





Window shade system Smart Solar



The OPALVARIO® Smart Solar doesn't only make a stylish and design-oriented acquisition of building indoor spaces; it is also an extremely functional roller blind system for light regulations for monitors at working places, because it ideally uses the natural day light but at the same time it is a glare protection, which also keeps the clear site to outside.

The special feature is an accumulator feeded by solar panel or power plug. The usage of the system is made by a wireless transmitter. Additional installation costs are no longer required, electricity costs will be reduced over long terms.

According to EU-standards these systems keep a great view to outwards while they guarantee a glare-free working at display working places. This effect is the result of special films. The films are featured with excellent technical sun protections values so that the important view to the work economically view to the outside world. Beyond this the highly reflecting outside of the film is a perfect heat protection. A comfortable atmosphere of a glare free working station arises. This is positive for health and for the well-being. It also affects performance-enhancing on the employees.

The processing of well chosen materials ensures an extreme reliability to the custom-made systems. The technique of OPALVARIO® Smart Solar meets functional and service free the high-est requirements of variable and variable used sun protection.

Because of their continuous innovations in the areas development, manufacturing and finishing as well as the certification according DIN EN ISO 9001 HAVERKAMP products set standards according to quality, functionality and longevity.

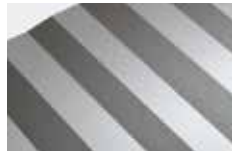
The discreet and compact window shade system is specially designed for sun protection in object space. Very small profile dimensions and clear lines meet the demands of the modern architecture. As standard, this system is equipped with a cassette of 33 x 33 mm – four various side guidances are available. A ventilation of the hanging with simultaneous light slit coverage is possible via the profile 29/22 (for inclined window bars) and the profile 14/22 with asymmetric bars. The profiles 28 and 40 have covered hanging edges. The guiding profiles have a supporting function of the system – it is mounted on the window frame or on the window bar. OPALVARIO® Smart Solar is handled via a transmitter – this makes a continuous positioning possible.

The OPALFILM® window shade films provide a wide range of our standard program. Various light transmissions, shadings and surfaces for the individual requirements.

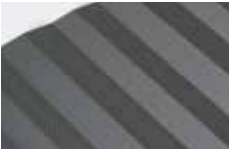
Film embossing



Diamant embossing

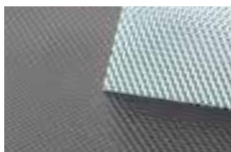


Glatt Stabila embossing

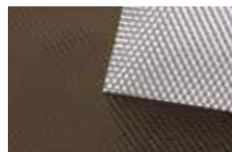


Diamant Stabila embossing

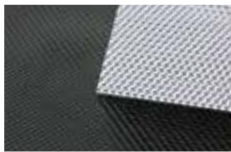
Film colors



silver/grey



silver/bronze



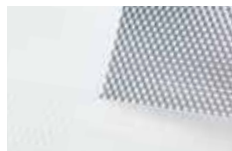
silver/black



grey/grey



silver/silver

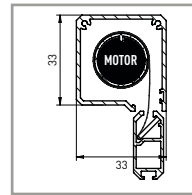


silver/white

Film variants

- Outer side either metallised or tinted
- Extensive range of colors
- Visibility from inside to outside is preserved
- Self-tinting screens available as option

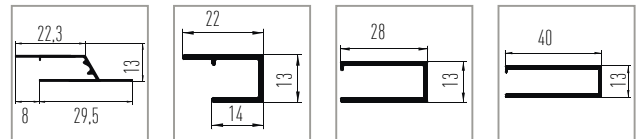
System design



One-piece, four-sides closed aluminum cassette with brush deburring toolholder, cross section 33 x 33mm with screwed plastic caps at sideways. Winding shaft and end profile chamber with brush deburring toolholder and plastics glides for a low-noise and

friction in the lateral guide profiles. Colors can be chosen of the system standard: white (RAL 9016, plastics white) and silver (RAL 9006, plastics grey) as well as all other RAL color (plastics mostly black).

Lateral guide



Optional four profiles can be chosen as side guide: the profile 29/22 for sloped window bars and 14/22 with asymmetric brackets. 14/22 makes a ventilation with simultaneous light slit coverage possible, such as the profiles 28 and 40 for covering the hanging guidance. All profiles are made of extruded aluminum, ends are plastics caps. For an accurate allowance we provide you our support and in case of side guide 29/22 please ask for our measurement tool.

Power unit

An 12 V tubular motor for exact, continuous positioning of the hanging. The engine battery of the motor is charged via a solar panel that is fixed on the window. You can handle the system via a transmitter. It is possible to control the systems by individual operation and in small groups.

Mounting

By attaching the cassette via gluing or screwing to the side guide profiles, on the frame or between the glass bars. When mount is to be made between the glass bars you can as for a brush seal as light slot cover.