

EXTERIOR BLINDS TITAN 90

1. MEASUREMENT

Measure the width (SZ) and height (VZ) of the blind.

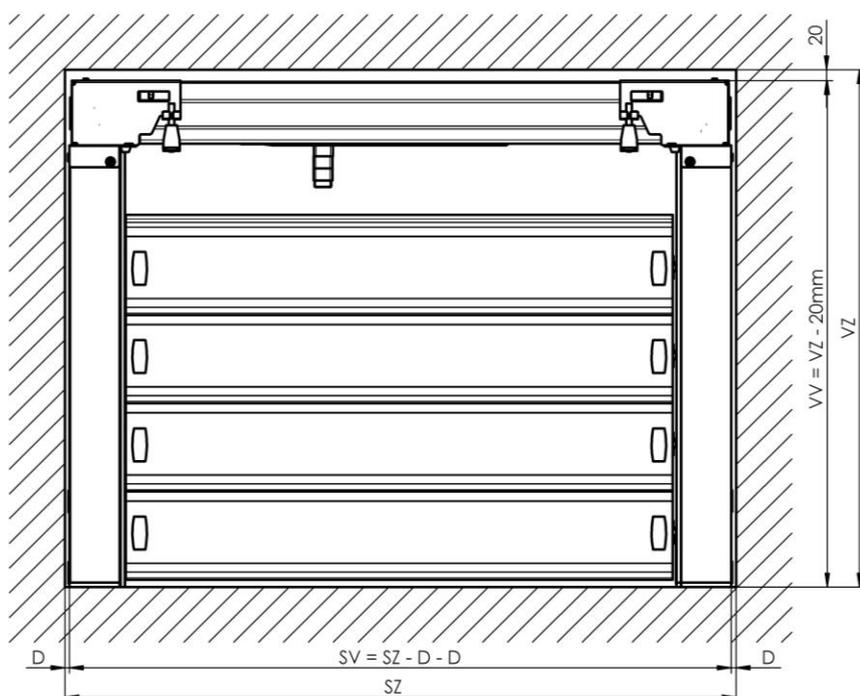
Measure the width (SZ) of the blind at least at 3 points, on the top, in the middle and on the bottom.

Use the lowest measured value for ordering and production of the blind.

ATTENTION! Produced width (SV) of the blind TITAN is always shorter compared to measured one according to chosen assembly option. See: Assembly options.

Measure the height of the blind (VZ) at 3 points as well, on both sides of lining and in the middle. Use the lowest measured value for ordering and production of the blind.

ATTENTION! Produced height of the blind TITAN (VV) is always 20 mm shorter compared to the measured one (VZ). The reason is ensuring manipulation space for assembly process and space for fixing brackets for front cover of the blind.



Note:

Real width of produced blind (SV) is always shorter compared to the one in order form. Width difference comes from the chosen assembly option. For assembly onto lining it is obligatory to use 2 mm distance pads (D). The pads help to adjust vertical level of guiding rails. Real height of produced blind (VV) is always 20 mm shorter than the one in order form. The reason is ensuring manipulation space for assembly process and space for fixing brackets for front cover of the blind.

Minimal lining depth for correct assembly is approximately 120 mm.

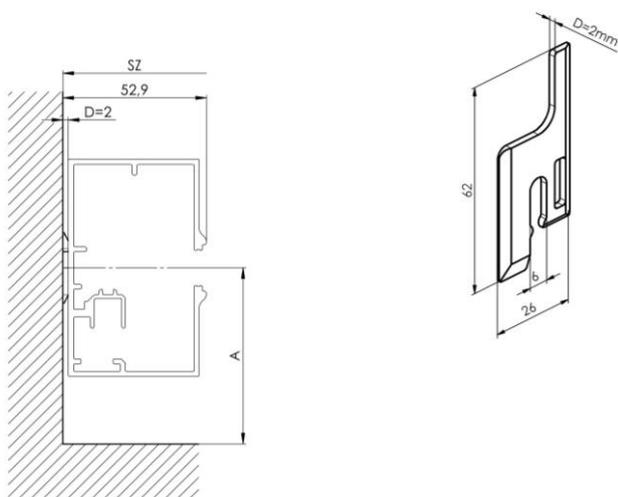
ATTENTION!

Take the utmost care during measurement you will avoid possible problems during later assembly of the blind.

Installation into reveal

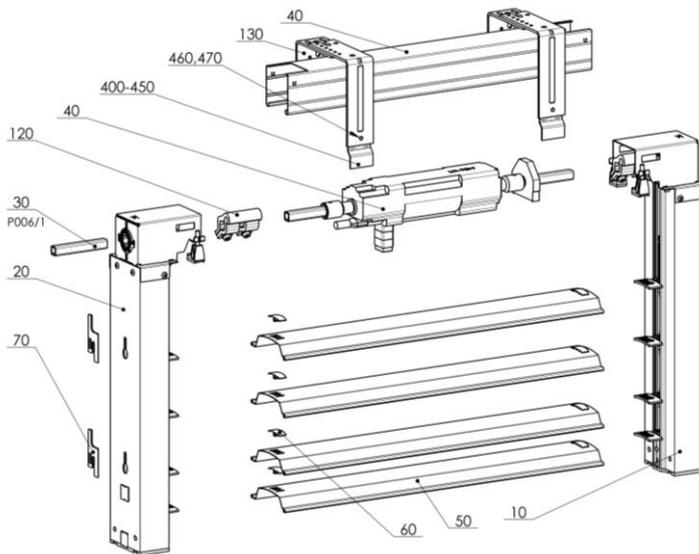
A = min. 65 mm

Spacing pad



Assembly holes for guiding rails:

Blind height including assembly gap (VZ)	Number of punching (PP)	Upper punching position (T)
400 mm – 799 mm	2	225
800 mm – 1299 mm	2	290
1300 mm – 1799 mm	2	480
1800 mm – 2799 mm	3	480
2800 mm and more	4	570

Basic product specification (exterior view)

Assembly parts of blind TITAN 90:

10, 20	Self-supporting guiding channels	1 pc
30	Short shaft	2 pc
40	Upper head rail including engine	1 pc
50	Slats	x pc (according to the slats number)
60	Stainless steel securing clips of slats	x pc (according to the slats number)
70	Assembly spacing pad	x pc (according to the blind height)
120	Shaft coupling	2 pc
130	Head rail bracket	x pc (according to the blind width)
400 - 450	Extension of front cover holder	x pc (according to the blind width)
460	Screw M5x8	x pc (according to the blind width)
470	Pad M5	x pc (according to the blind width)

2.1. PREPARATION FOR ASSEMBLY

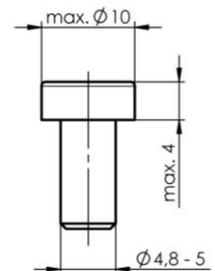
- Check installation dimensions: Blind dimensions should be as shown in the order form. Installation tolerance must correspond to the technical description of the product.
- Check assembly hole and its preparedness.
- Check all materials, the choice of appropriate anchoring elements and the proper tools, preparation of electrical connectors for connection to the blind engine.

- Check all assembly materials, verification of all assembly values (width x height x size of packet).

ATTENTION! All marks on blind parts are always palced and visible from interior view!

2.2. SCREW DIMENSIONS FOR ASSEMBLY

- \varnothing screw = 4,8 mm – 5 mm
- \varnothing screw head = max. 10 mm
- Height of screw head = max. 4 mm
- Fixing parts have to be enough strong and suitable for particular reveal.

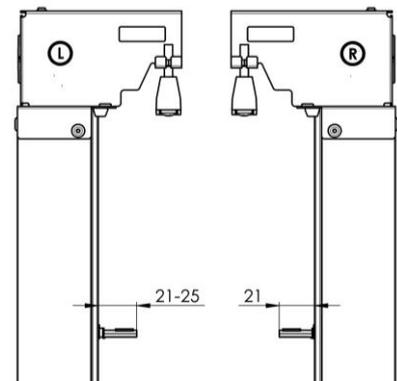


2.3. INSTALLATION TOLERANCE

- Parallelism of the guiding rails in all directions ± 1 mm.
- Deviation from the perpendicular ± 1 mm/m.

2.4. DIFFERENCE RIGHT/LEFT GUIDING RAIL

- Left guiding rail
 - Sticker „L“ on bearing bracket from interior view
 - Variable distance of slat holder 21-25 mm
- Right guiding rail
 - Sticker „R“ on bearing bracket from interior view
 - Variable distance of slat holder 21 mm



2.5. ASSEMBLY

Used symbols:



ACTION



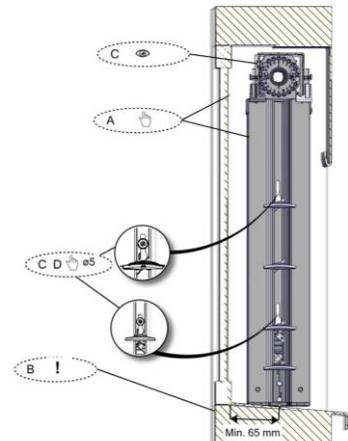
CHECK



ATTENTION

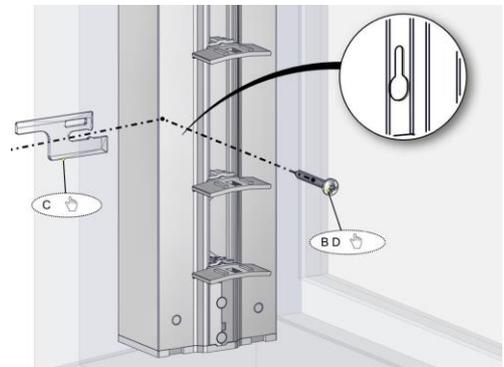
2.5.1. Guiding rails assembly

- A – Level the rail into lining.
- B – Minimal distance between guiding rail axis and the obstacle is 65mm.
- C – Mind the difference between left and right guiding rail, place them correctly.
- D – Make marks through the assembly holes for using suitable fixing elements.
- E – Screw and insert fixing elements.



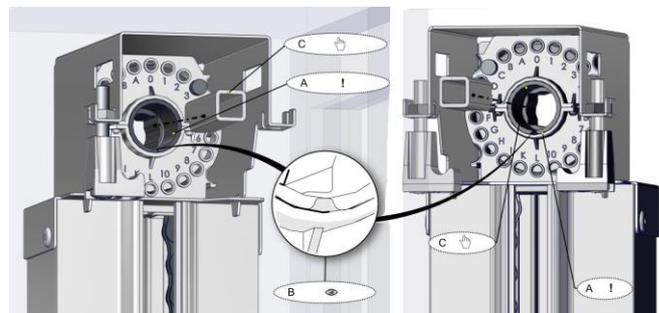
2.5.2. Guiding rails attachment

- A – Check that you have not misplaced right and left rail.
- B – Screw the screws through the guiding rail.
- C – Before tightening put the distance pad on the screw between lining and the rail.
- D – Tighten the screws and check the level of rails again.



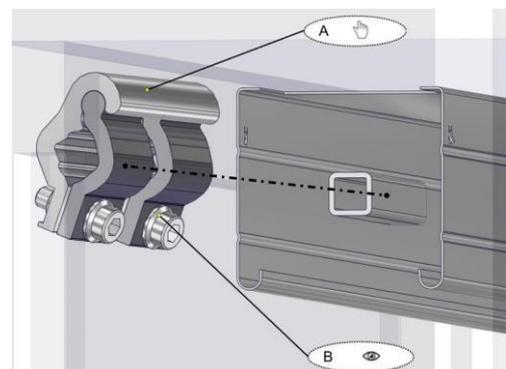
2.5.3. Check the bearing position

- A – Do not turn the bearing in any case. Default setting can be lost.
- B – Ensure that bearing marking are facing down on both guiding rails.**
- C – Insert short connection shafts into the bearings.



2.5.4. Head-rail with engine - preparation

- A – Slide the connectors onto four-square shaft into the head-rail. One from the left and one from the right side.
- B – Screw heads are facing always down.



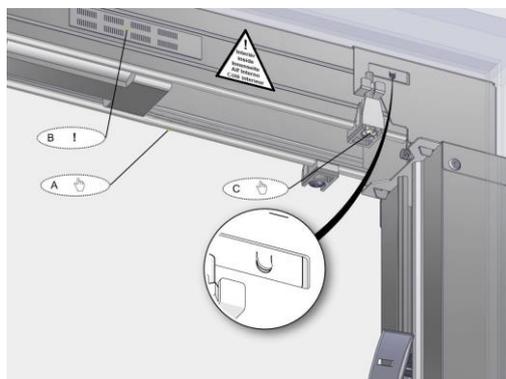
2.5.5. head-rail with engine

A – Insert the head-rail from below onto both guiding rails and center it.

ATTENTION:

B – Keep in mind that the label “INTERIOR” is always facing the interior view.

C – Secure the head-rail with securing hooks by tightening to guiding rails.

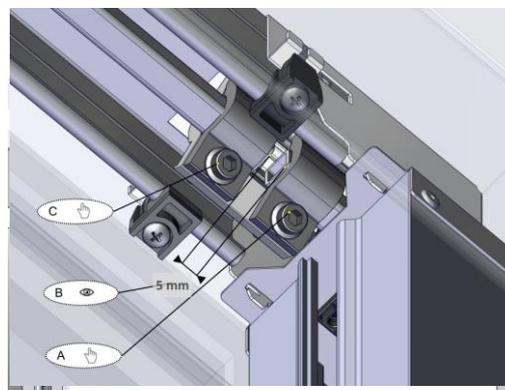


2.5.6. Head-rail with engine – shaft connection

A – Connect four-square shafts together with the connectors.

B – Ensure the gap between the shafts is approximately 5 mm.

C – Tighten the connectors.

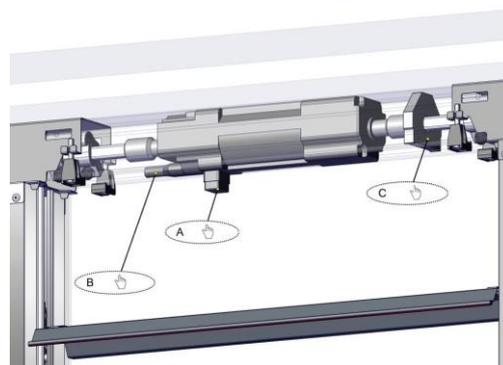


2.5.7. Engine connection

A – First equip the engine with suitable mechanical end stop button.

B – Connect the power supply (mounting) cable with engine cable.

C – If the head-rail is delivered with polystyrene support, remove it.

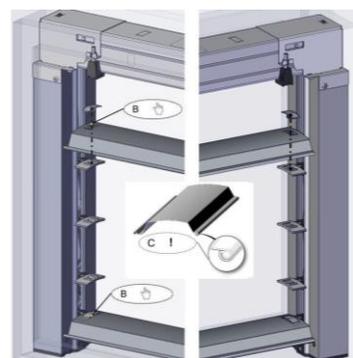


2.5.8. Slats

A – Unpack the slats (avoid scratching!).

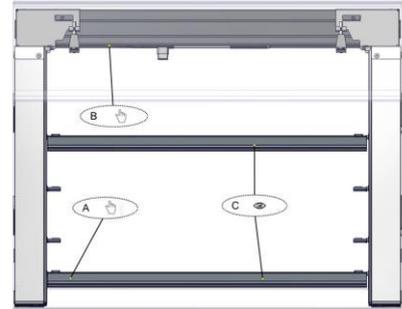
B – Hang the highest and lowest slat and secure them with stainless clips.

C – Seal rubber on the slat is facing always the exterior view.



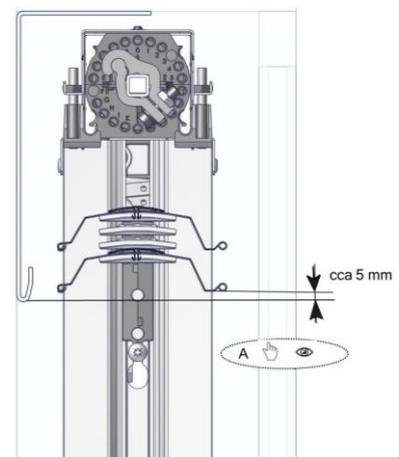
2.5.9. Slats - adjustment

- A – Using the mounting cable move the blind up and down.
- B – Moving the slats up push the upper limit button on the engine.
- C – Both slats are in opened position. Check their parallelism.**



2.5.10. Slats - adjustment

- A – When achieving the required upper end limit (usually height of lintel or front cover) stop the slats movement.
- B – Movement up is still possible for eventual setting.
- C – By moving the slats downwards the upper end limit is saved.



ATTENTION!

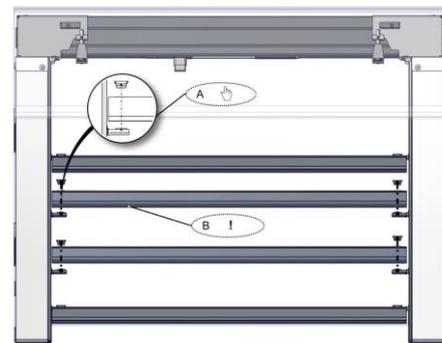
**Do not change the lower end limit! This is factory default setting.
If the end stop is moved beyond the factory-set position, the tension in the blind mechanism will increase and the blind may be permanently damaged.**

2.5.11. Engine connection

- A – Connect power supply with the engine.
- B – Use suitable plug according to engine control type.
- C – Ensure that the cable does not decrease blind functionality.**

2.5.12. Slats

- A – Insert rest of slats and secure them with stainless clips.
- B – Seal rubber on the slats is facing always the exterior view.**



2.6. FUNCTIONALITY CHECK AND ENGINE DRIVE

ATTENTION! Never connect more than one engine with single control unit.

Functionality check:

A – Using the mounting cable move the blind several times up and down.

B – Check horizontal free motion of the slat side clips towards left guiding rail. Tolerance is 0-4 mm.

C – Check vertical slat free motion. Tolerance is ± 1 mm.

D – Slats have to be in parallel.

