

PERGOLA SB 350 is a functional, aesthetic prefabricated construction set with a fixed roof in the form of rotating blades, which protects against sun and rain. The system is available in a free-standing single-module version. Designed for self-assembly.

USAGE:

- Sun protection, surface shading and rain protection.

PRODUCT CHARACTERISTICS:

- Extruded aluminium construction with stainless steel elements
- Water drainage system integrated with the construction
- Drive and rod hidden in the contour of the beam
- No slope of the roof
- Electrically controlled rotation of the roof blades
- Possibility of using weather automation
- Water resistance of the movable roof and aesthetic water drainage through integrated side gutters and posts with the option of blocking the outflow from the gutter at the selected end
- It regulates the access of the sunlight according to users needs
- Protects against weather conditions: rain and wind
- Protects against snowfall up to 30 kg/m² (even load)
- It does not emit toxic substances during the operational term
- The noise pollution due to electro-mechanical drive is not considered as a significant threat, but is rather a comfort matter
- The rotation of roof blades may be started remotely
- Chamber with revision for wiring and automation elements
- New flat blades design
- Square-section posts adjusted in width to ZiiiP cassettes
- Adapted for self-assembly

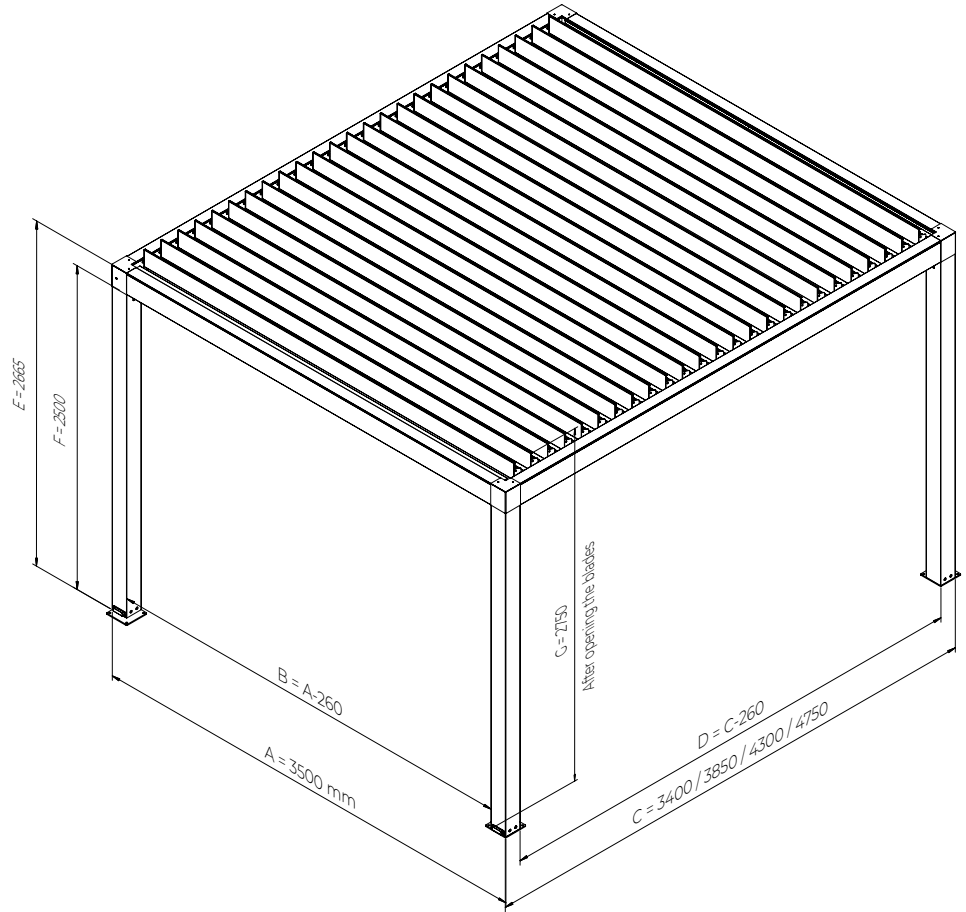
TECHNICAL SPECIFICATION:

- Fixed module width 3.5 m
- Fixed projection in 4 selected dimensions: 3.40 m, 3.85 m, 4.30 m, 4.75 m
- Fixed height in the light of the roof beams 2.5 m
- Max. construction height 2.665 m, including blade rotation mechanism 2.750 m
- Free-standing, single or multi-module structure, by connecting single modules - made of extruded aluminium profiles and stainless steel elements, equipped with a water drainage system
- The roof slope angle is 0°
- No transverse slope of the blade ends
- Intervals of roof blades 150 mm
- Blade rotation range: 0° to 120°
- Roof wind resistance class 3 (100 Pa ~10 kg/m²)
- Maximum drainage capacity drains the rain at intensity up to 0.05 l/s/m² (in case of 4 outflows) or up to 0.025 l/s/m² (in case of 2 outflows) at maximum duration time of 5.3 minutes
- Drainage through 2 gutters 88 mm wide (with bottom drains at each end and the possibility of plugging the selected end) and outflow directly to the posts as well as water outflow at the bottom of the posts
- Water drainage system - to all 4 posts with possible blockade of the outflow from the gutter
- Electric drive, 24V DC linear motor
- Construction colour - RAL 9016, RAL7016
- External usage
- Construction in accordance with PN-EN1090 and PN-EN13659

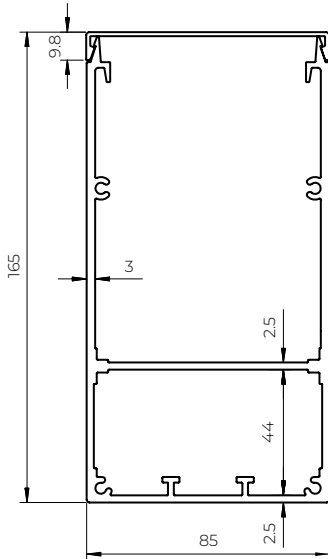
ACCEPTABLE TECHNOLOGICAL TOLERANCES OF THE EXTERNAL DIMENSIONS OF THE PERGOLA ARE +/- 10 mm

PERGOLA SB350
Single free-standing version

NOTE:
The outline of the foot and drain hole cover may protrude beyond the posts. Intervals of roof blades is 15 cm.



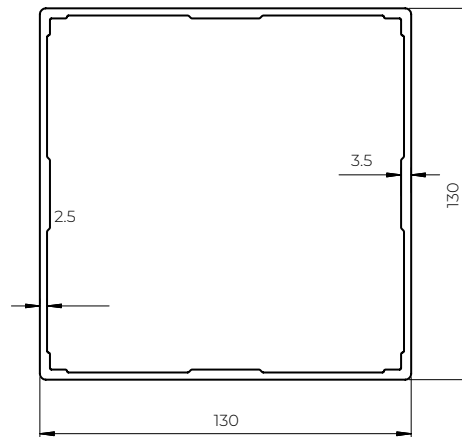
Cross-section of the beam
(85x165)



Material: EN AW6060 T66
Characteristics:
Mass 4.07 kg/m
Area 15.071 cm²
I_x 373.239 cm⁴
I_y 196.751 cm⁴

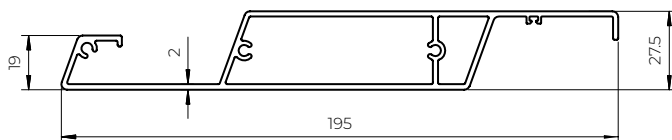
PERGOLA SB350
Cross-section of the profiles

Cross-section of the post
(130x130)



Material: EN AW6060 T66
Characteristics:
Mass 3.84 kg/m
Area 14.238 cm²
I_x 382.699 cm⁴
I_y 382.699 cm⁴

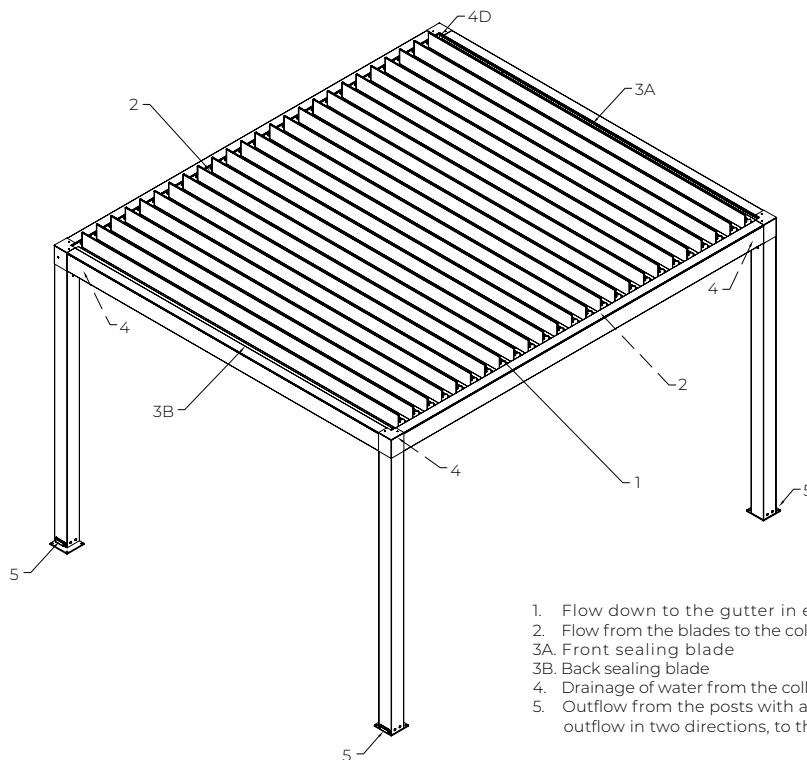
Cross-section of the blade
(195x27.5)



Material: EN AW6063 T66
Characteristics:
Mass 2.1 kg/m
Area 7.75 cm²
I_x 7.496 cm⁴
I_y 226.068 cm⁴

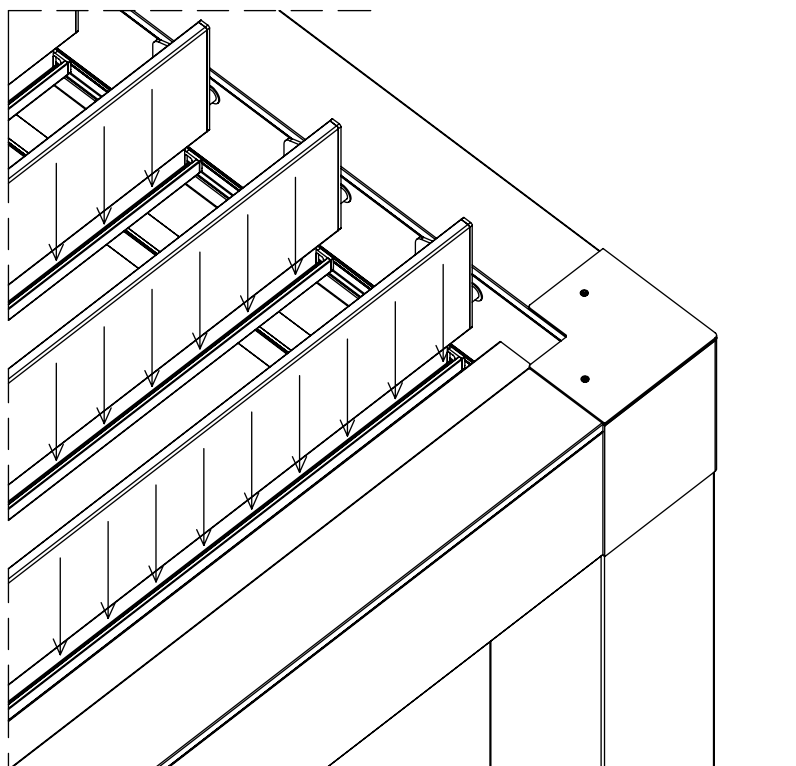
PERGOLA SB350
Drainage of the pergola

NOTE:
Required at least 2 posts with water outflow



1. Flow down to the gutter in each blade
2. Flow from the blades to the collective gutter (always two gutters)
- 3A. Front sealing blade
- 3B. Back sealing blade
4. Drainage of water from the collecting gutter at the ends to the post (in four corners)
5. Outflow from the posts with a drain cover for 4 posts (possibility of using the water outflow in two directions, to the front or to the side)

Detail no. 1

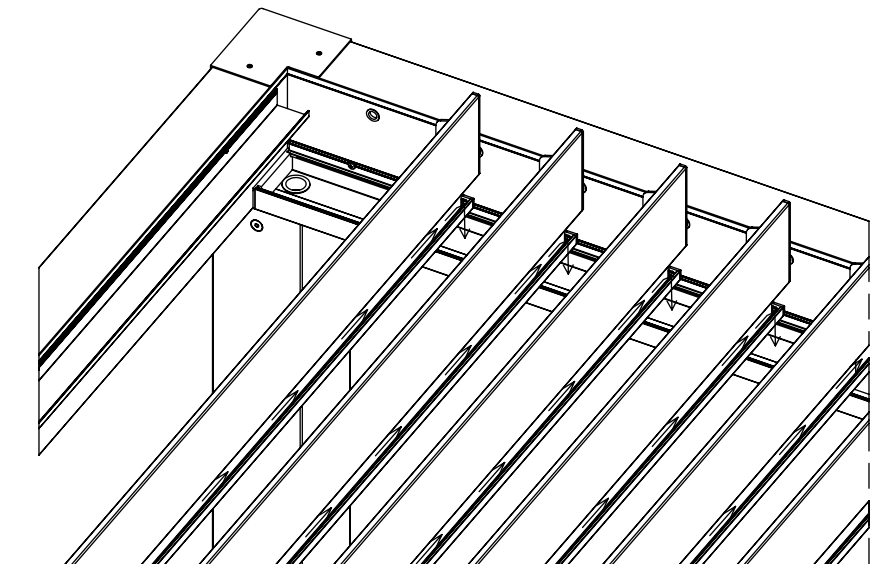


Flow down to the blade's gutter in each blade (horizontal blades).
Blade's gutter cross-section approx. 53x17 mm

PERGOLA SB350
Drainage of the pergola

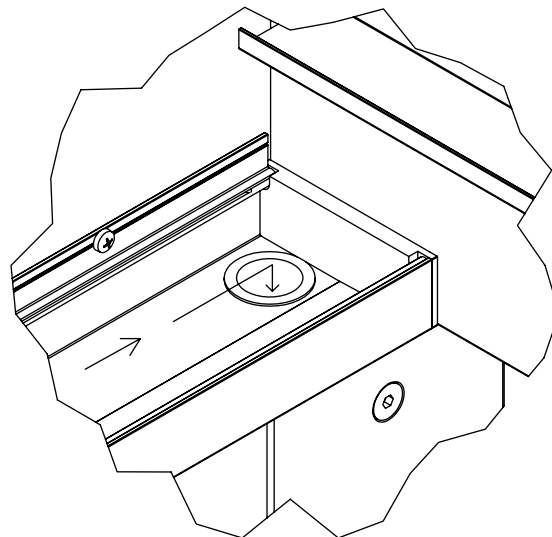
Detail no. 2

Flow from the blade's gutter to the collective gutter (through the window in the blade end cap)



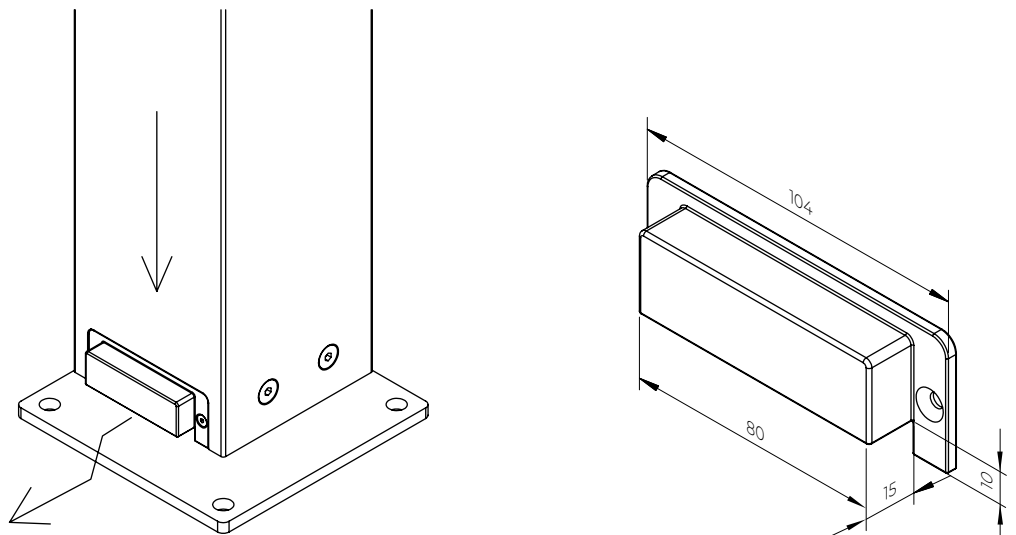
Detail no. 3

Flow from the collective gutter at both ends through $\varnothing 26$ hole in the bottom to the post. Note: 1 outflow from each gutter to the post can be blocked with a plug (which reduces drainage efficiency)



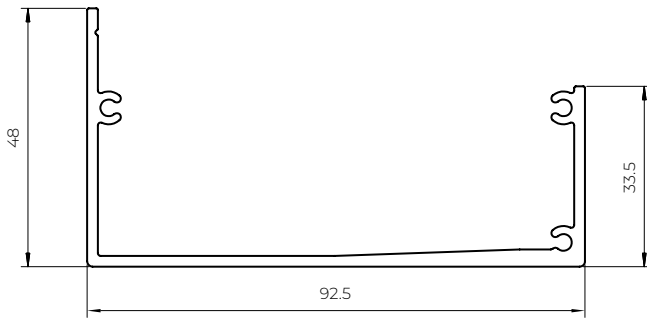
Detail no. 4

Flow down the post profile. Outflow through a hole in the wall of the post. A plastic cover is put on the drain hole. Outflow slot 74x10 mm.



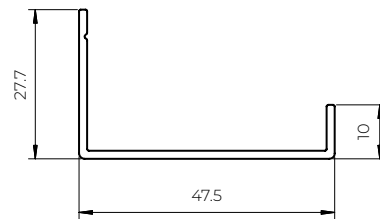
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Cross-sections of gutters drainage

Gutter



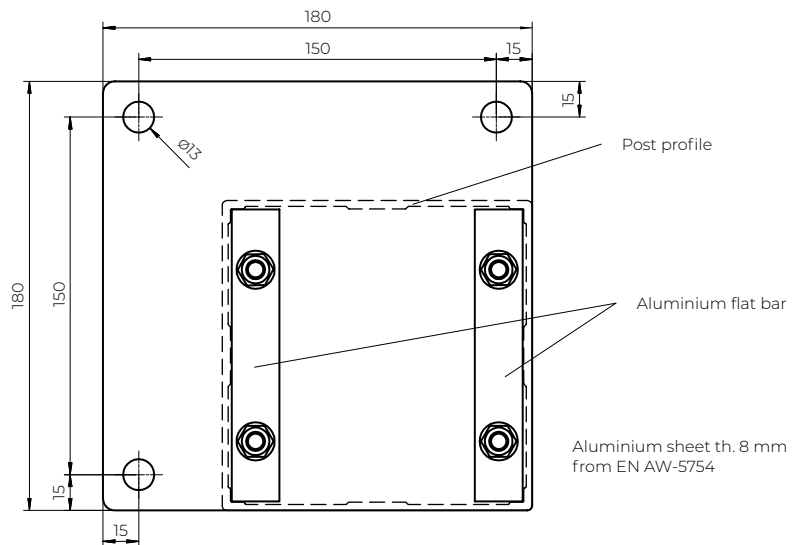
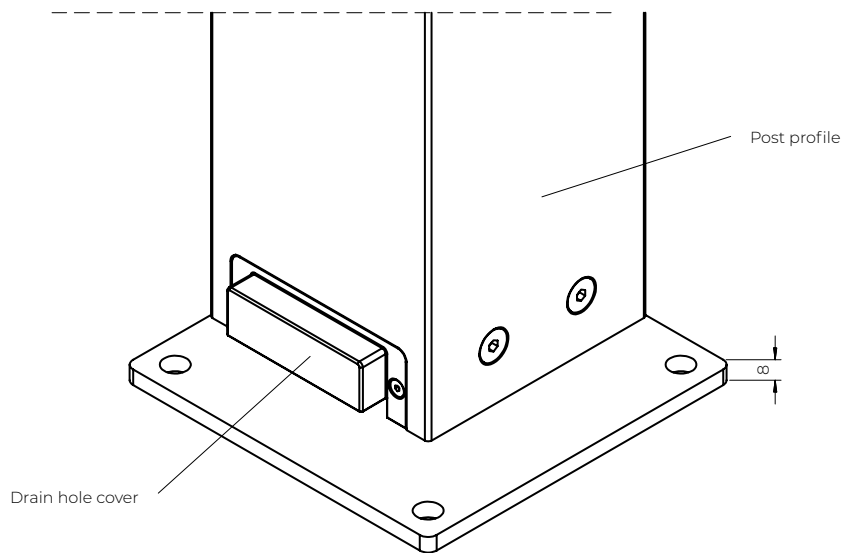
Material EN AW6060 T66
Mass 1.1 kg/m

Sealing blade
(fixed as a small gutter or roof)

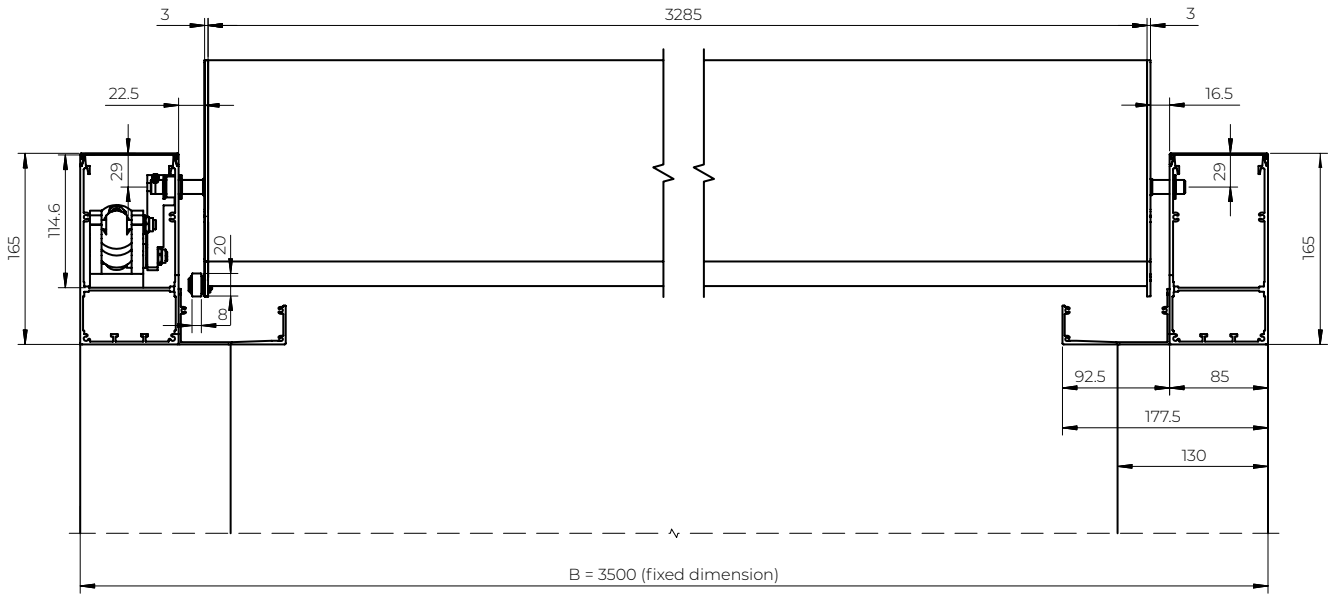


Material EN AW6060 T66
Mass 0.33 kg/m

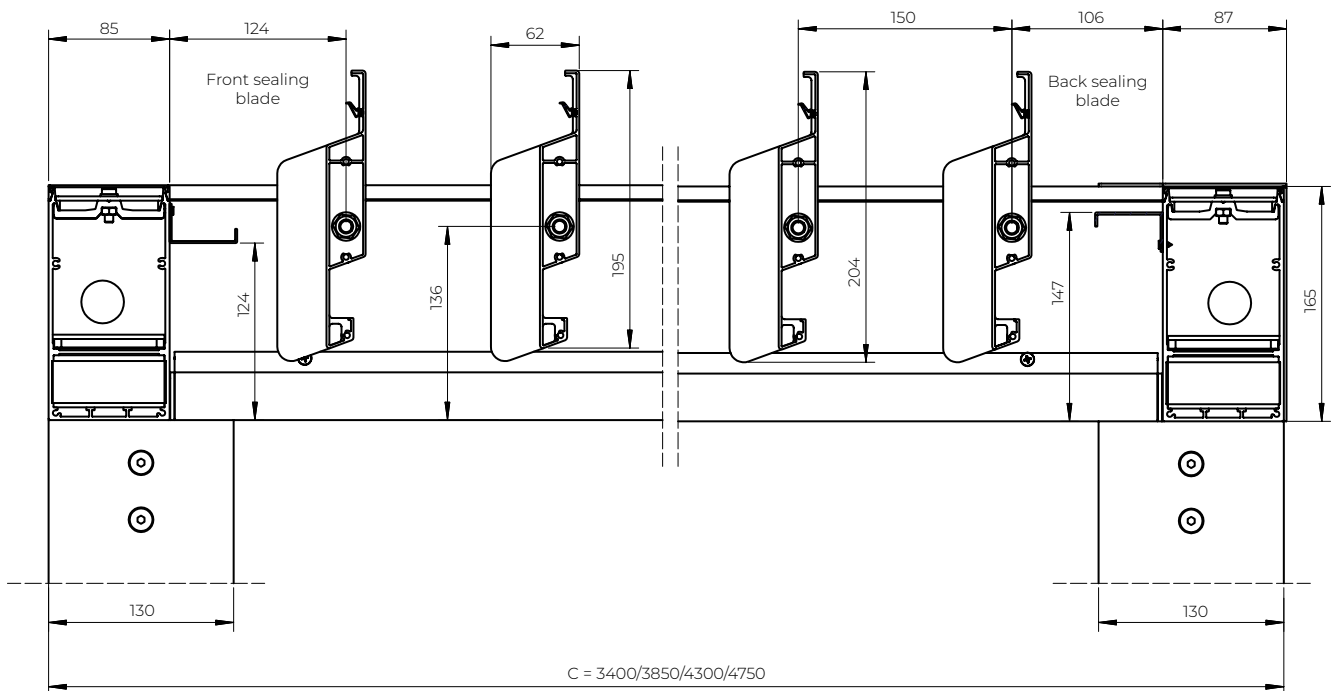
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Foot



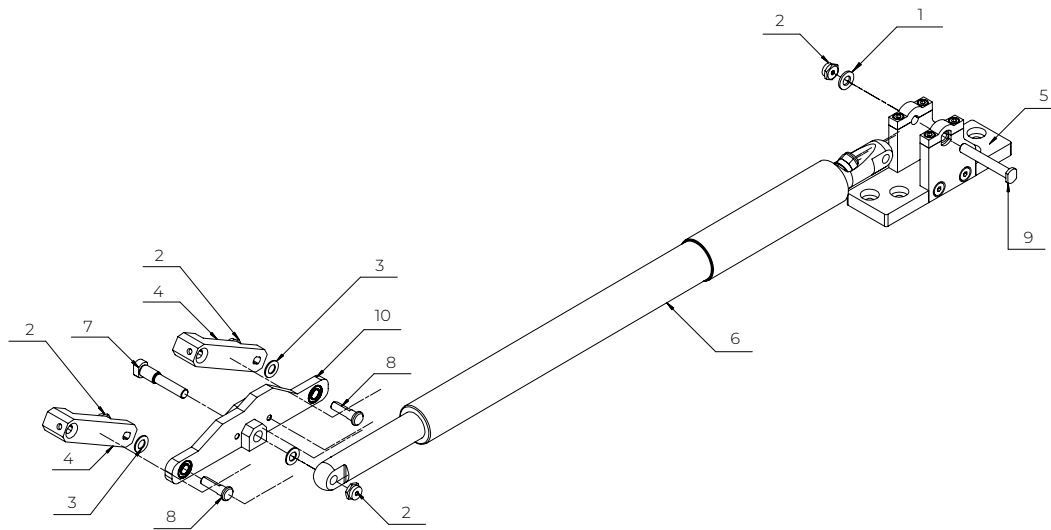
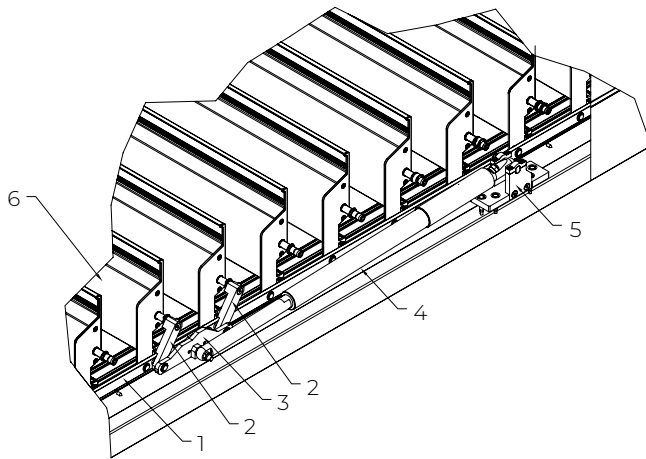
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Cross-section (open blades)



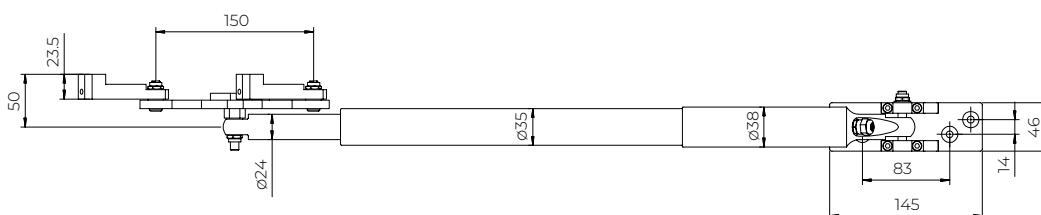
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Longitudinal section (bearing side)



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Drive unit

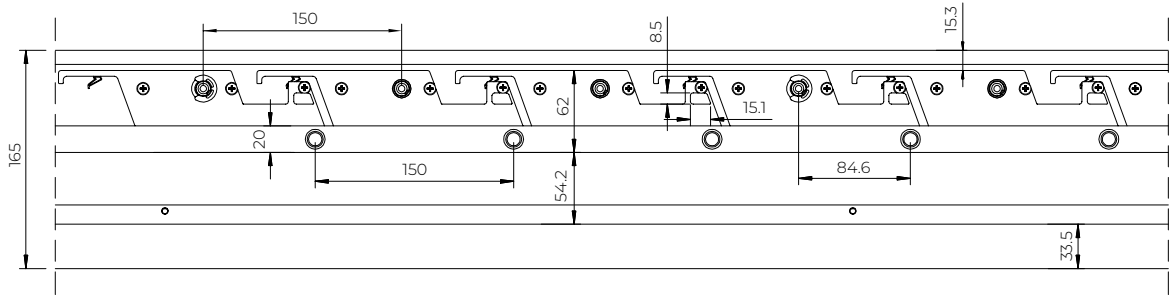


View from above

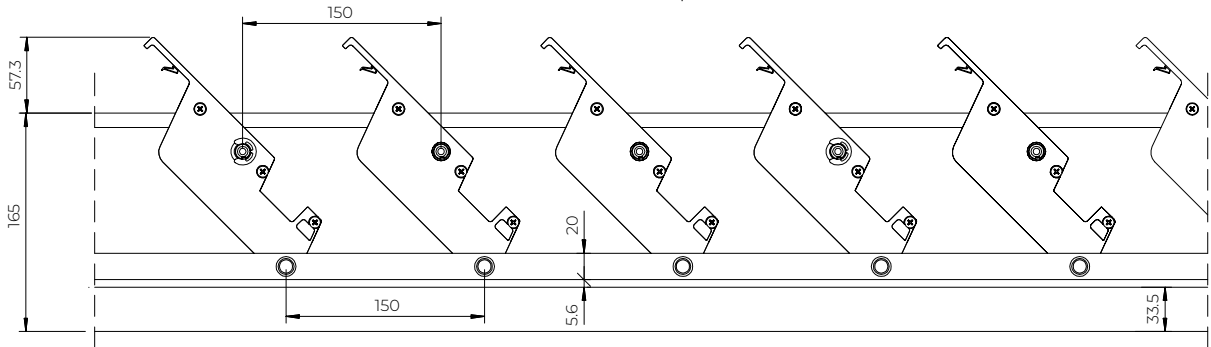


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Blade rotation range

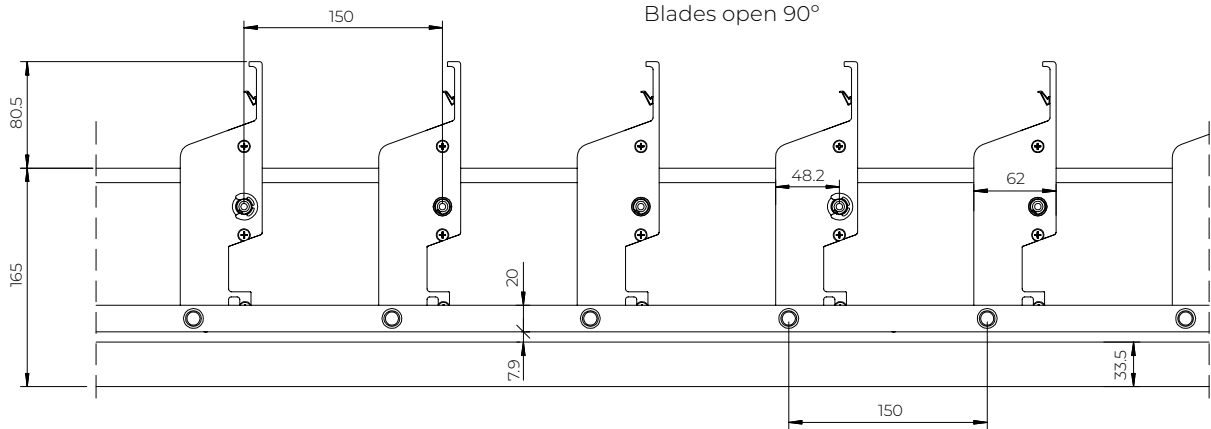
Closed blades



Blades open 45°



Blades open 90°



Blades open completely

