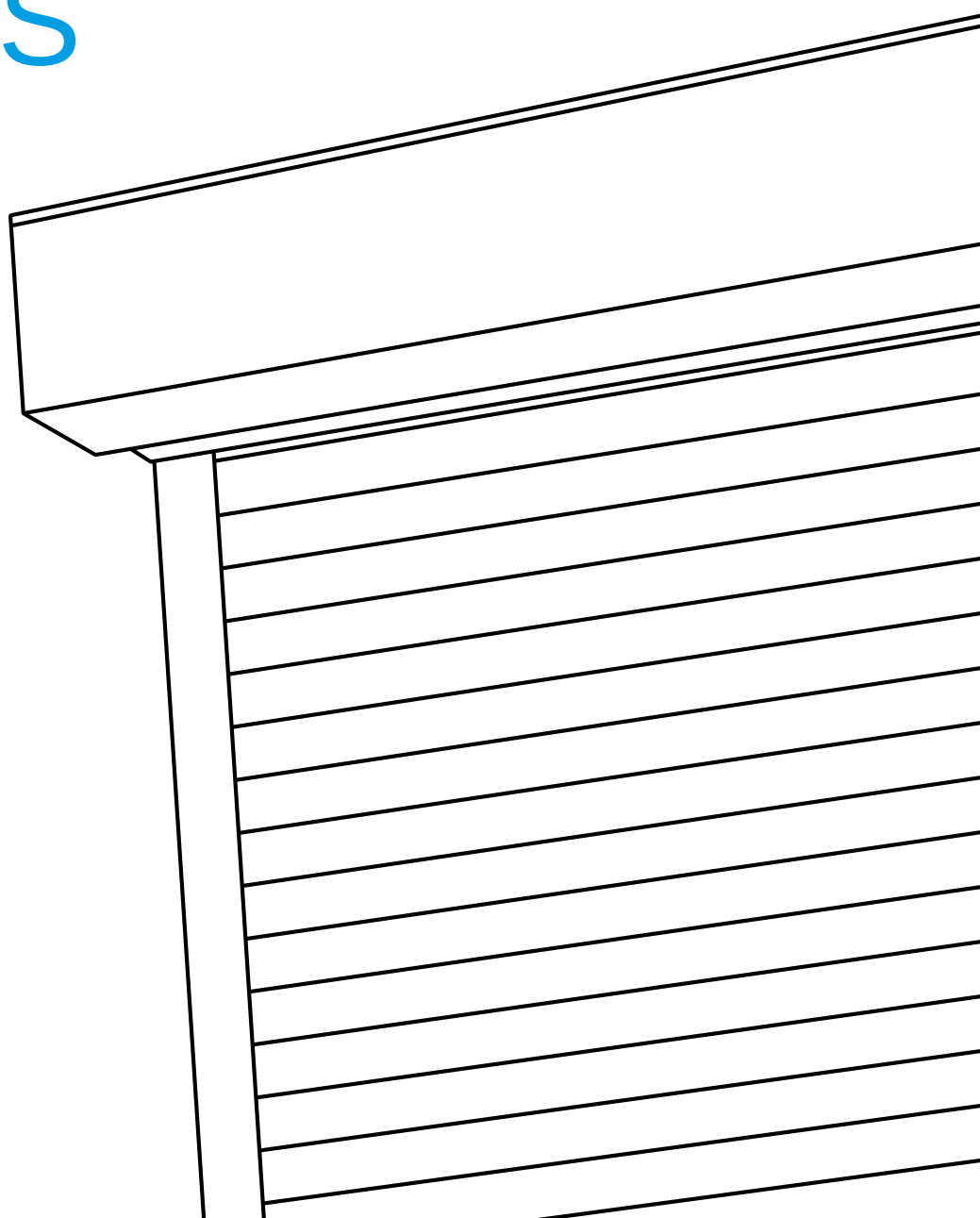
Labona

TECHNICAL MANUAL

# EXTERIOR ROLLER BLINDS



## CE Product Marking

All external roller shutters of ISOTRA a.s. comply with the standard ČSN EN 13659:2007

European Marking of CE Compliance – marking on products:

CE

ISOTRA a.s.
Bílovecká 2411/1, 746 01 Opava
IČ: 47679191
07

EN 13659

European Marking of CE Compliance – marking in the accompanying commercial documents:

CE

ISOTRA a.s.
Bílovecká 2411/1, 746 01 Opava
07

**EN 13659:2015**
**VIVERA**
**CPR 020/2017**
External sun visor
Wind resistance: 0 - 6
Additional thermal resistance ΔR: 0,18 $m^2$.K/W
Total transmittance
Solar energy gtot: 0,026 - 0,08

CE

ISOTRA a.s.
Bílovecká 2411/1, 746 01 Opava
07

**EN 13659:2015**
**HELUZ**
**CPR 021/2017**
External sun visor
Wind resistance: 0 - 6
Additional thermal resistance ΔR: 0,18 $m^2$.K/W
Total transmittance
Solar energy gtot: 0,026 - 0,08

## Standard EN 13659 – Control Force Limitation for Manual Control

The roller shutter armoring weight depends on the slat weight values (kg per $m^2$) and the total roller shutter area ($m^2$).

| **Use of Slat** | **$m^2$** | **M 317; M 328; MY 442** | | | | | | | | | | | **M 317; MY 442** | | **MY 442** | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **0,5** | **1,0** | **1,5** | **2,0** | **2,5** | **3,0** | **3,5** | **4,0** | **4,5** | **5,0** | **5,5** | **6,0** | **6,5** | **7,0** | **7,5** | **8,0** | **8,5** |
| **Slat Type** | **kg/$m^2$** | **roller shutter armoring weight (kg)*** | | | | | | | | | | | | | | | | |
| **M 317** | **2,80** | 1 | 3 | 4 | 6 | 7 | 8 | 10 | 11 | 13 | 14 | 15 | 17 | 18 | | | | |
| **M 328** | **2,60** | 1 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 12 | 13 | 14 | | | | | | |
| **MY 442** | **2,85** | 2 | 3 | 5 | 7 | 9 | 10 | 12 | 14 | 16 | 17 | 19 | 21 | 22 | 24 | 26 | 28 | 29 |

* The roller shutter armoring weight is rounded!

| **Control** | **Maximum Armoring Weight (kg)** |
|---|---|
| Cord | 5 |
| Tape | 9 |
| Winder with crank tape/cord | 9 |
| Crank | 15 |
| Motor | 29 |

Selection of control type based on roller shutter armoring weight (kg)

| | **$m^2$** | **0,5** | **1,0** | **1,5** | **2,0** | **2,5** | **3,0** | **3,5** | **4,0** | **4,5** | **5,0** | **5,5** | **6,0** | **6,5** | **7,0** | **7,5** | **8,0** | **8,5** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Slat Type** | **kg/$m^2$** | | | | | | | | | | | | | | | | | |
| **M 317** | **2,80** | 6 | 6 | 6 | 1,2,3,4,5 | 1,2,3,4,5 | 1,2,3,4,5 | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 | 5 | 5 | | | | |
| **M 328** | **2,60** | 6 | 6 | 6 | 6 | 1,2,3,4,5 | 1,2,3,4,5 | 1,2,3,4,5 | 4,5 | 4,5 | 4,5 | 4,5 | | | | | | |
| **MY 442** | **3,45** | 6 | 6 | 6 | 1,2,3,4,5 | 1,2,3,4,5 | 4,5 | 4,5 | 4,5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |

Explanatory Notes

| | |
|---|---|
| Tape | 1 |
| Cord | 2 |
| Winder with tape/cord | 3 |
| Crank | 4 |
| Motor | 5 |
| All control types | 6 |

## PRODUCT TOLERANCES

Manufacturer: **ISOTRA a.s., Bílovecká 2411/1, 746 01 Opava, IČ: 47679191**
Product: **EXTERNAL ROLLER SHUTTERS**

The review should help you to recognize the permissible limits of compliance and incompliance. At the same time the sheet will help you with reasoning as regards any unjust claims of the clients.
External roller shutters comprise of many metal and textile elements with various material features and production tolerances. Despite the optimally selected products, deviations from ideal function may occur even in case of new installation due to the product tolerances.
The external roller shutters are permanently exposed to the effect of weather, particularly temperature, moisture content, wind, and contamination. They have a great effect on the function and appearance of external blinds.
The deviations from the table values can be corrected by our technicians within a specific scope.
**Please, be aware:**
The specified limit values are created based on the actual state of technology, respective technical standards, and based on many years of experience.
The table values are valid only for the external roller shutters within the permitted production dimensions available in our actual technical catalogue.

| | Feature | Description of deviation | Tolerance |
|---|---|---|---|
| 1 | Roller shutter width | Roller Shutter up to 2000 mm | +0, -3mm |
| | | Roller Shutter from 2000 mm to 4000 mm | +0, -4mm |
| | | Roller Shutter over 4000 mm | +0, -5mm |
| 2 | Roller shutter height | Roller Shutter height up to 150 0mm | +0, -4mm |
| | | Roller Shutter height from 1500 mm to 2500 mm | +0, -6mm |
| | | Roller Shutter height over 2500 mm | +0, -10mm |
| 3 | Slats curvature | Deviation form the balance | max. 15mm |
| 4 | Slats slope run | Deviation form the balance | +/- 10mm |
| 5 | Roller shutter run time | Permanent length of the motor | max. 4min |
| 6 | Light permeability – as per EN 14501 | In closed state, there is no horizontal view from outside inside. | permissible |
| | | In closed state, there is no horizontal view from inside outside. | permissible |
| 7 | Acoustics | The operation and disconnection sounds result from technical solutions. | permissible |
| | | Noise as per the wind force. | permissible |

# Vivera

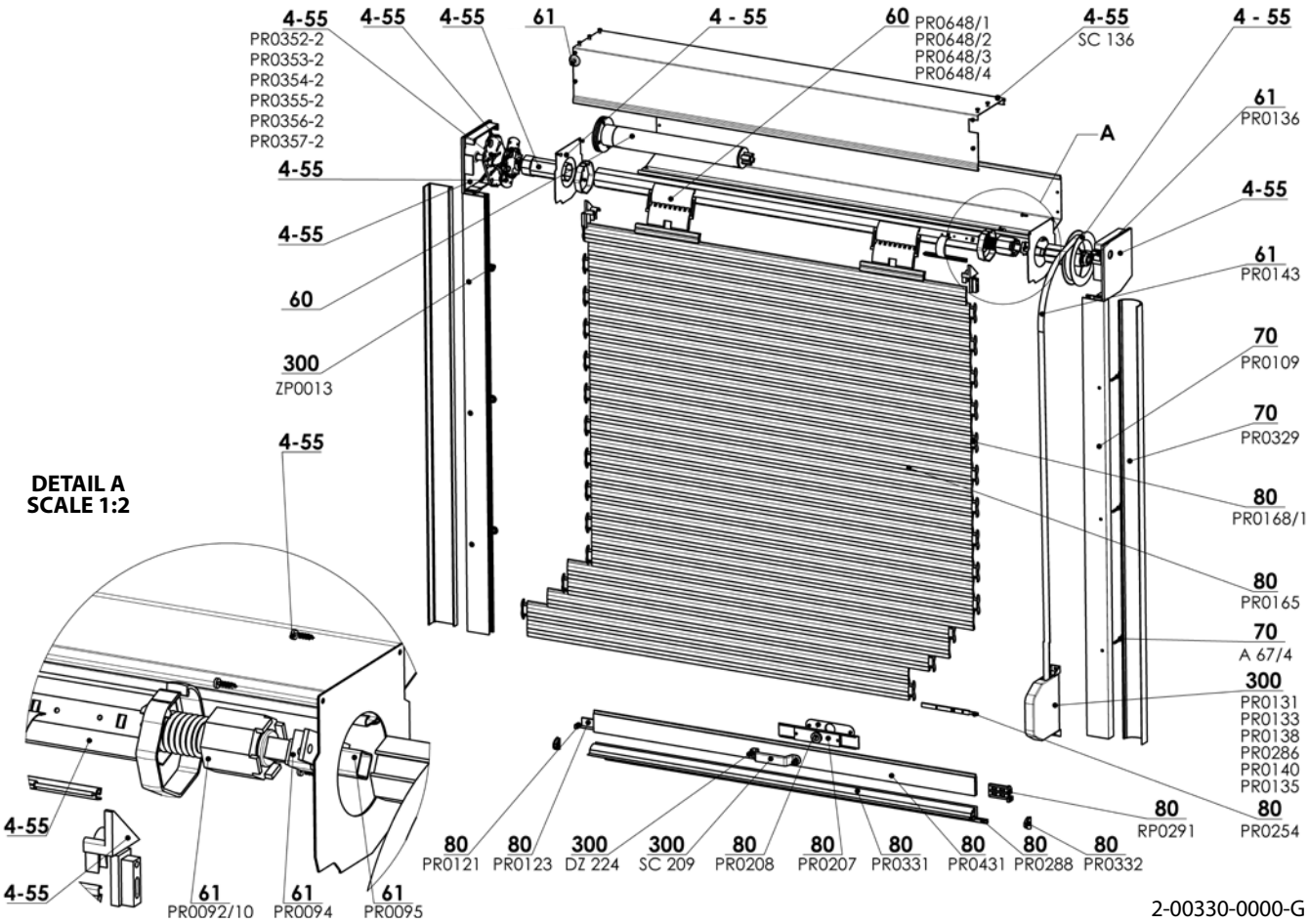
OPTION WITH INSECT SCREEN

- High degree of shading and outside noise level reduction
- Electrical control option
- Suitable for additional installation on window frame or façade and for plastering under façade heat-insulating system too
- Aluminum profiles filled with PUR foam
- Optional design with integrated insect screen

ISOTRA *Quality*

# Vivera / Vivera-Sectra External Roller Shutter

Basic Product Specification




## Control

| | |
|---|---|
| Cord | - used for pulling the roller shutter up and down. White or brown ø 4.5 mm cord. |
| Handle | - used for pulling the roller shutter up and down. Handle – made of plastic material and steel (ø 15.5 mm or ø 13 mm tube). Handle passage at the angle of 45° or 90°. |
| Tape | - used for pulling the roller shutter up and down. White or brown 14 mm wide tape. |
| Spring | - used for pulling the roller shutter up and down. The shutter is controlled manually, whereas the blind is wound back by a pre-stressed spring, installed in the crank. It is required to use slats without apertures in the lock. |
| Crank cord winder | - used for pulling the roller shutter up and down. White or brown color. |
| Crank tape winder | - used for pulling the roller shutter up and down. White or brown color. |
| Motor | - with the torque of 4–20 Nm, mounted in the octagonal rod with diameter of 40 mm or 60 mm. One motor can control more roller shutter simultaneously based on the roller shutter dimensions. |

## Standard dimensions Vivera

| Slat | Control | Width (mm) | | Height (mm) | | Guaranteed area (m²) |
|---|---|---|---|---|---|---|
| | | min. | max. | min. | max. | max. |
| M328 | cord, tape | 450 | 2700 | 800 | 4350 | 3,5 |
| | handle, motor | 450 | 2700 | 800 | 4350 | 5,8 |
| M317 | cord, tape | 450 | 2900 | 800 | 4340 | 3,2 |
| | handle, motor | 450 | 2900 | 800 | 4340 | 6,5 |
| MY442 | motor | 450 | 4000 | 800 | 2860 | 8,5 |

## Standard dimensions Vivera-Sectra

| Slat | Width (mm) | | Height (mm) | | Guaranteed area (m²) |
|---|---|---|---|---|---|
| | min. | max. | min. | max. | max. |
| M328, M317, MY442 | 450 | 1800 | 800 | 2500 | 3 |

When indicating the height of box for motor operated ROLLER SHUTTER, we have to know that the box is suitable for ROLLER SHUTTERS 100mm less height than the standard for handle operation is.

Maximum width of underplaster common box for outside roller shutters is 4 m and 5,5 m for visible box.

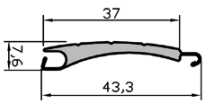
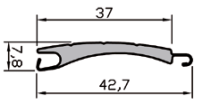
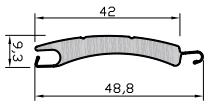
**VIVERA** (2-00330-0000)

| Position | Item name | Business name | Drawing number |
|---|---|---|---|
| **4-55** | **Covering boxes** | | **2-00337-XXXX** |
| 4-55 | Rivet Al 4x10 Din 7337 A | SC 136 | 6-002680-XXXX |
| **60** | **Motors (SOMFY) EXTERNAL ROLLER SHUTTERS** | | **2-00534-0000** |
| 60 | Octoeasy suspension - single-cell, shaft 40 mm, box 125-165 | PR0648/1 | 6-013917-0000 |
| 60 | Octoeasy suspension - single-cell, shaft 60 mm, box 125-165 | PR0648/2 | 6-013918-0000 |
| 60 | Octoeasy suspension - double-cell, shaft 40 mm, box 180-205 | PR0648/3 | 6-013919-0000 |
| 60 | Octoeasy suspension - double-cell, shaft 60 mm, box 180-205 | PR0648/4 | 6-013920-0000 |
| **61** | **Manual control** | | **2-00790-0000** |
| 61 | Tape 14 mm brown/grey | PR0143/XXXX | 6-001916-XXXX |
| 61 | Tape roller - white / brown | PR0136/XXXX | 6-001920-XXXX |
| 61 | OCTO spring 40 - 600 mm | PR0092/10 | 6-002684-0000 |
| 61 | Spring holder MINI for max. 30 kg | PR0094 | 6-002693-0000 |
| 61 | Reduction for VR30 | PR0095 | 6-002694-0000 |
| 61 | Rubber cable, plastic, black | | 6-017078-0000 |
| **62** | **Motors (GEIGER) EXTERNAL ROLLER SHUTTERS** | | **2-00565-0000** |
| **63** | **Motors (BECKER) EXTERNAL ROLLER SHUTTERS** | | **2-01297-0000** |
| 70 | Guiding channel A3 | PR0109/XX | 6-001786-XXXX |
| 70 | Rounded FAR-ES guiding channel cover | PR0329/XX | 6-003880-XXXX |
| 70 | Screw 3,5x9,5 DIN 7504 M, Zn | A 67/4 | 6-003096-0000 |
| 80 | Locking clip | PR0168/1 | 3-02239-0000 |
| **80** | **Slats** | | **2-00616-0000** |
| 80 | Aluminium slat M 317 | PR0165/XX/B | 6-002606-XXXX |
| **80** | **Slats** | | **see Slats** |
| 80 | Ratchet 10x3 mm to the end slat 8 mm | PR0254 | 6-002685-0000 |
| 80 | Rotary stop ABS - black - couple | RP0291/200 | 6-006288-0001 |
| 80 | Lateral piece for SL-ES, black | PR0332/9004 | 6-012002-9004 |
| 80 | End slat for the security shutter SL-ES | PR0331/XXXX | 6-012001-XXXX |
| 80 | Sealing insert, round into end-slat | PR0288 | 6-003664-0000 |
| 80 | End slat SL KU-N | PR0431/XX | 6-010977-XXXX |
| 80 | Stopper VB rotative Poly, transparent - pair | PR0121 | 6-001866-0000 |
| 80 | Cylinder round lock into KL white/brown/grey | PR0207/XX | 6-002131-XXXX |
| 80 | Cylinder round lock into KL white/brown/grey | PR0208/XX | 6-002133-XXXX |
| 80 | Weight down steel bar 18x3 | PR0123 | 6-001869-0000 |
| **300** | **Accessories** | | **2-00690-0000** |
| 300 | Selve - cord coiler, without cord - white/brown | PR0131/XXXX | 6-001908-XXXX |
| 300 | Selve - recessed cord coiler, without cord - white/brown | PR0133/XXXX | 6-001913-XXXX |
| 300 | Selve - cord handle coiler without cord- white/brown | PR0138/XXXX | 6-001914-XXXX |
| 300 | Selve - partially recessed tape coiler, without cord- white/brown | PR0286/XXXX | 6-003640-XXXX |
| 300 | Selve - cor- handle coiler, without cord - white/brown | PR0140/XXXX | 6-001954-XXXX |
| 300 | Selve - cord coiler, without cord - white/brown | PR0135/XXXX | 6-001911-XXXX |
| 300 | Exterior aluminium handle white/brown | SC 209 XXXX | 6-001387-XXXX |
| 300 | Cover caps 10 mm | ZP0013/XXXX | 6-002066 |
| 300 | Screw 2,9x6,5, DIN 7981 C,H, Zn | DZ 224 | 6-003135-0000 |
| 330 | Engine holder MLP.2 125 | PR0352-2 | 6-012064-01252 |
| 330 | Engine holder MLP.2 138 | PR0353-2 | 6-012064-01382 |
| 330 | Engine holder MLP.2 150 | PR0354-2 | 6-012064-01502 |
| 330 | Engine holder MLP.2 165 | PR0355-2 | 6-012064-01652 |
| 330 | Engine holder MLP.2 180 | PR0356-2 | 6-012064-01802 |
| 330 | Engine holder MLP.2 205 | PR0357-2 | 6-012064-02052 |

## Electric Motor Technical Parameters

| Shaft | Maximum Roller Shutter Area | Torque | RPM | Maximum Operation Time | Power Input | International Protection Rating | Cable Length |
|---|---|---|---|---|---|---|---|
| 40 | 3.8 m² | 4 Nm | 14 RPM | 4 min. | 65 W | IP44 | 3 m |
| 40 | 5.8 m² | 9 Nm | 14 RPM | 4 min. | 100 W | IP44 | 3 m |
| 60 | 7.9 m² | 15 Nm | 17 RPM | 4 min. | 140 W | IP44 | 1 m |
| 60 | 7.8 m² | 20 Nm | 17 RPM | 4 min. | 160 W | IP44 | 1 m |
| 60 | 6.6 m² | 10 Nm | 17 RPM | 4 min. | 120 W | IP44 | 1 m |
| 60 | 5.3 m² | 8 Nm | 17 RPM | 4 min. | 90 W | IP44 | 1 m |
| 60 | 4.1 m² | 6 Nm | 17 RPM | 4 min. | 90 W | IP44 | 1 m |

## Slats

| M317 | M328 | MY442 |
|---|---|---|
| Vivera, Heluz | Vivera, Heluz | Vivera, Heluz |
| Al | Al | Al |
|   |   |   |

| Technical data ( mm) | M317 | M328 | MY442 |
|---|---|---|---|
| Covering height | 37 | 37 | 42 |
| Thickness | 7,6 | 7,8 | 9,3 |
| Material thickness | 0,3 | 0,28 | 0,3 |
| Weight | 2,8 kg/m² | 2,6 kg/m² | 2,85 Kg/m² |
| Maximum Width | 2900 | 2700 | 4000 |
| Maximum Area | 6,5 m² | 5,8 m² | 8,5 m² |

## Vivera

### Winding table for 40 mm octagonal shaft.

| Box size (mm) | Slat | | | | | |
|---|---|---|---|---|---|---|
| | M317 | | M328 | | MY442 | |
| | Roller shutter height (mm) | | | | | |
| | manual control | motor | manual control | motor | manual control | motor |
| 125 | 1270 | 1170 | 1390 | 1290 | - | - |
| 138 | 1600 | 1500 | 1720 | 1620 | - | - |
| 150 | 2090 | 1990 | 2160 | 2060 | - | - |
| 165 | 2720 | 2620 | 2640 | 2540 | - | - |
| 180 | 3260 | 3160 | 3260 | 3160 | - | - |
| 205 | 4350 | 4250 | 4360 | 4260 | - | - |

### Winding table for 60 mm octagonal shaft.

| Box size (mm) | Slat | | | | | |
|---|---|---|---|---|---|---|
| | M317 | | M328 | | MY442 | |
| | Roller shutter height (mm) | | | | | |
| | manual control | motor | manual control | motor | manual control | motor |
| 125 | - | 780 | - | 970 | - | 660 |
| 138 | - | 1220 | - | 1480 | - | 950 |
| 150 | - | 1700 | - | 1960 | - | 1240 |
| 165 | - | 2250 | - | 2430 | - | 1800 |
| 180 | - | 2960 | - | 2950 | - | 2260 |
| 205 | - | 4070 | - | 4010 | - | 2860 |

## Vivera-Sectra

### Winding table for 40 mm octagonal shaft

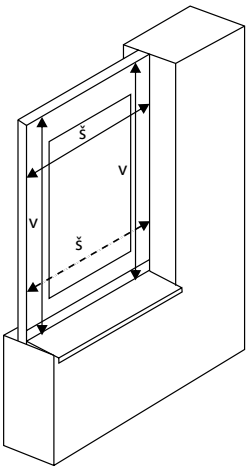
| Box size (mm) | Slat | | | | | |
|---|---|---|---|---|---|---|
| | M317 | | M328 | | MY442 | |
| | Roller shutter height (mm) | | | | | |
| | manual control | motor | manual control | motor | manual control | motor |
| 138 | 1110 | 1010 | 1170 | 1070 | - | - |
| 150 | 1630 | 1530 | 1790 | 1690 | - | - |
| 165 | 2230 | 2130 | 2340 | 2240 | - | - |
| 180 | 2500 | 2400 | 2500 | 2400 | - | - |

### Winding table for 60 mm octagonal shaft

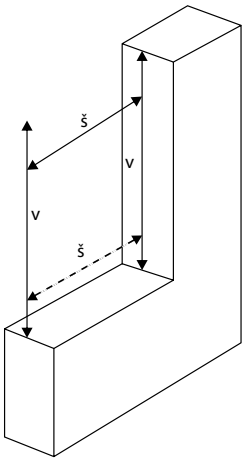
| Box size (mm) | Slat | | | | | |
|---|---|---|---|---|---|---|
| | M317 | | M328 | | MY442 | |
| | Roller shutter height (mm) | | | | | |
| | manual control | motor | manual control | motor | manual control | motor |
| 138 | - | 720 | - | 960 | - | - |
| 150 | - | 1350 | - | 1470 | - | - |
| 165 | - | 1760 | - | 2060 | - | - |
| 180 | - | 2400 | - | 2400 | - | - |

## Measuring

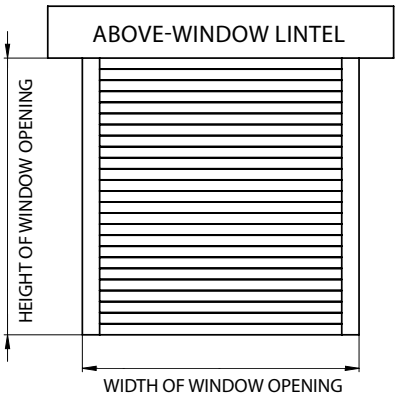
Front window roller shutter

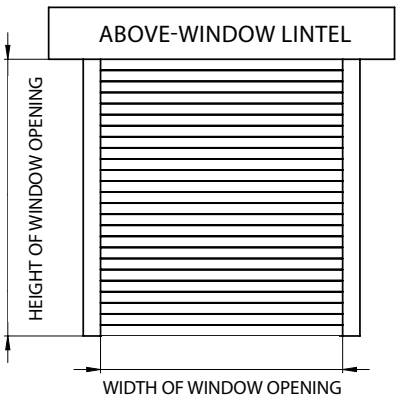



Above-window roller shutter




Under plaster roller shutter



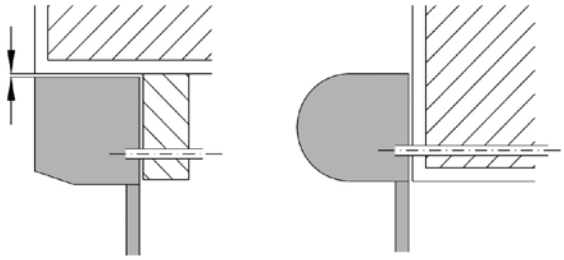




The ordering dimensions are the dimensions fo the finished roller shutter.
Width of the roller shutter = X
Height of the roller shutter = Y

The height and the width are always measured in a minimum of three places. The manufacturing dimensions are always the minimum measured value. Measurements are taken after the frame or window is fitted into the construction hole after completion of the outside and inside reveals, including parapets. The method of measurement of external roller shutter is so specific that it is recommended to consult the technical plans at the construction site. Other specific solutions are possible.

## ASSEMBLY

The assembly may only be performed by a qualified professional employee! Construction preparedness for the assembly: finished reveal, coloured façade, finished outside parapets



**AREA FOR ASSEMBLY**

- **on the top** 5 - 10 mm (closed with sealing substance)
- **on sides** also approximately 5 mm
- **down:** leave a maximum distance of 5 mm between the leading bar and the parapet

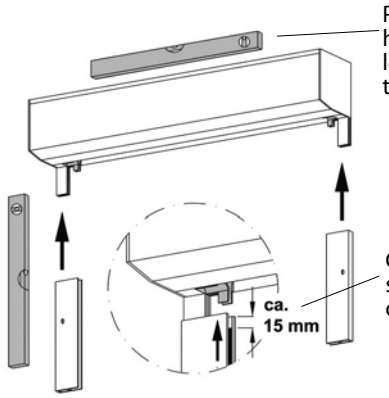
**ASSEMBLY TOOLS:**

1. Tape measure
2. Water gauge
3. Pencil
4. Hammer
5. Electric drill as per the source material
6. Cordless electric drill
7. Magnetic adapter
8. Bits PZ2, PH2, magnetic adapter on hexagonal head 8 and 10
9. Set of Allen wrenches
10. Assembly cable
11. Small ratchet wrench and 8 nut
12. Set of screwdrivers, insulated, electric

## INSPECTION

Before assembly we recommend inspecting all the parts after delivery of the goods to prevent any problems. The manufacturer must be notified of any defects or comments concerning the assembly or roller shutter.

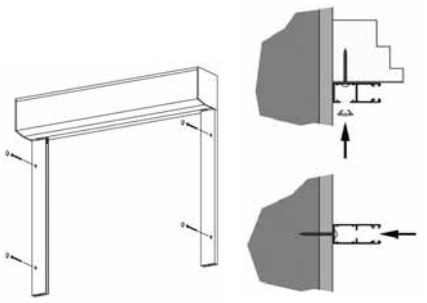
1. Check the dimensions of the roller shutter and the construction hole or the window
2. On the box cut the outlet for the strip, cable or lever of the conical gearbox and drill the passage on the wall or in the window. To prevent damage to the strip, it is necessary to drill the passage for the strip perpendicularly, if possible. Pay attention when drilling to the handle bar; the square must be located centrally in the drilled hole and must not be in contact with the walls in the hole and the scrub in them. (For the 14 mm strip, drill about 16 mm / for strip 23 mm strip, drill a hole of about 32 mm / for the cable, drill a hole about 10 mm / for the conical gearbox, follow the manual).




Pay attention to the exact horizontal and vertical location of the roller shutter

Cut the sealing insert see the diagram on the other side

3. Insert the guiding bars into the leg of the side wall; check the guiding bars are the same height. (The insertion of the guiding bar into the side wall must not damage the starting point of the armour located in the side wall.)
4. Marking of drilling points in which the screws fix the blind (the size is according to the masonry and screws used).



Stage drilling when using PVC cover caps

Drilling through the guiding bar (without cover caps)

**CONTROL USING THE STRIP OR THE CORD**

5. On the strip attach the penetration, plastic tube, tape roll, etc. (roll downward, brush upward).
6. Suspend the strip or the cord into the spring clamp so that during the movement of the armour the upward strip is automatically wound into the winding mechanism (according to the construction the winding mechanism must be open and the strip must be hooked and fixed to the spring mechanism). We advise that when shortening the strip, the blind armour must be lowered. When working with the strip, the spring mechanism must be secured against winding!
7. Fixation of the winding mechanism on the frame of the window or the wall.
8. Fixation of the strip penetration on the wall or the window frame (the roll simplifies the movement of the strip).

**ENGINE CONTROL**

9. Attach the cable from the engine to the connection box.
   N.B. It is necessary to connect the cables according to the drawing of the engine supplier. The work with parts connected to the electricity current must be carried out by trained experts. During the connection all the electric lines must be without electric current. Engines are pre-adjusted, but in the place of the installation of the roller shutter they must be tested and the border settings must be adjusted.

**CONTROL BY HANDLE:**

10. Passing through the wall of the square joint bearing and fixation into the conical gearbox (in the box the square must be shortened according to the flxation).
11. Fixation of the joint bearing by the attached screws on the wall or the window frame.
12. Insert the handle (profiled tube) into the joint bearing and fi x it with the fixation clamp (plastic ring).
13. Fixation of the handle holder on the window frame or the wall.
14. Version of the box under the plaster.

· Mount the box on the wall using under-plaster clamps.
· Before starting plaster work it is necessary to cover the joints between the box and the wall and the large area joint. (Additional fixation and armouring prevents the origination of cracks from tension.)

**The roller shutters must be assembled and serviced by trained specialists**

**NUMBER OF FIXATIONS FOR ONE GUIDING BAR:**

Height of the roller shutter up to **150 cm** > 2 fixation points in one guiding bar
Height of the roller shutter up to **250 cm** > 3 fixation points in one guiding bar

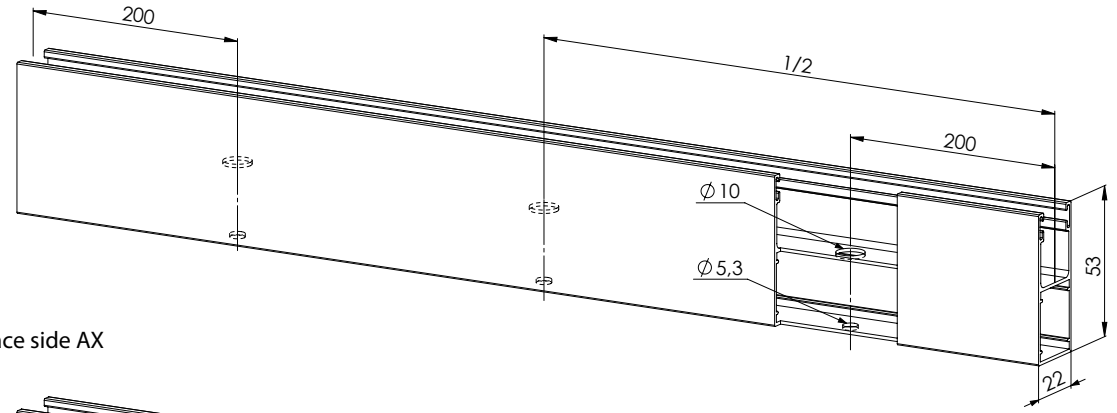
This data is valid during assembly into the masonry with a sufficient load-bearing capacity. The same is also valid for data for the attached joining material. The fixation material must be chosen according to the strength of the masonry and the static conditions of the particular case.

For a 20 kg roller shutter, a further fixation of the roller shutter box into the masonry is necessary.

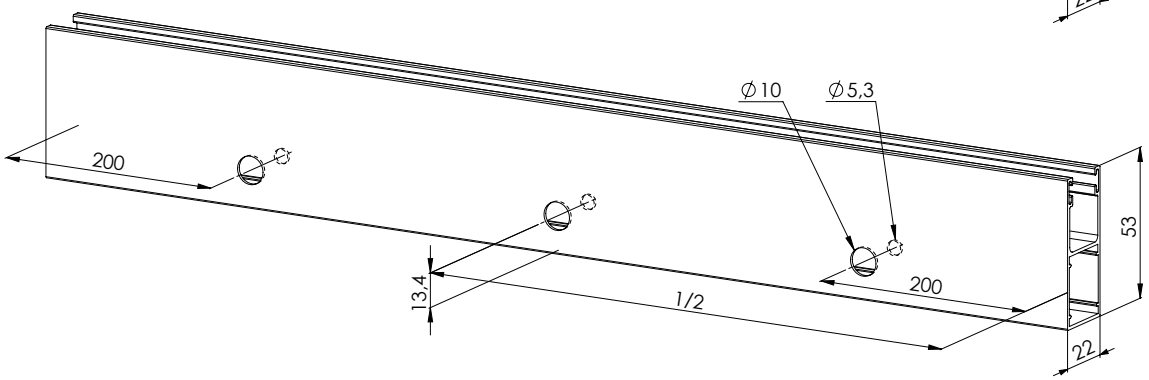
For roller shutter boxes in the under the plaster version, the boxes must be fixed into the masonry.

**Guiding rails drilling**

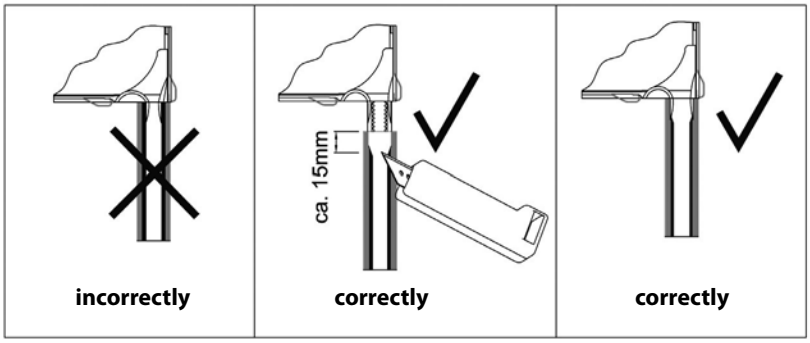
A) from the side AXb




B) face side AX



**Guiding Rail Gasket Cutout**




To prevent hooking the blind armour when starting:

The sealing insert of the guiding bar in the upper part of the starting position about 15 mm from the upper edge must be cut. (Before assembly of the guiding bars!)

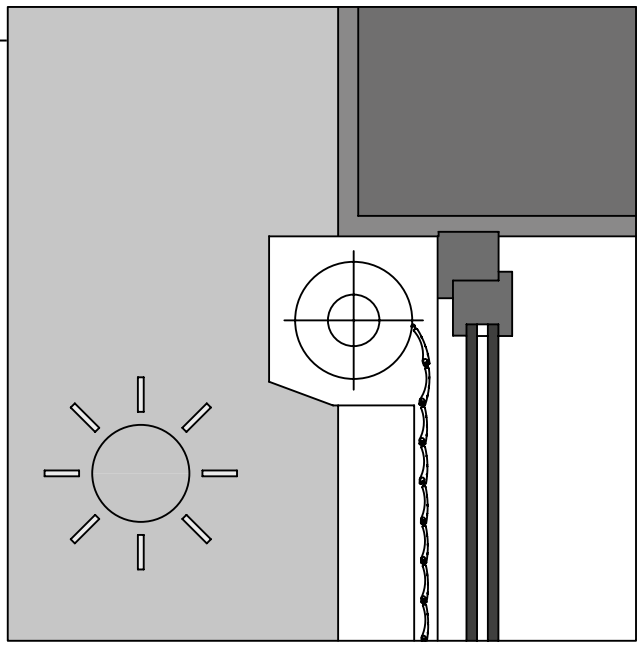
Dismantling of the revision cover of the box must always be enabled. Therefore, the revision cover cannot be plastered or fixed into the construction. For the installation of boxes under the plaster, the strip is prepared which is fixed to the side by the rivet which can be plastered.

## Assembly Alternatives

### Vivera and Sectra Roller Shutter Assembly

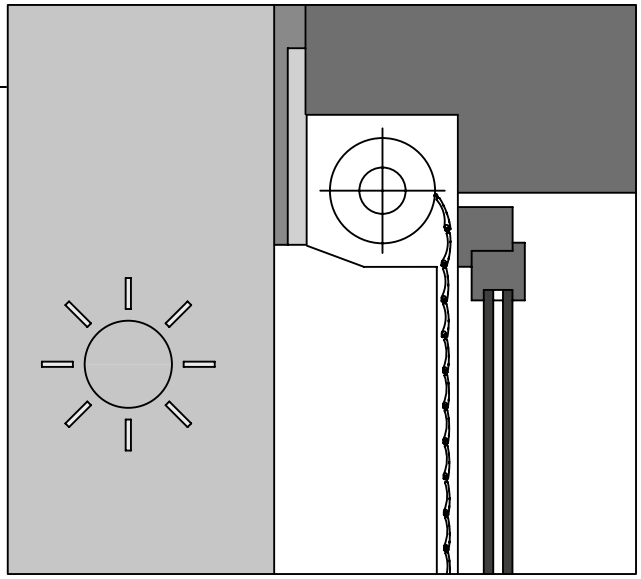
**Assembly A**

**Assembly on window frame.** Prepare the aperture for passage of the control mechanisms into interior, prepare the passage for cord, crank or electrical cable based on the control method and lower the rolling Shutter to the low position. Put the box onto the guiding rails and then screw the complete set onto the window frame. Cover the screws with covers. After checking the roller Shutter function, attach the bushing for cord, tape or crank in the interior. In the case of electrical control, complete the wiring, which can only be done by a qualified person. In the case of absence of the expanding profile on the window, the disadvantage of the installation is the window clearance reduction.



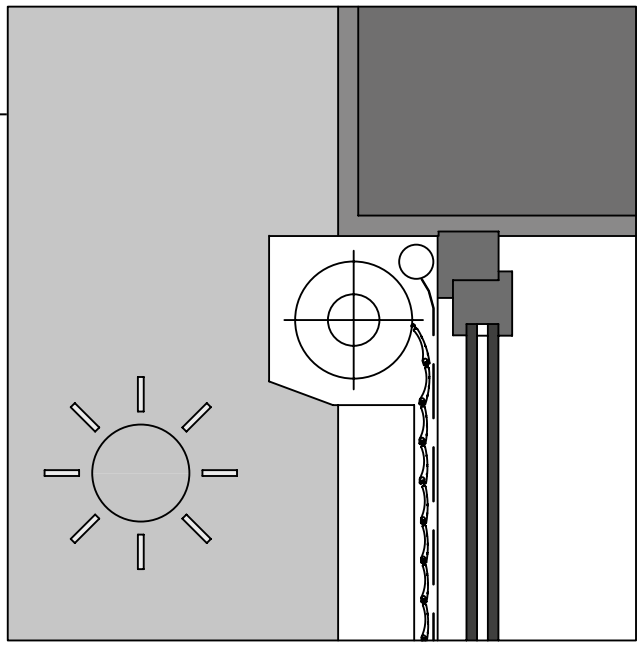
## Admira and Vivera Roller Shutters Assembly

**Assembly A**
**Assembly on window frame.** An advantage of these roller shutter is that they are hidden under the façade or heat-insulating system that does not disturb the building aesthetics. Prepare the aperture for passage of the control mechanisms into interior, prepare the passage for cord, crank or electrical cable based on the control method and lower the roller shutter to the low position. Put the box onto the guiding rails and then screw the complete set onto the window frame. Cover the screws with covers. After checking the roller shutter function, attach the bushing for cord, tape or crank in the interior. In the case of electrical control, complete the wiring, which can only be done by a qualified person.



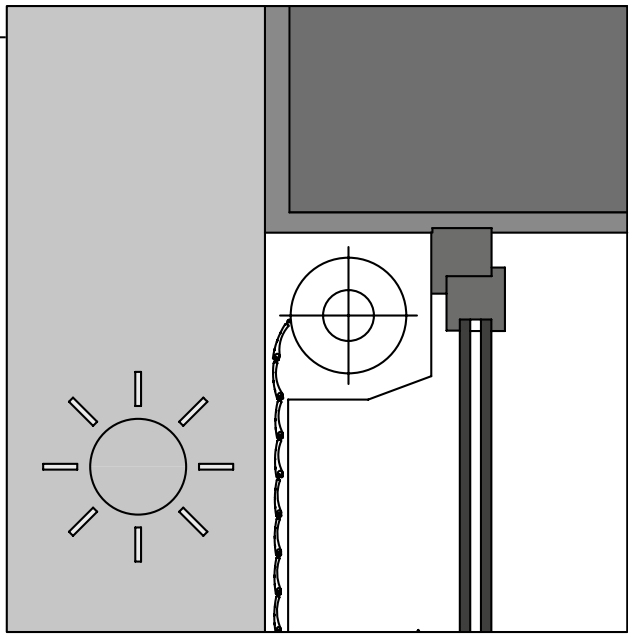
## Vivera-Sectra Roller Shutters Assembly

**Assembly A**
**Assembly on window frame.** Prepare the aperture for passage of the control mechanisms into interior, prepare the passage for cord, crank or electrical cable based on the control method and lower the roller shutter to the low position. Put the box onto the guiding rails and then screw the complete set onto the window frame. Cover the screws with covers. After checking the roller shutter function, attach the bushing for cord, tape or crank in the interior. In the case of electrical control, complete the wiring, which can only be done by a qualified person. Drill apertures for the screen locking in the guiding rail. The SECTRA roller shutter can also be mounted in above-window pockets or lintels.



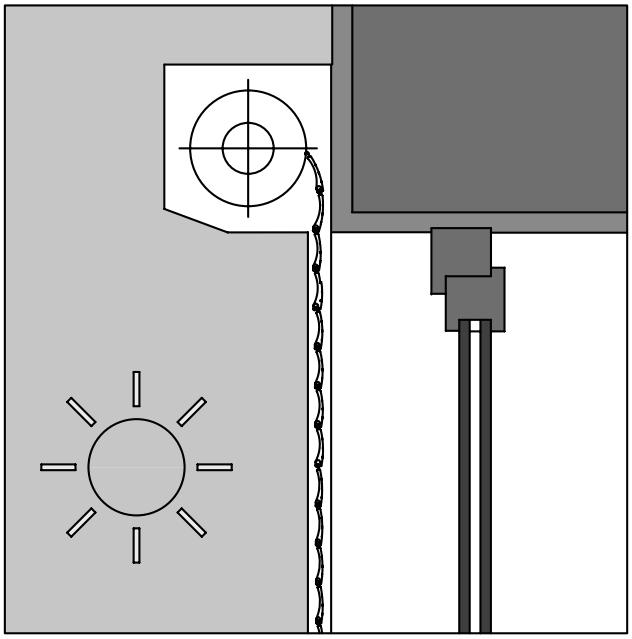
**Assembly B**

**Reverse Assembly on window frame.** The box is screwed onto the window frame en face and the distance between guides and window is based on the box size. Prepare the aperture for passage of the control mechanisms into interior, prepare the passage for cord, crank or electrical cable based on the control method and lower the roller shutter to the low position. Put the box onto the guiding rails and then screw the complete set onto the window frame. Cover the screws with covers. Screw the guiding rails onto the window lining. After checking the roller shutter function, attach the bushing for cord, tape or crank in the interior. In the case of electrical control, complete the wiring, which can only be done by a qualified person.



**Assembly D**

**Assembly on window frame from interior.** This is practically Installation A with the only difference that the roller shutter and the roller shutter control are installed inside the room. Put the box onto the guiding rails and then screw the complete set onto the window frame. Cover the screws with covers. Complete the control system. After checking the roller shutter function, attach the bushing for cord, tape or crank in the interior. In the case of electrical control, complete the wiring, which can only be done by a qualified person.

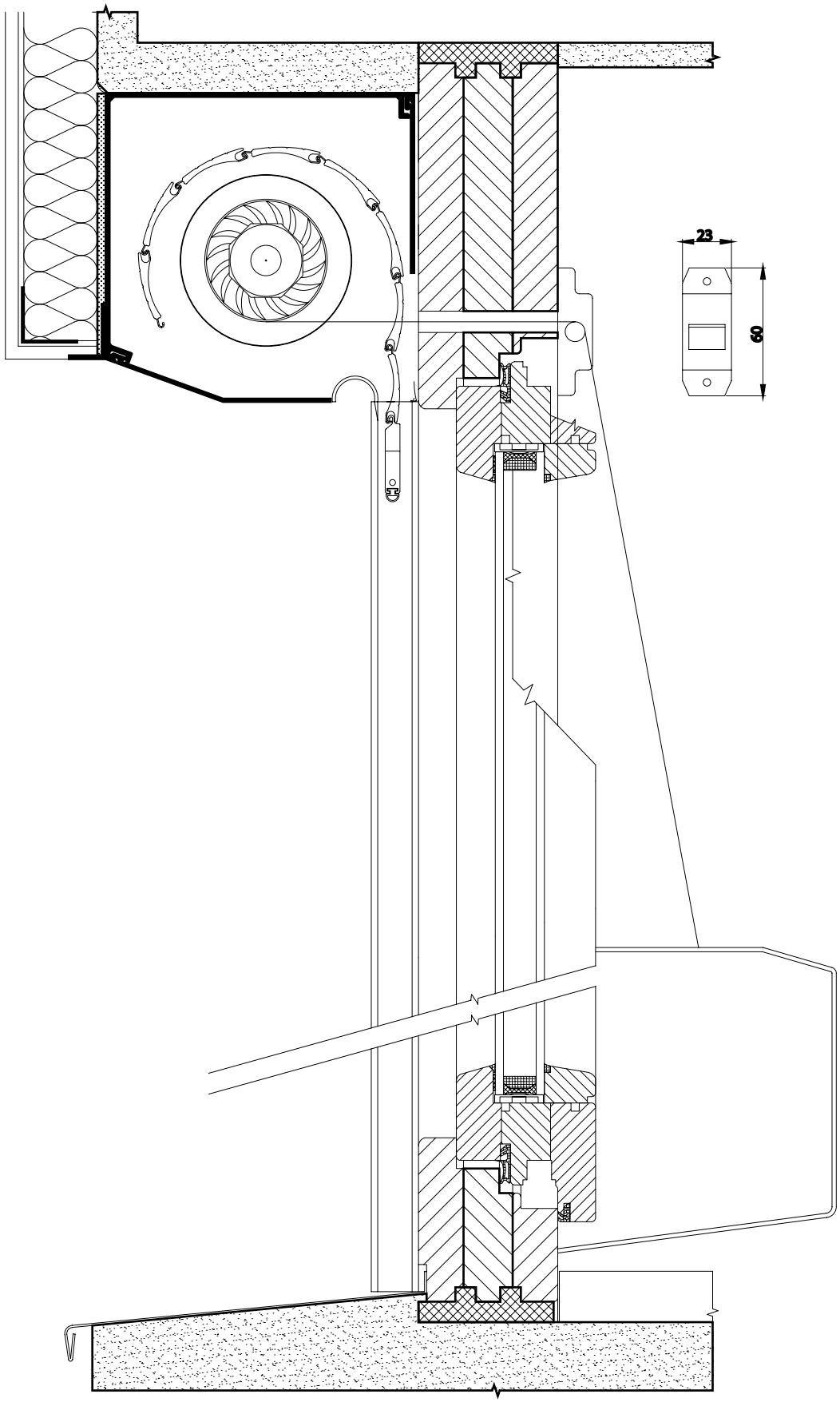


**Assembly E**

**Assembly on facade.** Prepare the aperture for passage of the control mechanisms into interior, prepare the passage for cord, crank or electrical cable based on the control method and lower the roller shutter to the low position. Put the box onto the guiding rails and then screw the complete set onto the facade. Cover the screws with covers. After checking the roller shutter function, attach the bushing for cord, tape or crank in the interior. In the case of electrical control, complete the wiring, which can only be done by a qualified person. The guiding rails should have end stops.

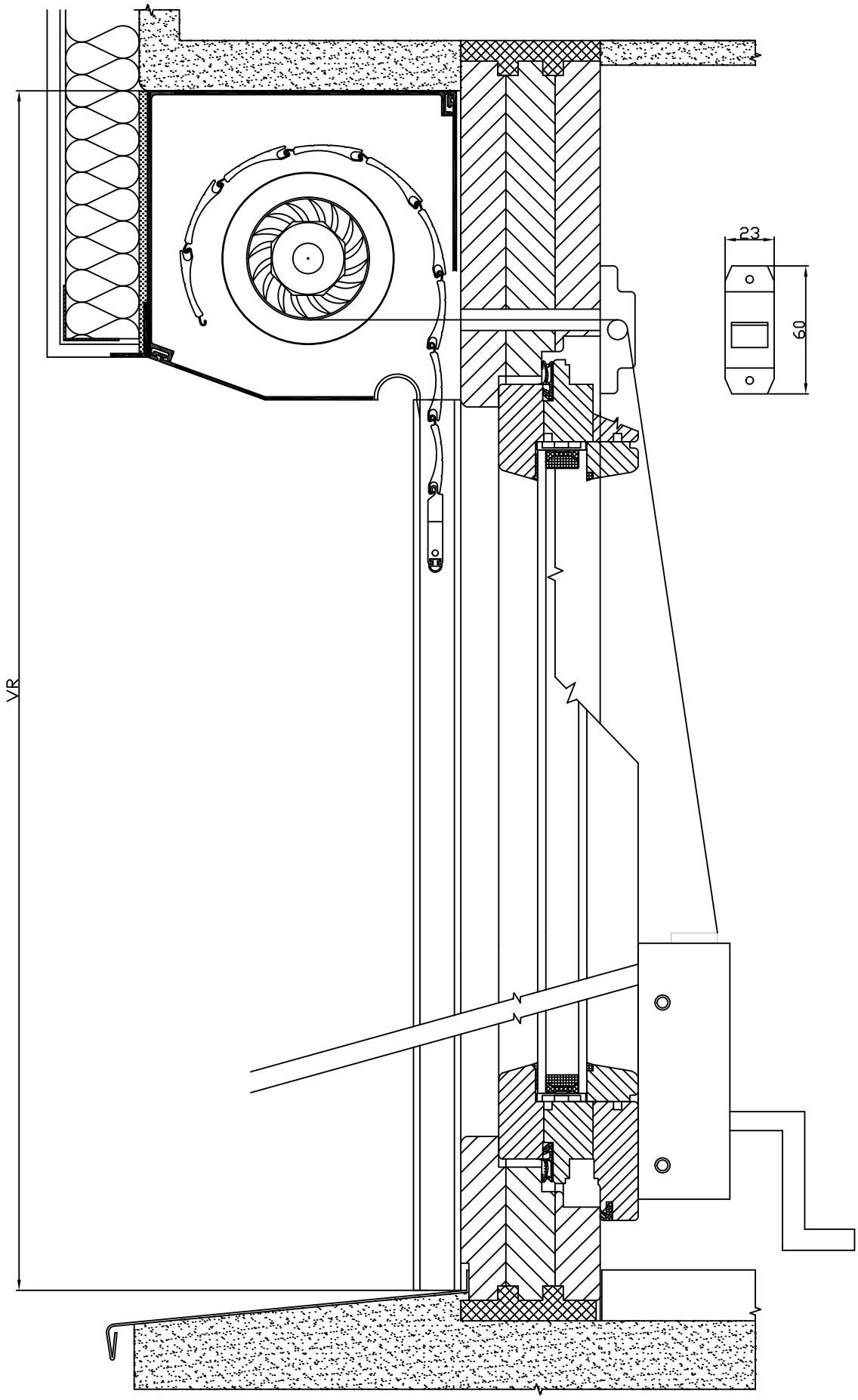
## Schematic Sections for Individual Control Types

Tape Controlled Roller Shutter – vertical section



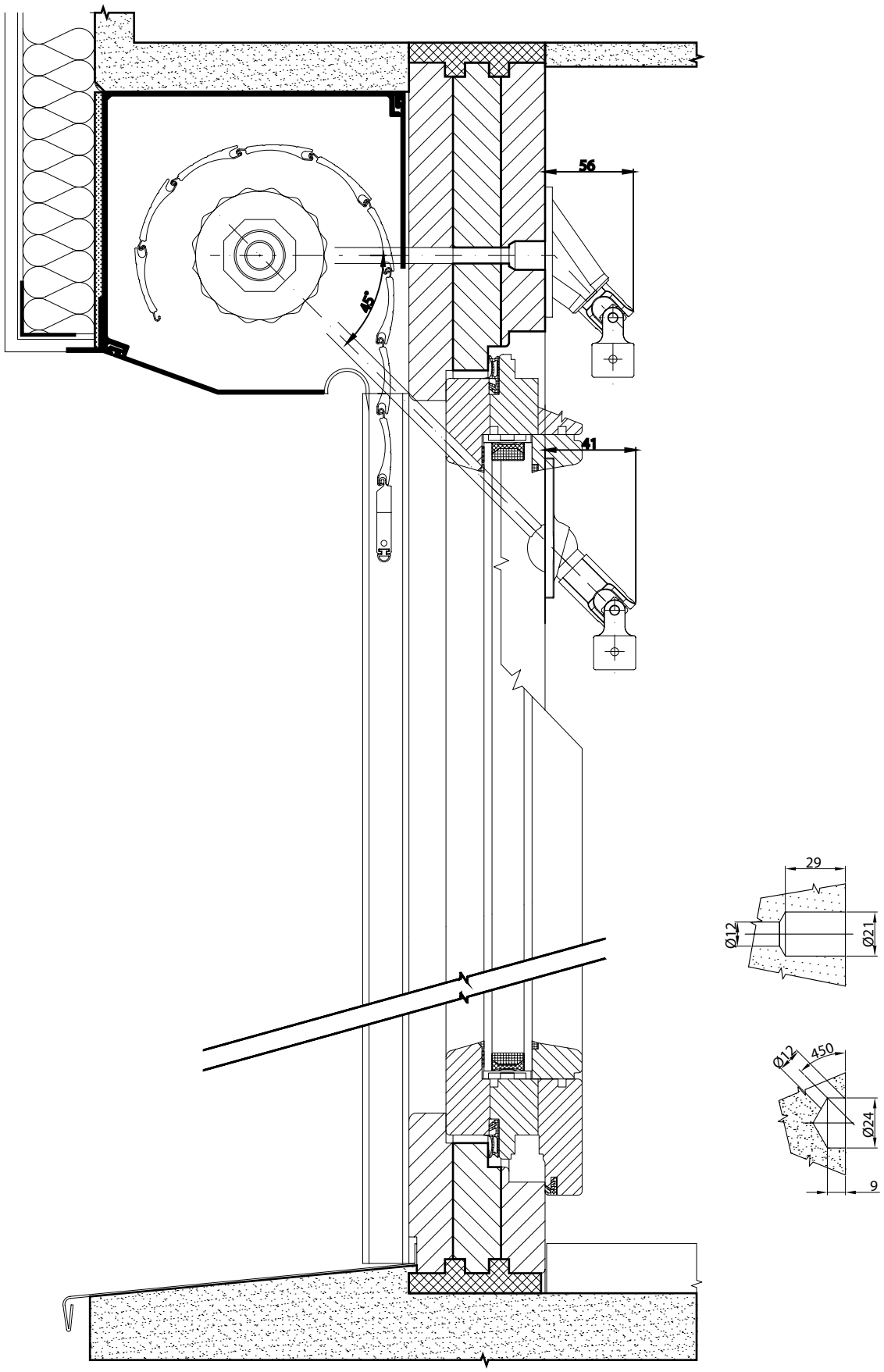

This is a schematic drawing whose shape varies according to the configuration of the product.

Crank Winder Controlled Roller Shutter – vertical section



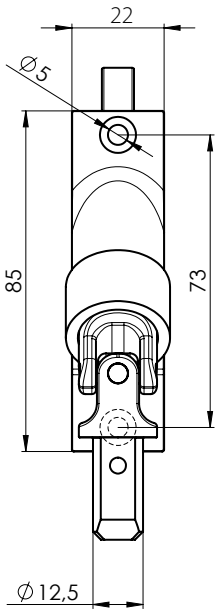

This is a schematic drawing whose shape varies according to the configuration of the product.

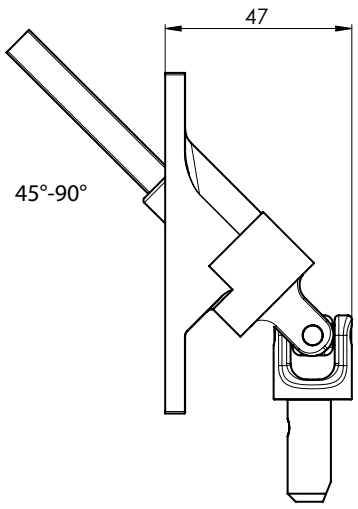
# Crank Controlled Roller Shutter – vertical section

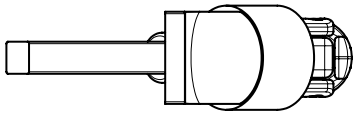


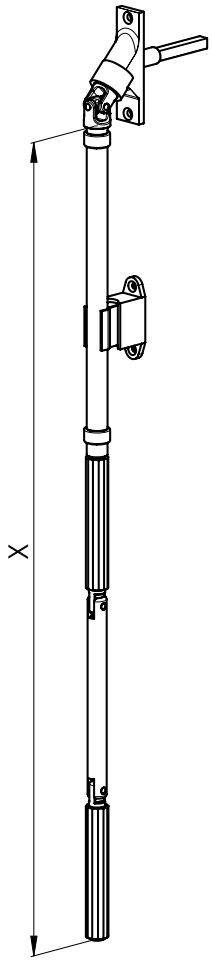

This is a schematic drawing whose shape varies according to the configuration of the product.

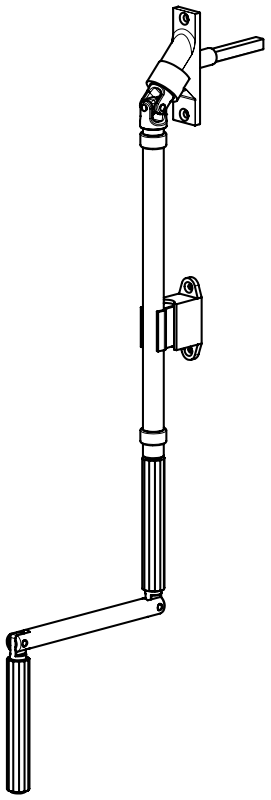
Articulated coupling 45-90°
PR0185
(6-002709-0000)



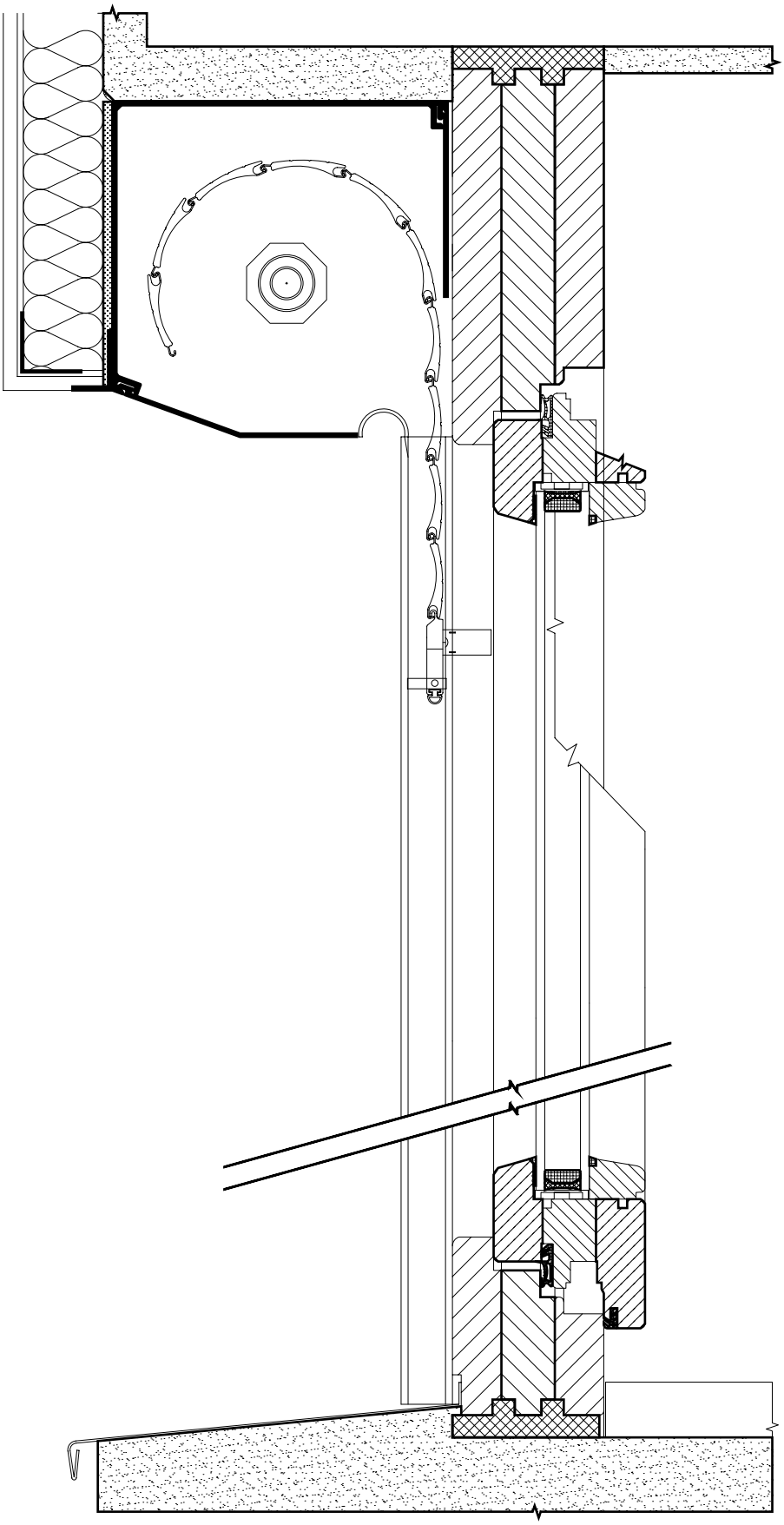





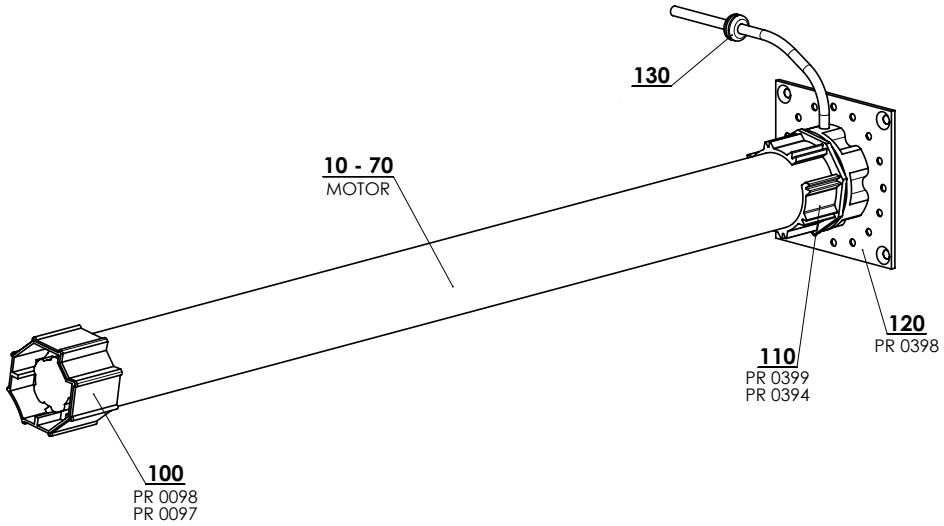



Spring or Motor Controlled Roller Shutter - vertical section



This is a schematic drawing whose shape varies according to the configuration of the product.

# Motors




**Motors type -** Somfy

| Position | Item name | Business name | Drawing number |
|---|---|---|---|
| 10 | Motor LT 50 - Ariane 6/17 | PR0130 | 6-002630-0006 |
| 10 | Motor LT 50 - Atlas 15/17 | PR0126 | 6-002630-0015 |
| 10 | Motor LT 50 - Jet 10/17 | PR0128 | 6-002630-0010 |
| 20 | Motor Ilmo 40 WT 13/10 | PR0407 | 6-006867-0013 |
| 20 | Motor Ilmo 40 WT 4/16 | PR0405 | 6-006867-0004 |
| 20 | Motor Ilmo 40 WT 9/16 | PR0406 | 6-006867-0009 |
| 20 | Motor Ilmo 50 S WT 6/17 | PR0408 | 6-006867-S006 |
| 20 | Motor Oximo WT50 10/17 | PR0334 | 6-001532-0010 |
| 20 | Motor Oximo WT50 15/17 | PR0335 | 6-001532-0015 |
| 20 | Motor Oximo WT50 6/17 | PR0333 | 6-001532-0006 |
| 20 | Motor Ilmo 2 50 WT 10/17 | PR410/1 | 6-013925-0010 |
| 20 | Motor Ilmo 2 50 WT 15/17 | PR411/1 | 6-013925-0015 |
| 20 | Motor Ilmo 2 50 WT 6/17 | PR409/1 | 6-013925-0006 |
| 30 | Motor Altus 40 RTS 13/10 | PR0350 | 6-008175-0013 |
| 30 | Motor Altus 40 RTS 4/16 | PR0348 | 6-008175-0004 |
| 30 | Motor Altus 40 RTS 9/16 | PR0349 | 6-008175-0009 |
| 30 | Motor Altus 40 RTS433 3/30 | PR0347 | 6-008175-0003 |
| 30 | Motor Oximo RTS50 10/17 | PR0340 | 6-002615-0010 |
| 30 | Motor Oximo RTS50 15/17 | PR0341 | 6-002615-0015 |
| 30 | Motor Oximo RTS50 20/17 | PR0342 | 6-002615-0020 |
| 30 | Motor Oximo RTS50 30/17 | PR0343 | 6-002615-0030 |
| 30 | Motor Oximo RTS50 40/17 | PR0344 | 6-002615-0040 |
| 30 | Motor Oximo RTS50 6/17 | PR0339 | 6-002615-0006 |
| 30 | Motor Oximo S auto RTS 6/17 | PR0414 | 6-008040-0000 |
| 40 | Motor Oximo 40 WireFree RTS 10/12 | PR0417 | 6-008256-WF10 |
| 40 | Motor Oximo 40 WireFree RTS 3/23 | PR0415 | 6-008256-WF03 |
| 40 | Motor Oximo 40 WireFree RTS 6/18 | PR0416 | 6-008256-WF06 |
| 50 | Motor LT 50 NHK - Ceres 8/17 | PR0400 | 6-002631-0008 |
| 60 | Motor Oximo 50 io 10/17 | PR0637 | 6-012566-1017 |
| 60 | Motor Oximo 50 io 15/17 | PR0638 | 6-012566-1517 |
| 60 | Motor Oximo 50 io 20/17 | PR0639 | 6-012566-2017 |
| 60 | Motor Oximo 50 io 30/17 | PR0640 | 6-012566-3017 |
| 60 | Motor Oximo 50 io 40/17 | PR0641 | 6-012566-4017 |
| 60 | Motor Oximo 50 io 6/17 | PR0636 | 6-012566-0617 |
| 61 | Motor Oximo S auto io 6/17 | PR0642 | 6-013056-0000 |
| 62 | Motor S&SO-RS100 io 10/17 | PR0880/10 | 6-014804-0010 |
| 62 | Motor S&SO-RS100 io 15/17 | PR0880/15 | 6-014804-0015 |
| 62 | Motor S&SO-RS100 io 20/17 | PR0880/20 | 6-014804-0020 |
| 62 | Motor S&SO-RS100 io 6/17 | PR0880/06 | 6-014804-0006 |
| 63 | Motor S+SO RS100 ioHybrid 10/17 | MR 135/10 | 6-015565-1017 |
| 63 | Motor S+SO RS100 ioHybrid 15/17 | MR 135/15 | 6-015565-1517 |
| 63 | Motor S+SO RS100 ioHybrid 20/17 | MR 135/20 | 6-015565-2017 |
| 63 | Motor S+SO RS100 ioHybrid 6/17 | MR 135/06 | 6-015565-0617 |
| 70 | Motor Oximo 40 io 13/16 | PR0652/13 | 6-014871-0013 |
| 70 | Motor Oximo 40 io 4/16 | PR0652/4 | 6-014871-0004 |
| 70 | Motor Oximo 40 io 9/16 | PR0652/9 | 6-014871-0009 |
| 100 | Carrier SW 60 - IMBAC | PR0098 | 6-001676-0000 |
| 100 | Carrier SW 40x0,6 | PR0097 | 6-001637-0000 |
| 110 | Adapter SW 60 | PR0399 | 6-001664-0000 |
| 110 | Adapter SW 40x0,6 | PR0394 | 6-001636-0000 |
| 120 | Storage NHK-K 10x10 | PR0398 | 6-001663-0000 |
| 130 | Rubber cable, plastic, black | | 6-017078-0000 |

End stop limits adjustment of motors

## End stop limits adjustment for OXIMO RTS

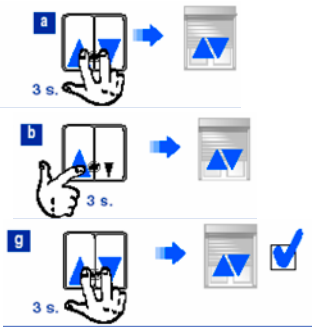
1. Turn on power supply.
2. Choose the right channel on remote control.
3. Push both buttons UP and DOWN at the same time on remote control:
   ▶ u the blind makes short movement up and down, adjustment controller is saved into the motor memory.
4. Push UP button on remote control.
5. Push and hold both buttons UP and DOWN at the same time until the blind makes a shore movement up and down.
6. Push and hold STOP/my button until the blind makes a short movement there and back:
   ▶ end stop limits adjustment is fi nished
7. Push the PROG button on remote control and save the fi rst controller into the motor memory:
   ▶ the blind makes short movement up and down.

### End stop limits adjustment of Oximo WT motors

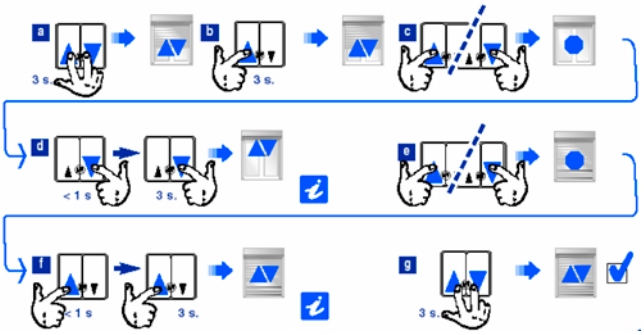
using Somfy adjustment cable or testing cable where you can push both direction buttons at the same time

### Automatic end stop limits

In programming mode the motor reacts with certain delay after you push the buttons.

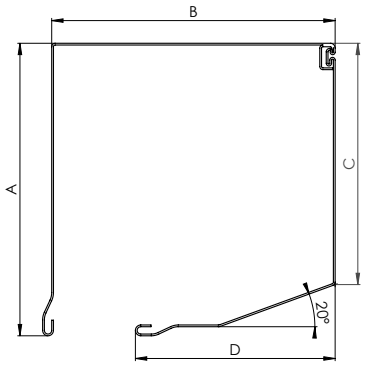



### Manually upper and lower end stop limit



# Rolled Covering Boxes (Sectra, Vivera)

## Rolled box, 20° bevel



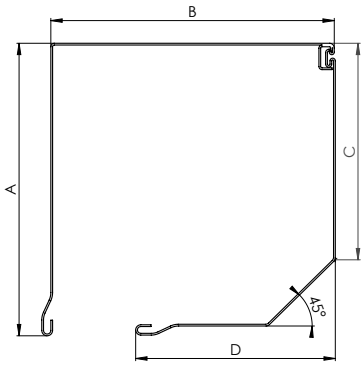

Vivera

| Size | A | B | C | D |
|---|---|---|---|---|
| **125** | 129 | 125 | 106 | 88 |
| **138** | 138 | 136 | 115 | 101 |
| **150** | 152 | 150 | 27 | 113 |
| **165** | 167 | 165 | 142 | 128 |
| **180** | 182 | 181 | 153 | 143 |
| **205** | 206 | 207 | 175 | 170 |

Sectra

| Size | A | B | C | D |
|---|---|---|---|---|
| **138** | 138 | 136 | 115 | 101 |
| **150** | 152 | 150 | 27 | 113 |
| **165** | 167 | 165 | 142 | 128 |
| **180** | 182 | 181 | 153 | 143 |

## Rolled box, 45° bevel



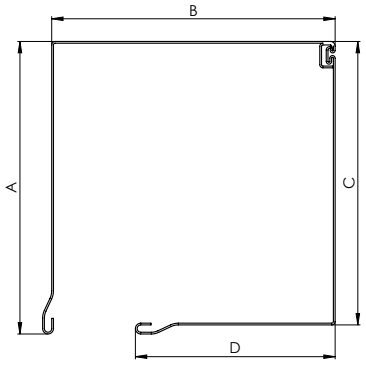

Vivera

| Size | A | B | C | D |
|---|---|---|---|---|
| **125** | 128 | 126 | 95 | 88 |
| **138** | 138 | 138 | 104 | 104 |
| **150** | 150 | 151 | 111 | 116 |
| **165** | 170 | 168 | 120 | 126 |
| **180** | 185 | 182 | 131 | 145 |
| **205** | 205 | 207 | 149 | 168 |

Sectra

| Size | A | B | C | D |
|---|---|---|---|---|
| **138** | 138 | 138 | 104 | 104 |
| **150** | 150 | 151 | 111 | 116 |
| **165** | 170 | 168 | 120 | 126 |
| **180** | 185 | 182 | 131 | 145 |

## Rolled round box , straight design, 90°



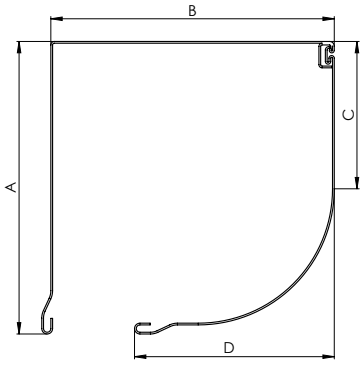

Vivera

| Size | A | B | C | D |
|---|---|---|---|---|
| **125** | 129 | 125 | 127 | 86 |
| **138** | 138 | 136 | 135 | 101 |
| **150** | 152 | 150 | 151 | 112 |
| **165** | 167 | 165 | 167 | 127 |
| **180** | 182 | 181 | 182 | 142 |
| **205** | 206 | 207 | 206 | 172 |

Sectra

| Size | A | B | C | D |
|---|---|---|---|---|
| **138** | 138 | 136 | 135 | 101 |
| **150** | 152 | 150 | 151 | 112 |
| **165** | 167 | 165 | 167 | 127 |
| **180** | 182 | 181 | 182 | 142 |

## Rolled quarter-round box



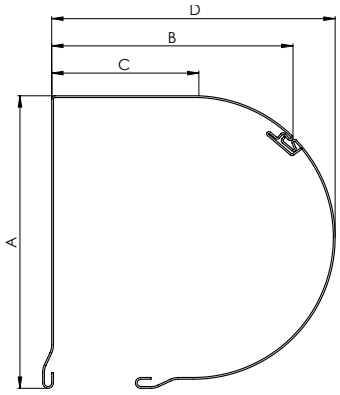

Vivera

| Size | A | B | C | D |
|---|---|---|---|---|
| **138** | 138 | 137 | 70 | 101 |
| **150** | 152 | 151 | 76 | 115 |
| **165** | 167 | 167 | 87 | 130 |
| **180** | 182 | 182 | 92 | 145 |
| **205** | 206 | 205 | 106 | 166 |

Sectra

| Size | A | B | C | D |
|---|---|---|---|---|
| **138** | 138 | 137 | 70 | 101 |
| **150** | 152 | 151 | 76 | 115 |
| **165** | 167 | 167 | 87 | 130 |
| **180** | 182 | 182 | 92 | 145 |

## Rolled round box



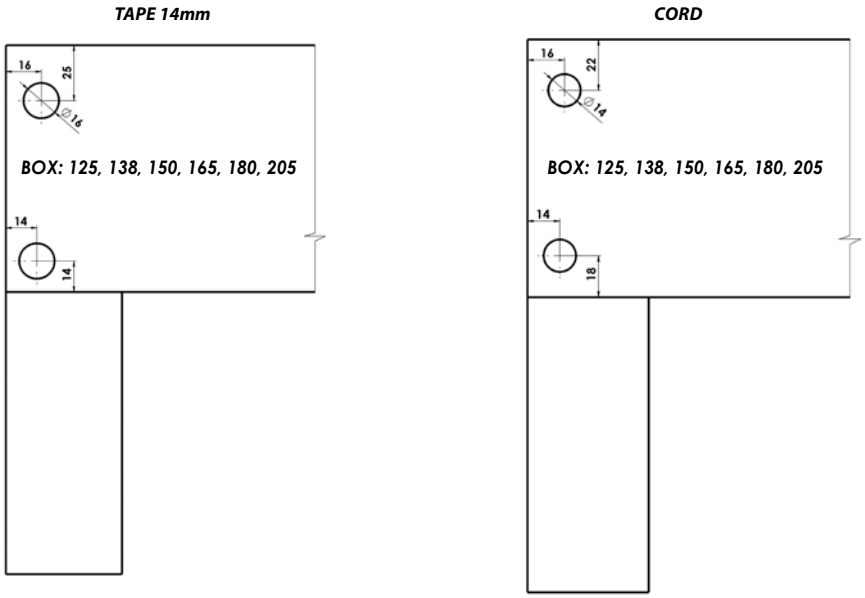

Vivera

| Size | A | B | C | D |
|---|---|---|---|---|
| **138** | 139 | 118 | 78 | 145 |
| **150** | 152 | 131 | 84 | 160 |
| **165** | 167 | 143 | 92 | 173 |
| **180** | 180 | 156 | 99 | 188 |
| **205** | 206 | 179 | 113 | 215 |

Sectra

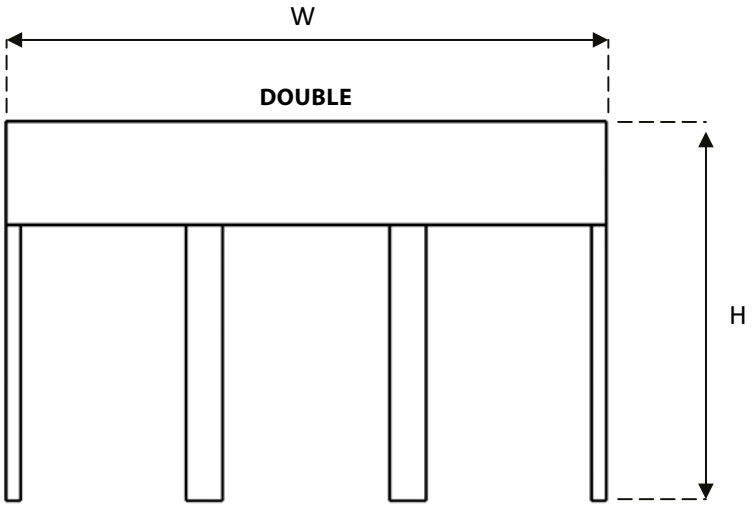
| Size | A | B | C | D |
|---|---|---|---|---|
| **138** | 139 | 118 | 78 | 145 |
| **150** | 152 | 131 | 84 | 160 |
| **165** | 167 | 143 | 92 | 173 |
| **180** | 180 | 156 | 99 | 188 |

## Covering box




Thickness: 1mm

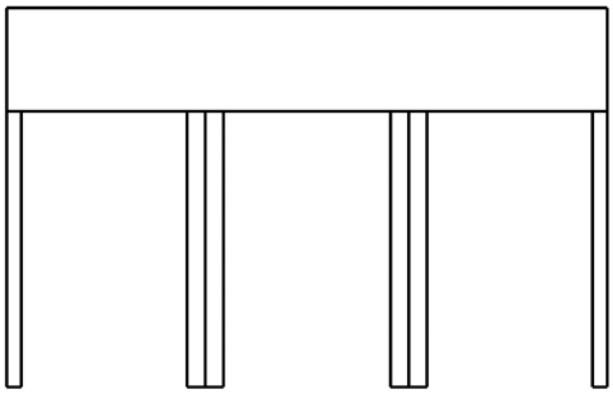
## Continuous box - double guiding channel



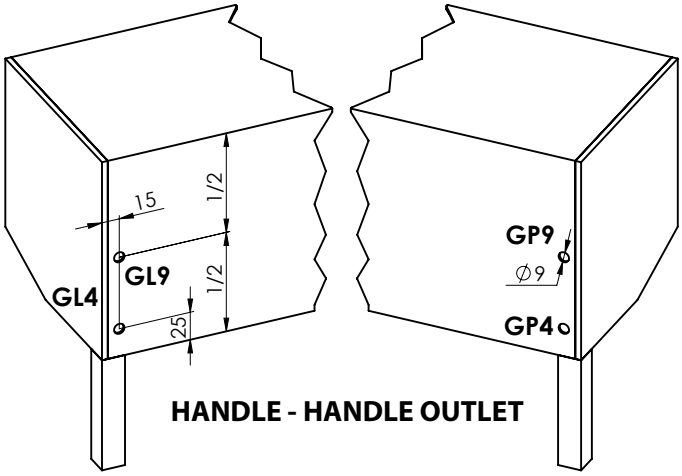

| | |
|---|---|
| max. width* | = 4500 mm |
| max. height | = 4350 mm |
| max. area | = 5,8 m² |

*Max. width for Plasterax is 4000 mm.

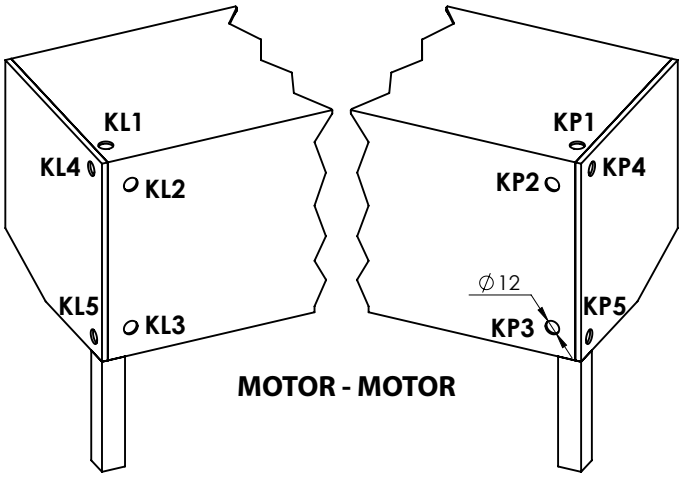
## Continuous box – two guiding channels



**Control Placement**



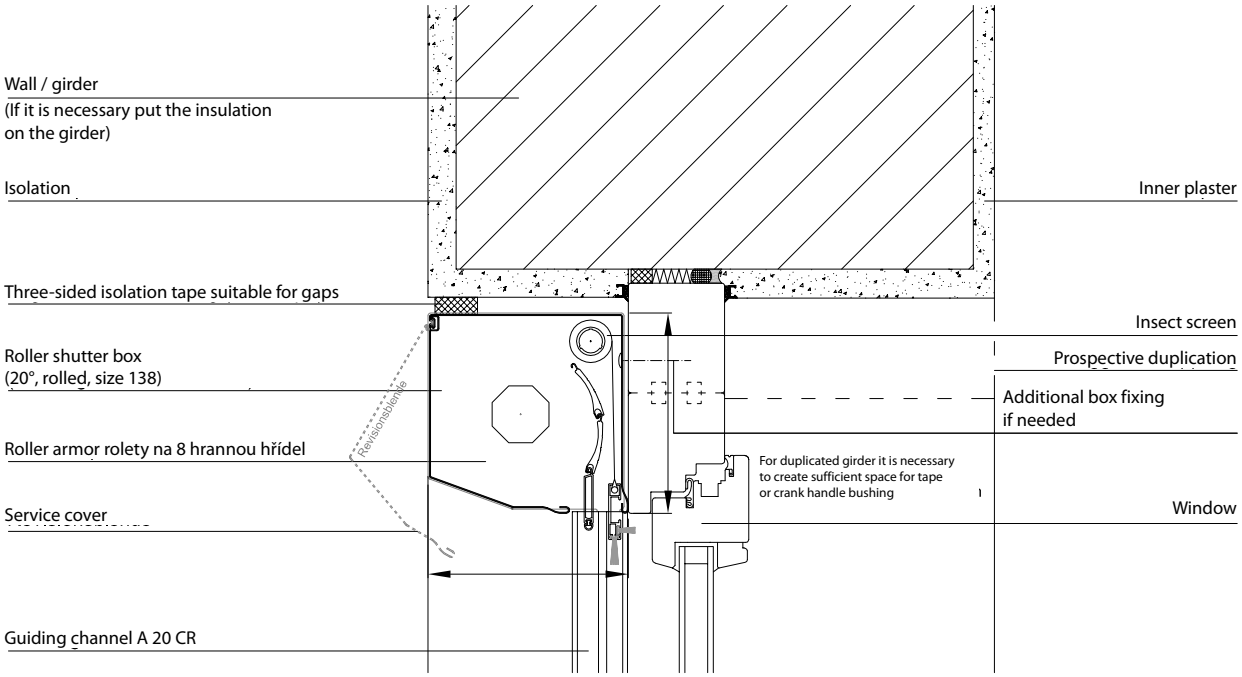

**HANDLE - HANDLE OUTLET**

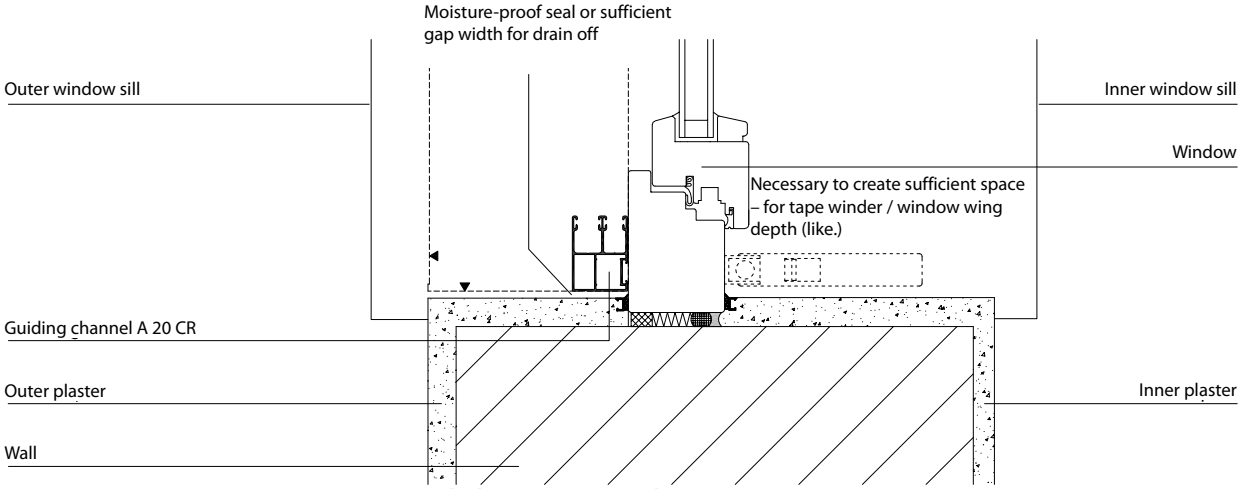



**MOTOR - MOTOR**

# Roller shutters with integrated insect screen – visible box

## Detailed connection – side view (upper part)

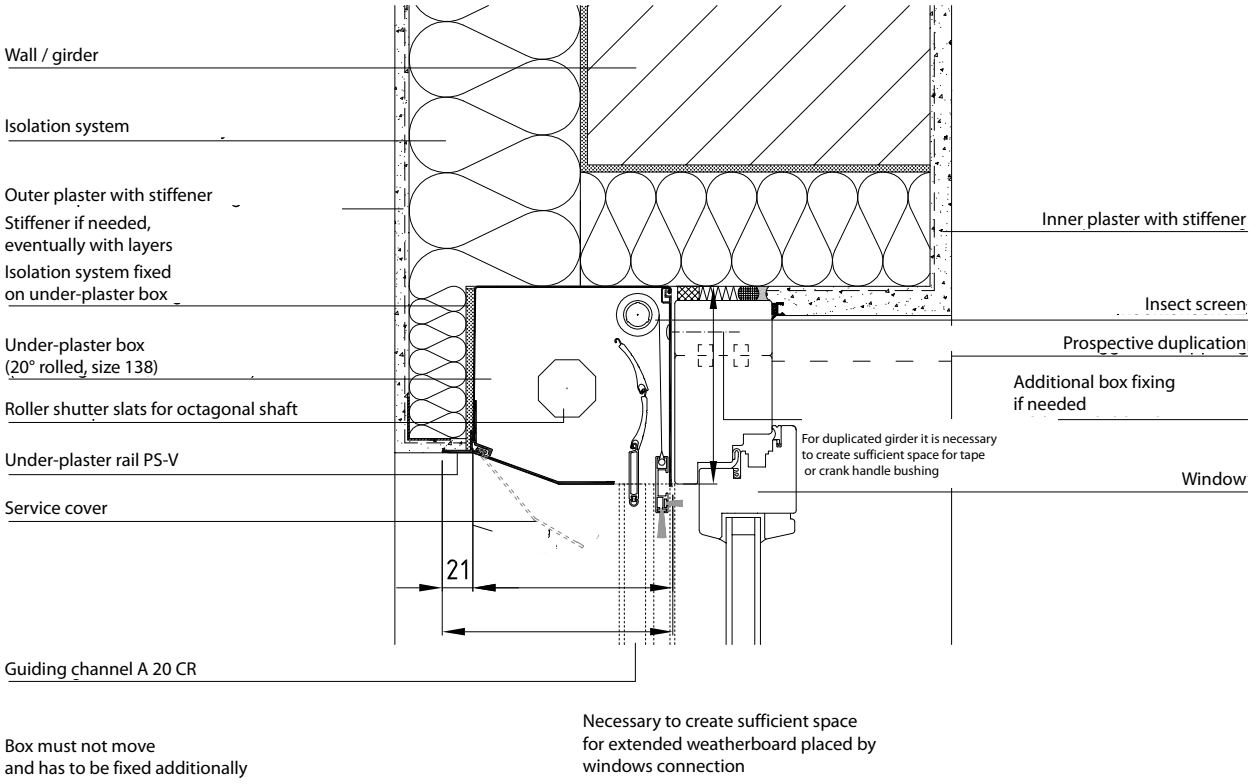


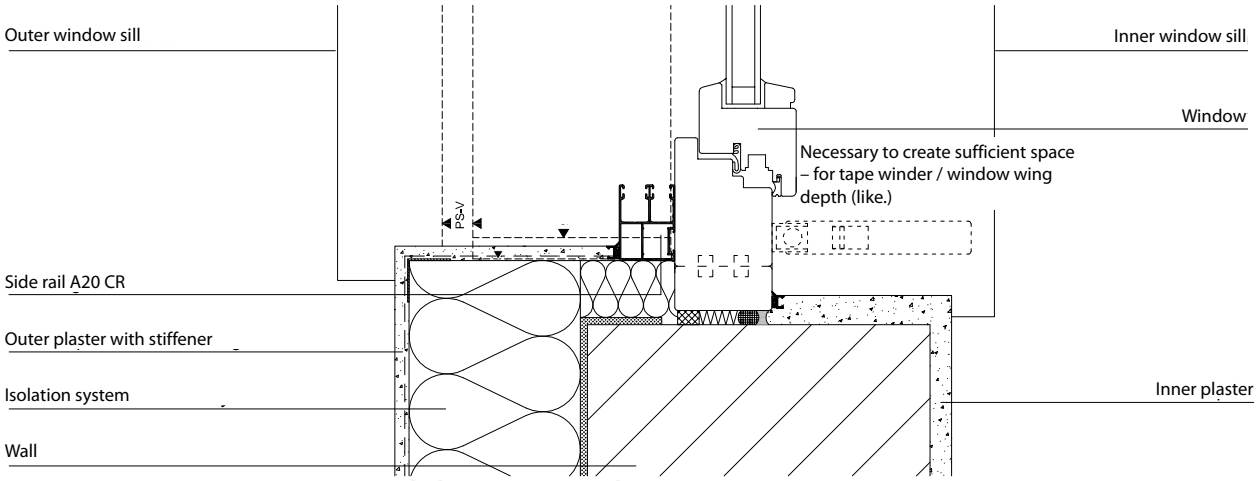




## Detailed connection – side view (lower part)

## Roller shutters with integrated insect screen – under-plaster box

**Detailed connection – side view (upper part)**

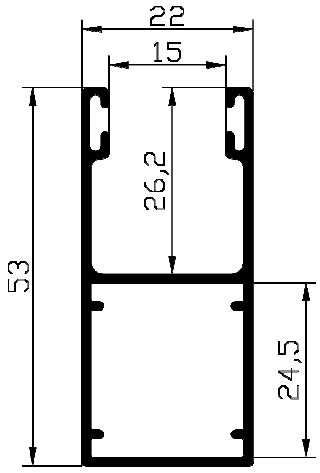


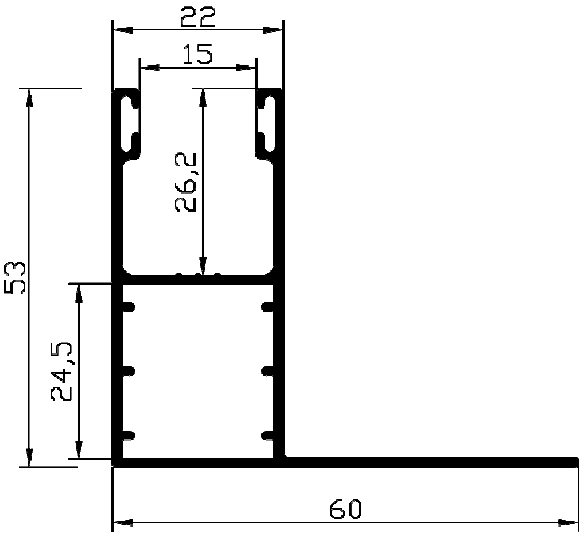

**Detailed connection – side view (lower part)**

## Guiding channels

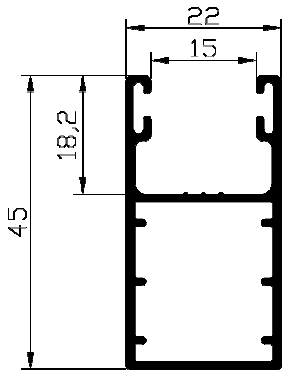
Guiding rail A3 (6-001786-xxxx)



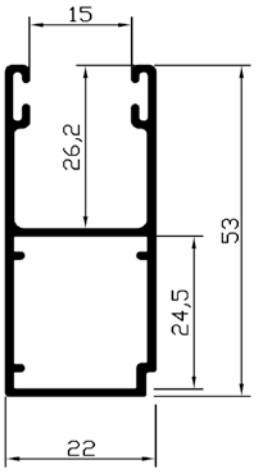

Guiding rail A4 (6-001788-xxxx)



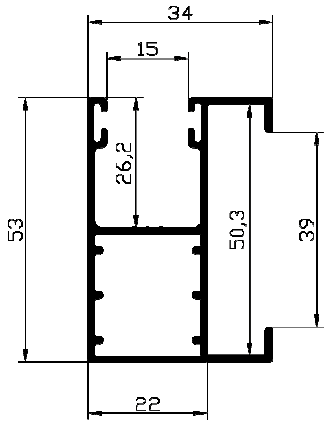

Guiding rail A5 (6-002595-xxxx)



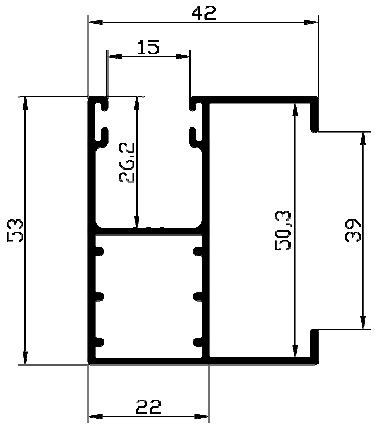

Guiding rail A3-ES (6-003879-xxxx)



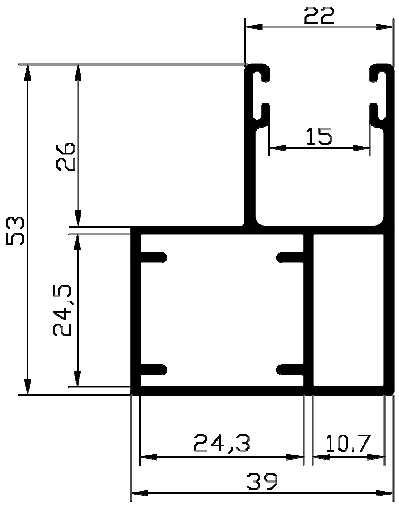

Guiding rail A8 - 12 (6-002599-xxxx)



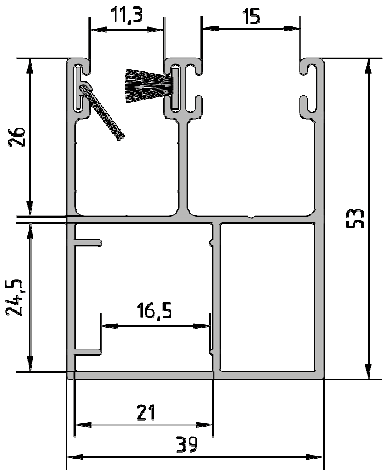

Guiding rail A8-20 (6-002600-xxxx)



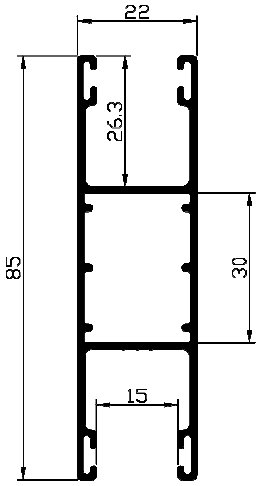
Guiding rail A15 (6-001794-xxxx)



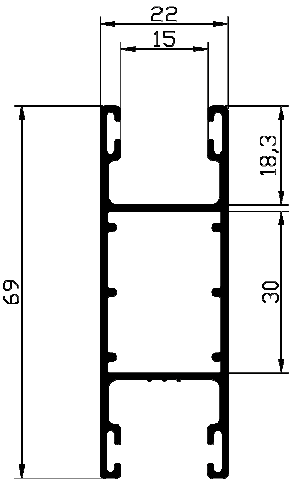

Guiding rail A20 (6-001926-xxxx) Sectra




Guiding rail DF-A3 (6-002601-xxxx)

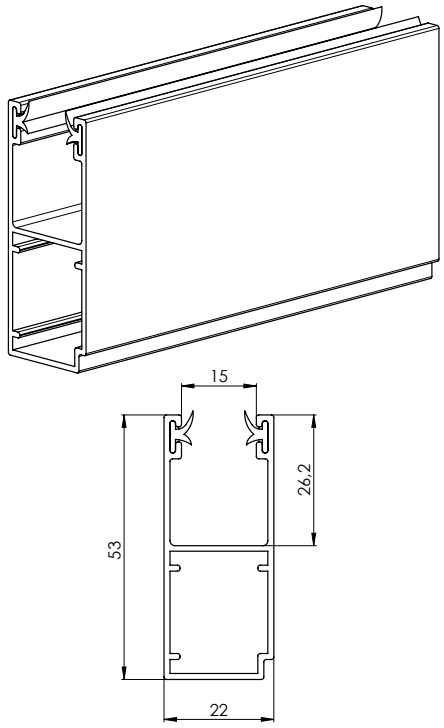



Guiding rail DF-A5 (6-001808-xxxx)

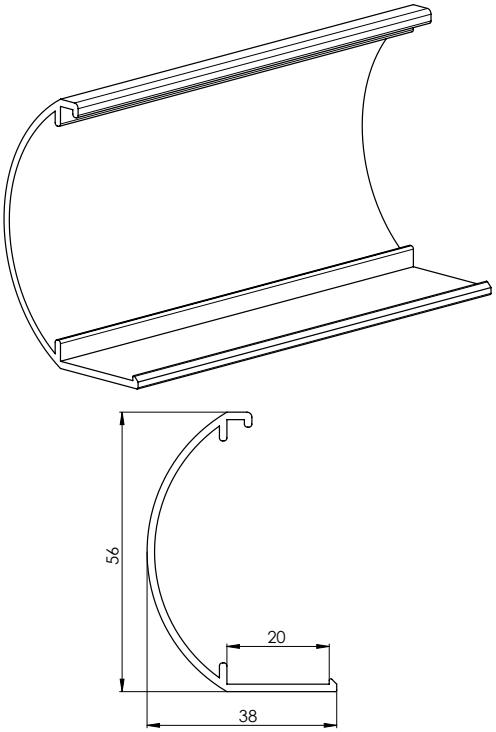


## The elements to secure external roller shutter - safety components

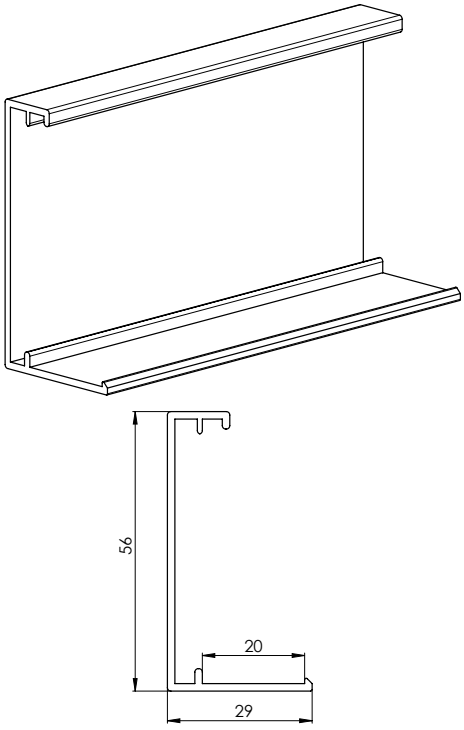
Guiding rail A 3-ES (6-003879)



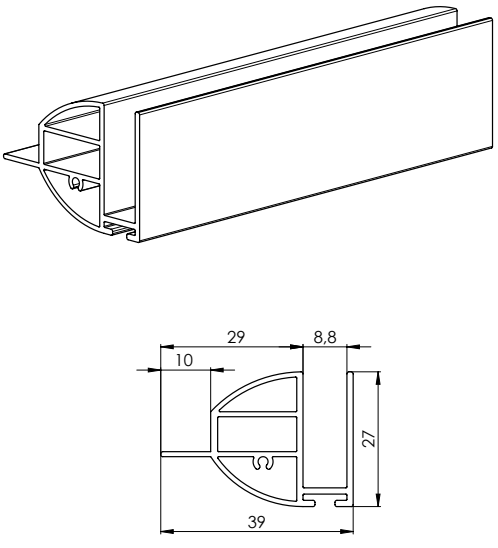

Guiding rail cover FAR-ES (6-003880)




Guiding rail cover FAG-ES (6-012000)

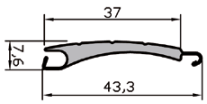
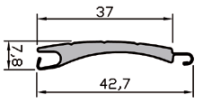
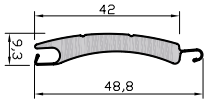



Special end rail (6-012001)




Note: Safety components for guide rails can only be selected within the MY442 slat, the special end rail is supplied automatically.

# Slats

| M317 | M328 | MY442 |
|---|---|---|
| Vivera, Heluz | Vivera, Heluz | Vivera, Heluz |
| Al | Al | Al |
|   |   |   |

**Technical Data (mm)**

| | M317 | M328 | MY442 |
|---|---|---|---|
| Covering height | 37 | 37 | 42 |
| Thickness | 7,6 | 7,8 | 9,3 |
| Material thickness | 0,3 | 0,28 | 0,3 |
| Weight | 2,8 kg/m² | 2,6 kg/m² | 2,85 Kg/m² |
| Maximum Width | 2900 | 2700 | 4000 |
| Maximum Area | 6,5 m² | 5,8 m² | 8,5 m² |

| M317 | | M328 | | MY442 | |
|---|---|---|---|---|---|
| **01 white** | ● | **01 white** | ● | **01 white** | ●x |
| **02 grey** | ●x | **02 grey** | ●x | **02 grey** | ●x |
| **03 velvet brown** | ● | **03 velvet brown** | ● | **03 velvet brown** | ●x |
| **04 beige** | ●x | **04 beige** | ●x | **04 beige** | ●x |
| **05 dark Begie** | x | **07 natural** | ● | **07 natural** | ●x |
| **07 natural** | ● | **13 moss Green** | ●x | **13 moss Green** | ●x |
| **09 bronze** | x | **22 golden oak** | ● | **22 golden oak** | ●x |
| **11 oak** | x | **27 creamy white** | ●x | **23 lighter grey** | ●x |
| **12 teak** | x | **30 jamaica brown** | ●x | **27 creamy white** | ●x |
| **13 moss Green** | ●x | **35 sand-begie** | ●x | **30 jamaica brown** | ●x |
| **14 purple red** | x | **38 anthracite grey** | ● | **35 sand-begie** | ●x |
| **22 golden oak** | ● | **81 mahagon** | x | **38 anthracite grey** | ●x |
| **23 lighter grey** | ●x | **82 irish oak** | x | **84 ivory** | ●x |
| **27 creamy white** | ●x | **84 ivory** | ●x | **86 nut** | ●x |
| **28 fir green** | x | **86 nut** | ●x | **other (consultation with SR)** | |
| **37 velvet grey** | x | **other (consultation with SR)** | | | |
| **38 anthracite grey** | ● | | | | |
| **39 steel blue** | x | | | | |
| **84 ivory** | ●x | | | | |
| **85 gray aluminum 9007** | x | | | | |
| **87 imitation of stainless steel** | x | | | | |
| **other (consultation with SR)** | | | | | |

● standard price and standard delivery
●x standard price and delivery after consulting
x extra charges and delivery must be consulted


**01 white**


**02 grey**


**03 velvet brown**


**04 beige**


**05 dark Begie**


**07 natural**


**09 bronze**


**11 oak**


**12 teak**


**13 moss Green**


**14 purple red**


**22 golden oak**


**23 lighter grey**


**27 creamy white**


**28 fir green**


**30 jamaica brown**


**35 sand-begie**


**37 velvet grey**


**38 anthracite grey**


**39 steel blue**


**81 mahagon**


**82 irish oak**


**84 ivory**

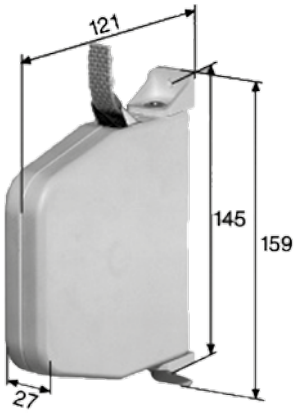

**85 gray aluminum 9007**


**86 nut**


**87 imitation of stainless steel**

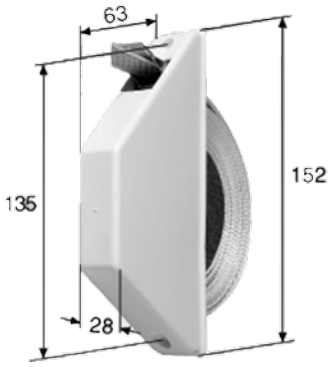
## Accessories

**Tape coiler** PR0131
6-001908-XXXX
Design: white, brown




**Flush fitting cord coiler** PR0133
6-001913-XXXX
Design: white, brown


**Semi-recess tape coiler** PR0286
6-003640-XXXX
Design: white, brown

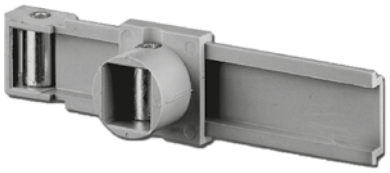



### Tape gear for atypical options

**metal**

6-002071-000

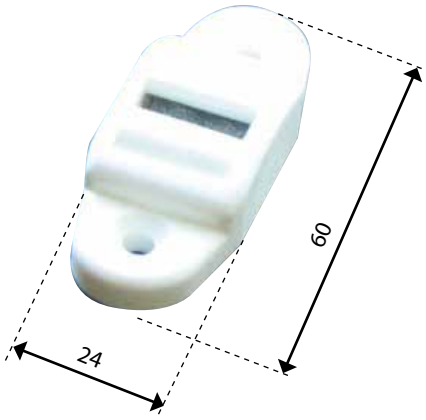
**plastic**



6-011360-0200

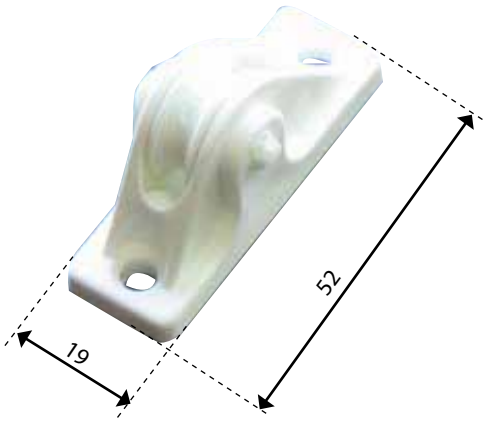
## Guides

**Tape guide** PL0146
6-001918-XXXX



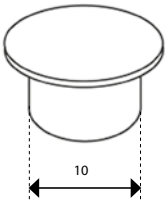

Cord colour: whitegrey, brown
Height 18 mm

**Deflect roller for cord** PR0148
6-001923-XXXX



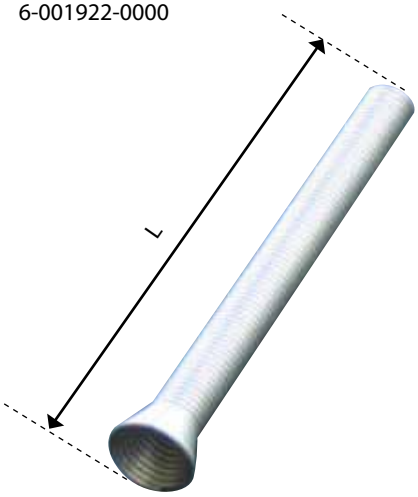

Tape colour: grey, brown
Height 28 mm

**PVC cover** ZP0011
6-009203-0000

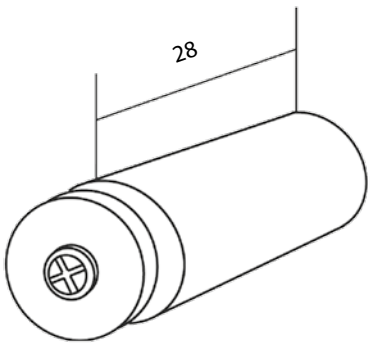



Design:
white
brown
grey,
beige
nougat brown

**Cord spring** (100/200 mm) PR0149
6-001922-0000

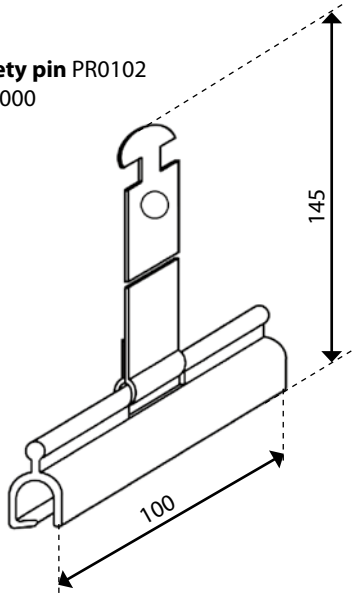



**Dead stop**
6-005477-xxxx

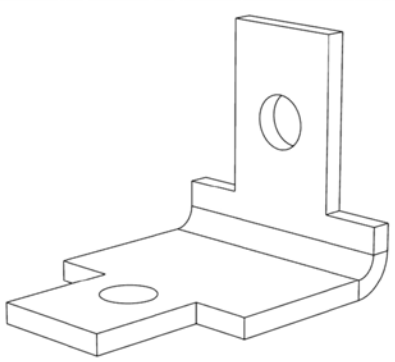



A = 28mm
Design: white, brown, grey, black, beige

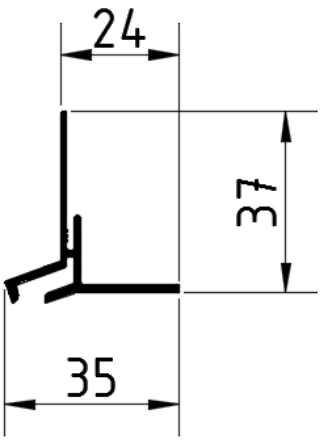
**Spring safety pin** PR0102
6-001871-0000



**Guide channel end parts** PR0432
6-011947-0000



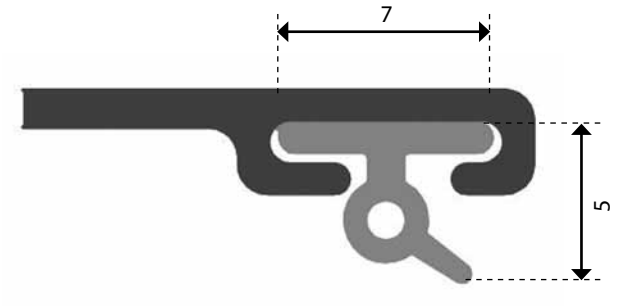
**Concealed rail for under-plaster box**



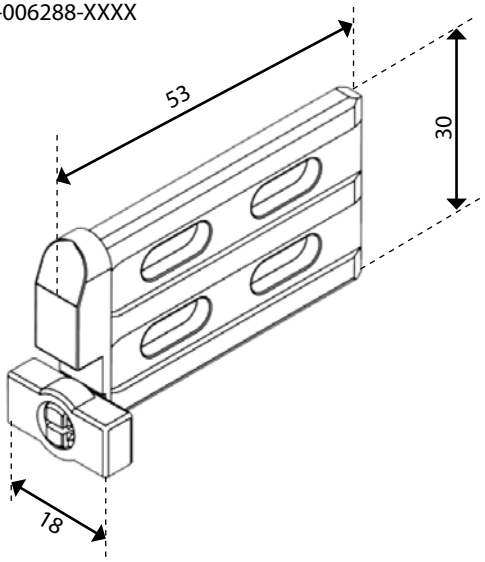

**Octoeasy suspension**

| | | |
|---|---|---|
| Octoeasy suspension - single-cell, shaft 40mm, box 125-165 | PR0648/1 | (6-013917-0000) |
| Octoeasy suspension - single-cell, shaft 60 mm, box 125-165 | PR0648/2 | (6-013918-0000) |
| Octoeasy suspension - double-cell, shaft 40mm, box 180-205 | PR0648/3 | (6-013919-0000) |
| Octoeasy suspension - double-cell, shaft 60 mm, box 180-205 | PR0648/4 | (6-013920-0000) |

**PVC insert** PR0430
6-001796-0000



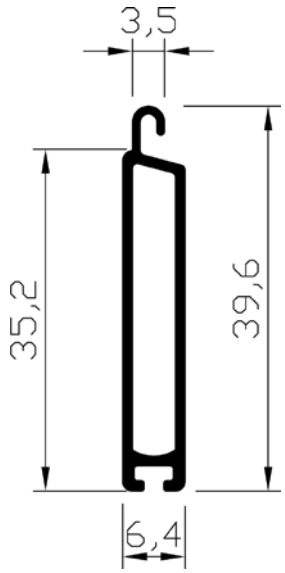

**Connecting buffer swiveling** RP0291
6-006288-XXXX



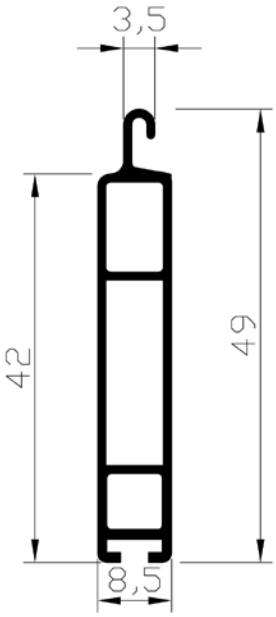

Design: white, black

**End slat**

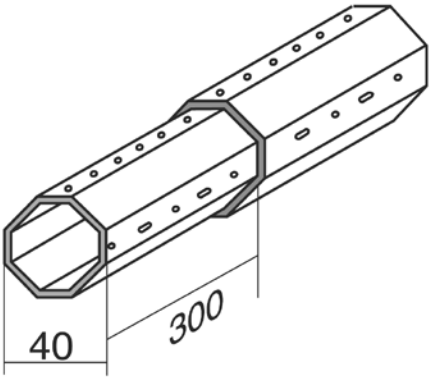
**End slat** PR0431
6-010977-XXXX



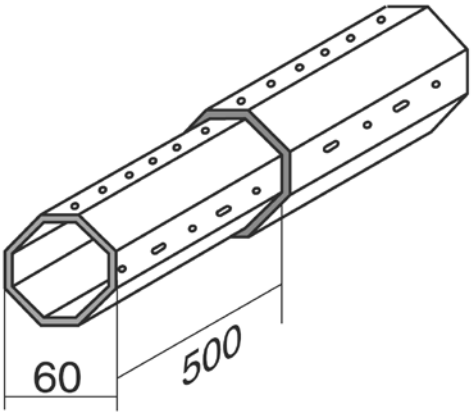

**End slat for covered stops** PR0115
6-001858-XXXX



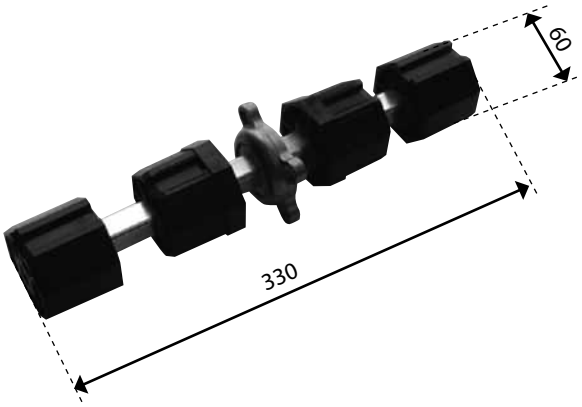
**Telescope shaft (40mm shaft)** X.A229040100
6-001878-0040




**Telescope shaft (60mm shaft)** PR0206
6-001878-0060



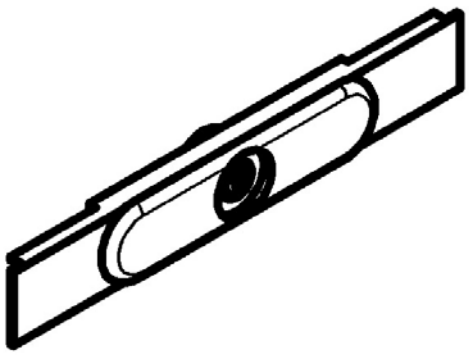

**Double shaft bolt**
6-010973-0000




**Linkage (120/130/140/150/160 mm)**
6-001883-0000
6-002704-0000
6-002706-0000
6-002707-0000
6-002708-0000

Design: white

**Cylinder round lock** PR0207
6-002131-xxxx



**Groove in side guide rail for cylinder lock**