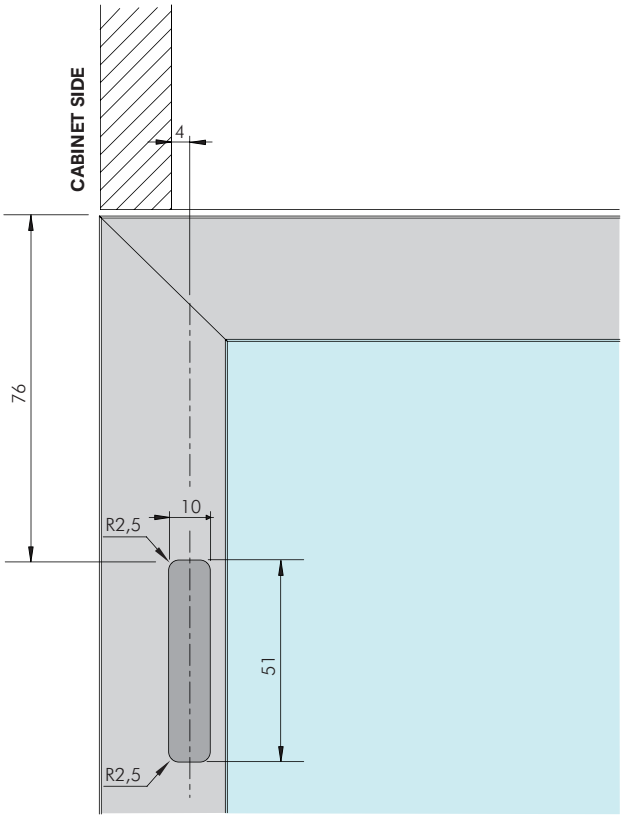
KIARO



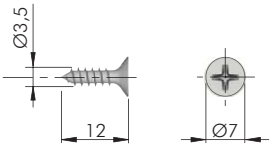
EP = 1500 pcs.

4630208000

DRILLING PLAN FOR KIARO



FIXING ACCESSORY

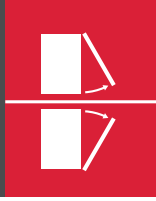


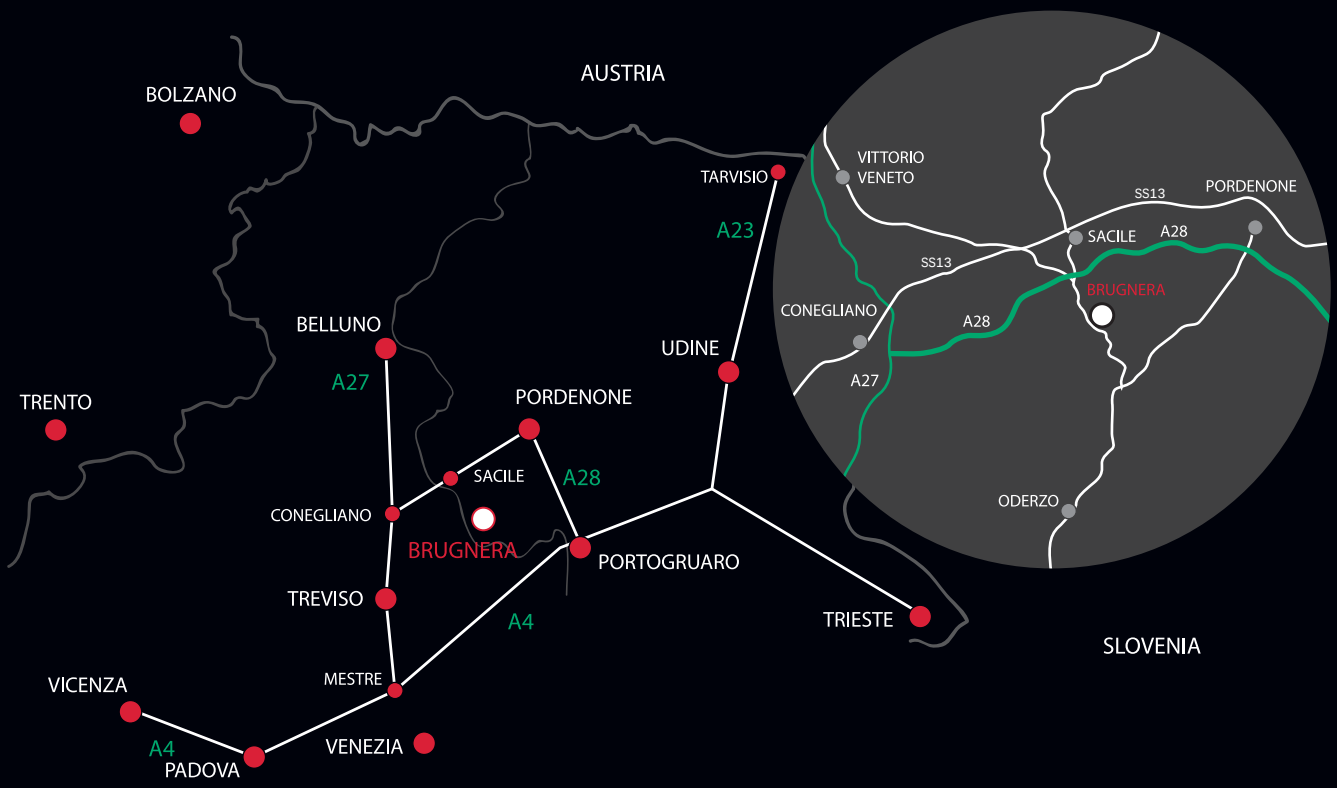
= Ø 3 mm +

= PZ2

ST = 10.000 pcs.

60101380ZN





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