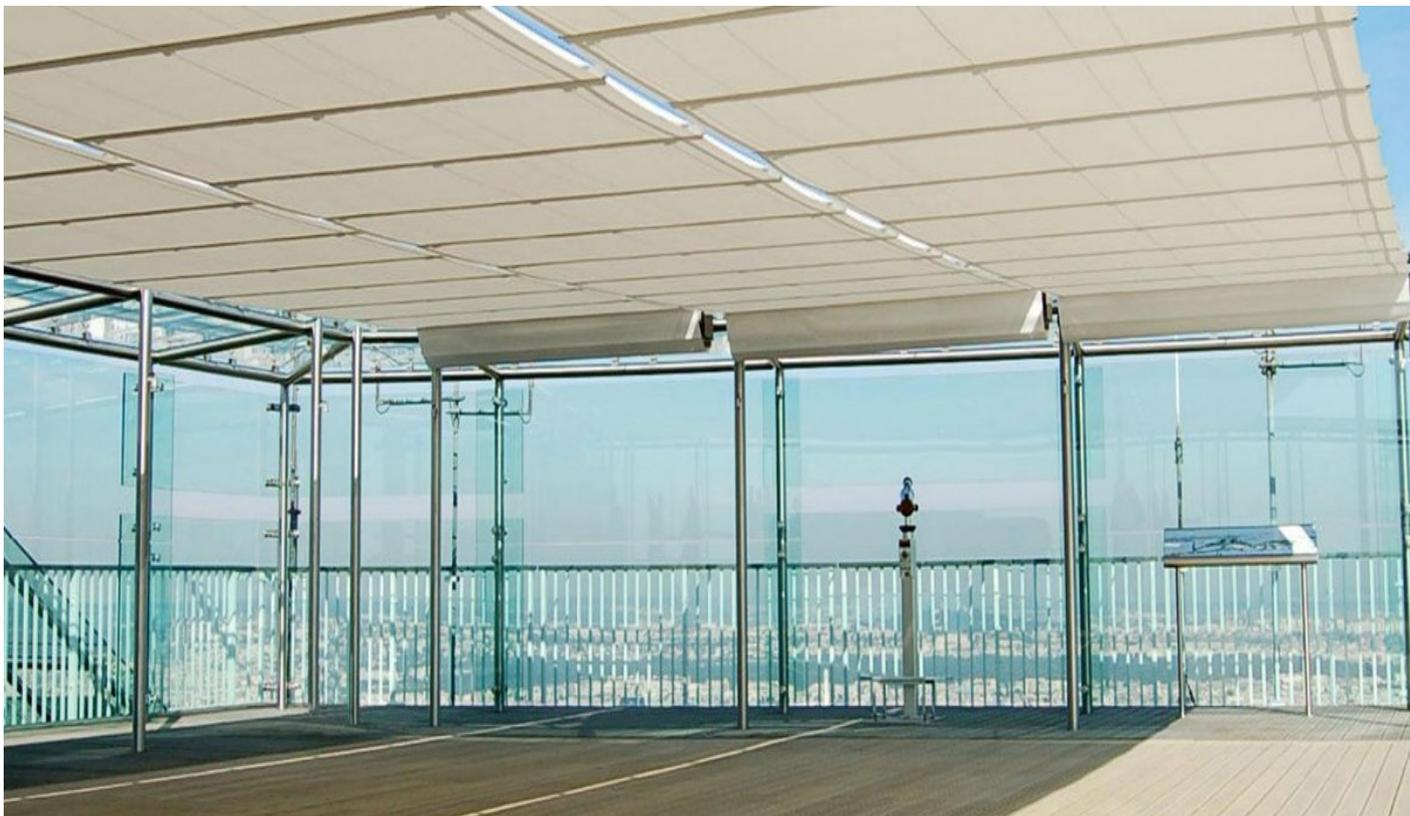


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1. Introduction

Solange® 500 Internal | External Blind System Large Horizontal Pergola Shading System



Designed for use in both outdoor and indoor with large plaza and terraces buildings

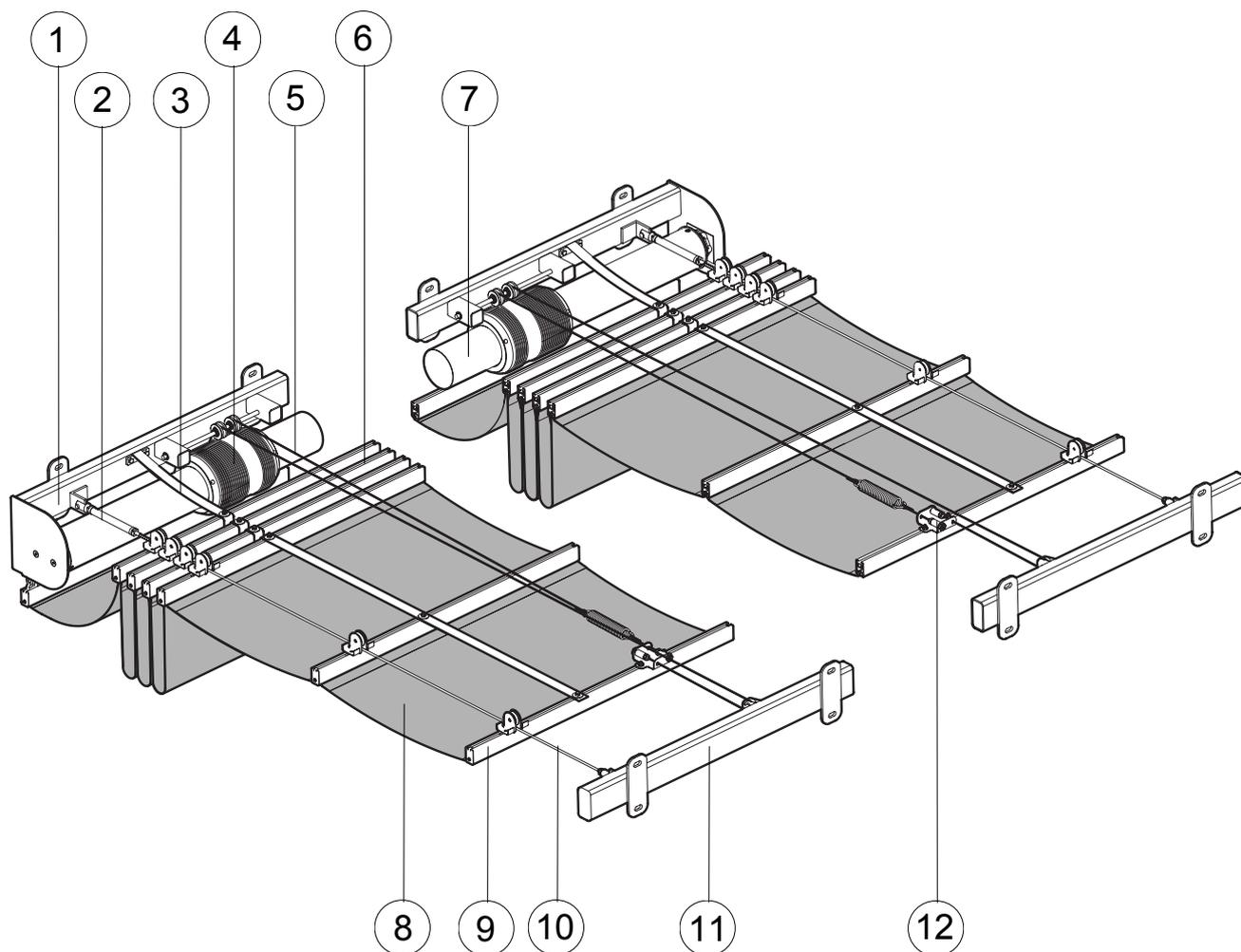
Solange® 500 is the perfect solution to areas with large horizontal glazing as it incorporates a single mechanism that covers up to 100m². It is typically engineered for covering glazed roofs, plazas and terraces. This horizontal shading system is fixed to each end of the opening with no side fixings required. Available in a rectangular shape, the blind is divided into individual panels which are released and retracted using motorized cables. 6mm stainless steel wires are attached to support bars which use coated steel brackets.

Solange® 500 is a balanced combination of reliability and style, providing modern and advanced shade technologies to huge spaces. It is a perfect solution with versatile options as it offers flat or festooned fabrics with multiple colour options. We believe in first impressions and satisfying our clients is our priority. Therefore we give options for patterns, size, colours and type. The designs cater to the individual needs specifically.

2. Technical Specifications and Drawings

Key Features:

- Large window coverage in one complete system
- Fabric panels area coverage up to 100m²
- Large Roof, Large Terraces and Large Plaza applications



- | | | | |
|------------------------|----------------------------------|-------------------------------|----------------------------------|
| 1. Main Frame Assembly | 4. Deploy and Retract Cable Drum | 7. Cable Drum Barrel Assembly | 10. Support Cables |
| 2. Turn buckle | 5. Deploy and Retract Cables | 8. Shade Fabric Panels | 11. Return Pulley Frame Assembly |
| 3. Fabric Tape Guide | 6. Support Hembars | 9. Lead Hembar | 12. Deploy Cable Griplocks |

Technical Data

System Dimension:

Maximum Width	6.0m
Maximum Draw	18.0m
Maximum Fabric Area	100.0m²
Minimum Width (Standard WT Motor)	2.0m

System Weight:

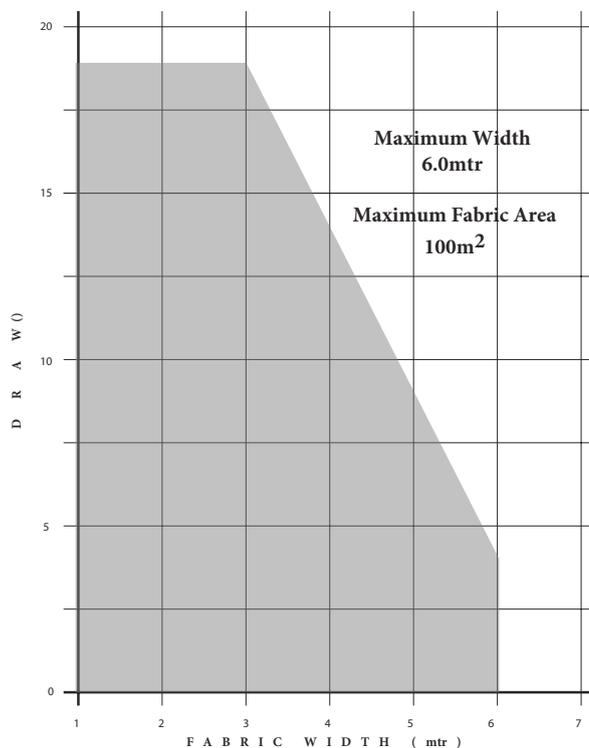
Weight **55 kg + 27kg/mtr width + 6.4 kg/m draw**

Motor:

Motor Type	Wired or Radio Frequency (RF)
Voltage	230 V AC 50 Hz
Limit Switch Unit (Standard)	Progressive
Motor Torque	35.0 Nm
Motor Speed	18 rpm
Temperature Range	0-60 C°

System Load Considerations:

Fixing Loads	≤600 kg per cable (x3)
Cable min. breaking Load	1300 kg



Calculations are based on a maximum of 1:400 tube deflection.

* This figure is the maximum capacity of the system based on a fabric weight of 450g/m².

The weight of the fabric and how prone it is to creasing should also be taken into account when sizing the blind

Specifications

Components

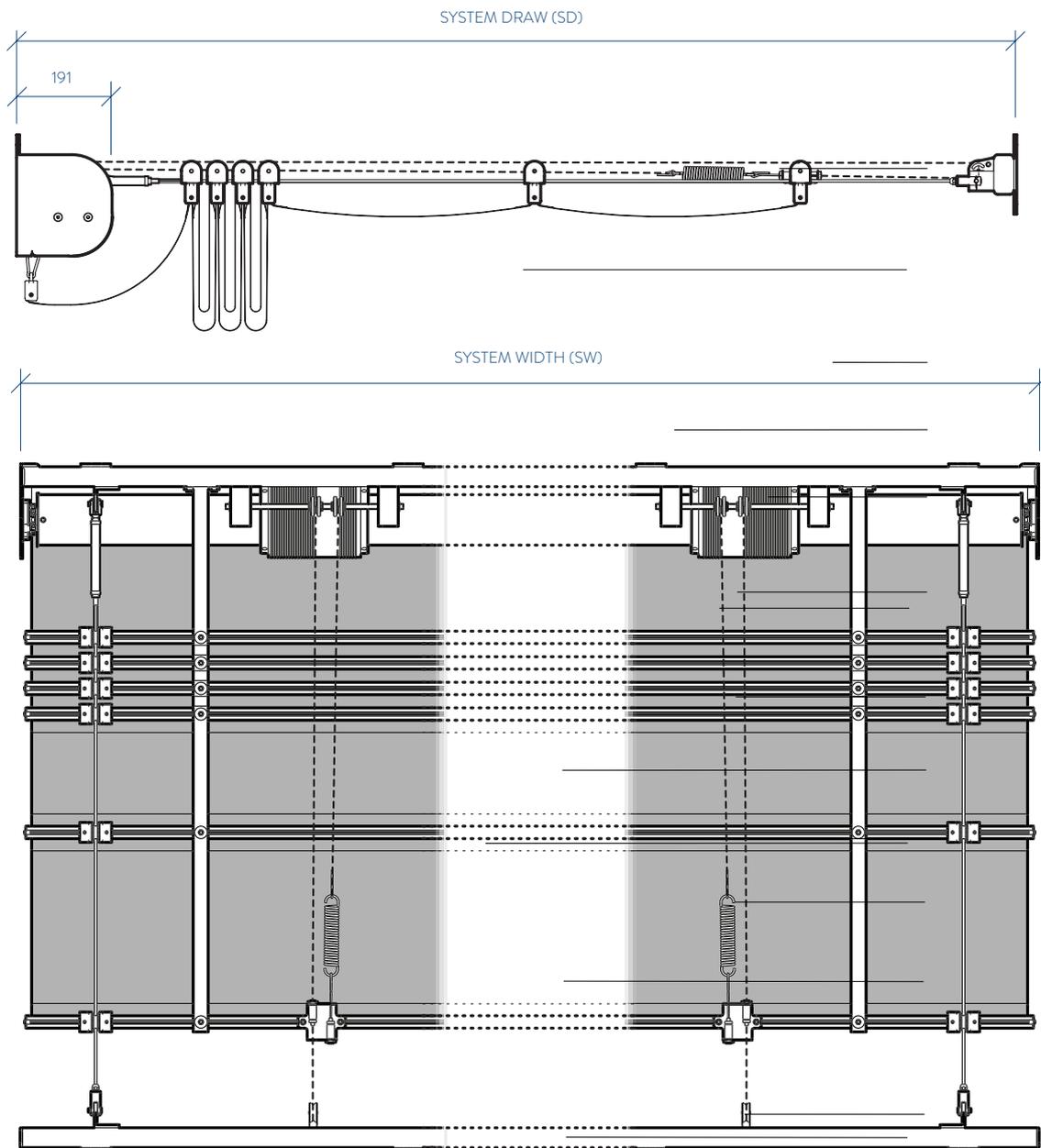
- 127Ømm extruded aluminum fabric and motor assembly tube.
- stainless steel nylon coated guide cables.

Finishes:

- aluminium components finished in the standard polyester powder finish, 30% gloss.
- fasteners of stainless steel and other steel parts galvanized against corrosion.

System Installation

Recess | Back Fixing



3. Operating System

Solange® systems offers a wide range of controls for its motors. Whether the motors is to be controlled individually / Group of motors/ connected to building automation, Serena® offers them all.

Control strategy for Solange® is designed keeping in mind the easy user interface and latest technology available in building services engineering. Serena® controls are open and can easily be integrated with all type of standard protocols in the industry.

With the combination of Serena® controls and serena sensors the roller blinds can also be operated based on various factora such as glare, heat gain, light pollution, temperature etc

A simple remote / A simple wall switch...

Most common operation for our roller blinds is either by a remote or by a wall switch. A wall switch is easy in operation and a remote is handy in use. Solange® remotes & Solange® Wall switches are beautifully designed and looks attractive. A wall switch can either by wired to the motor or can be a wireless. A roller blind can be operated individually or in groups with our 5 and 10 channel remotes.



Compatible controls from Euro Systems

MCP4

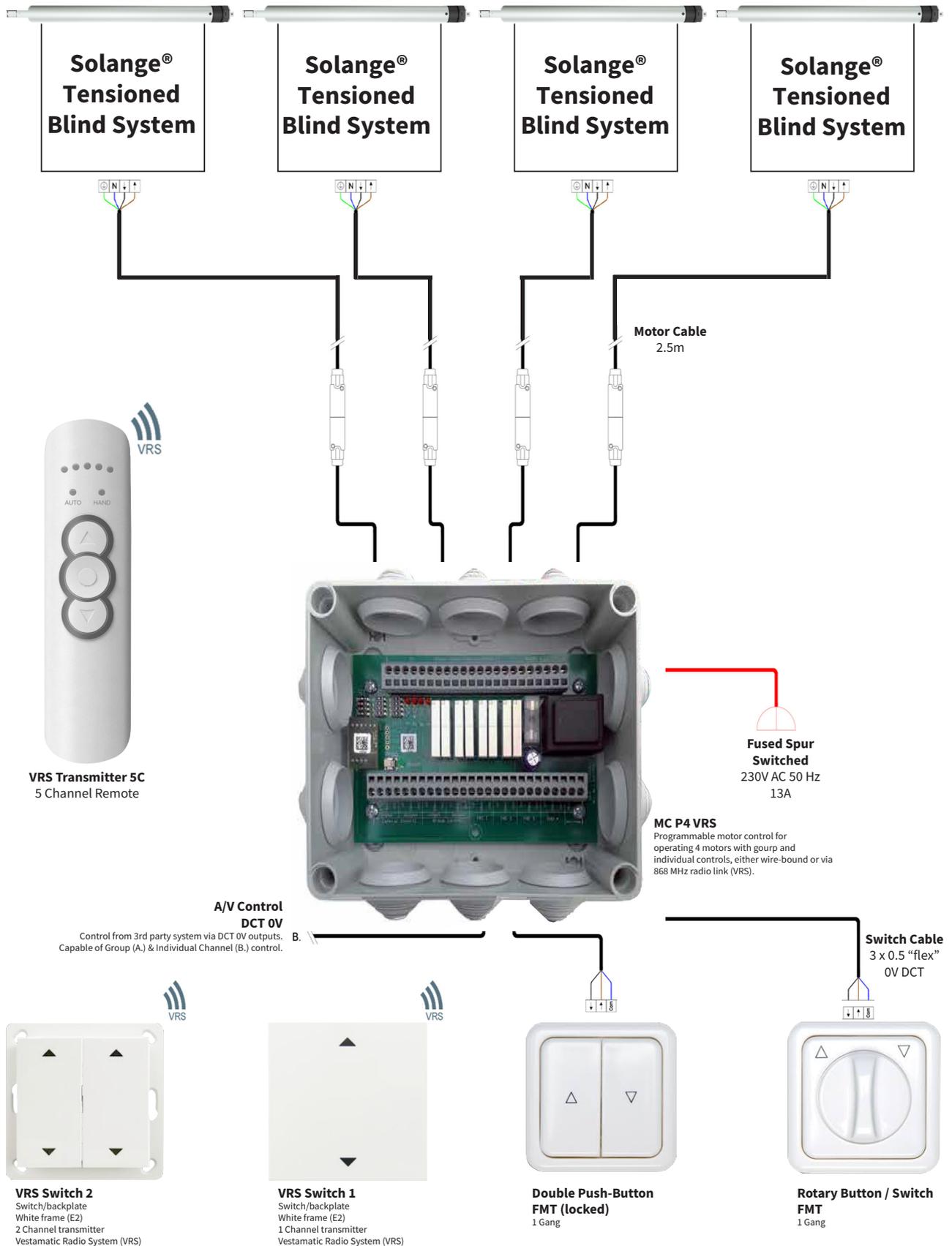
Programmable motor controls for operating 4 sunshade devices with group and individual controls, either wire-bound or via 868 MHz radio link.



- Microprocessor-powered motor controller for four sunshade controls
- Standard 3-wire central input
- Direct connection available for four 230VAC motors
- Connection available for group button
- Connection available for four individual buttons
- Separate connection terminals for mains supply and central transmission
- 10 different operating modes can be set, incl. inching mode and
- Intelligent decentralised operation
- Motor run time/tilting time can be individually set
- Control via VRS radio remote control or VRS wall-mounted radio transmitter (MC P4 VRS)

Technical Data	
Power supply:	230VAC, 50 Hz
Impulse voltage withstand level:	2.5 kV
Radio frequency (MC P4 VRS):	868 MHz
Rated power:	2.6 W
Fuse:	T 6.3A
Output:	230VAC, 50 Hz
Maximum load:	250VAC, 4A, cos f > 0.8 ind.
Align switching time extend:	3 – 180 s
Align switching time retract:	180 s
Permissible motor current:	max. 6A
Software class:	A
Operating temperature:	0 °C (32 °F) to +40 °C (104 °F)
IP class:	IP54
Degree of contamination:	2
Dimensions (L × W × H):	170 × 134 × 85 mm (without connections)
Conformity:	CE

MCP4: Application Connection Drawing



The WISO-range – protection against wind, sun and more.

The blind controls WISO Control and WISO Quattro always move one single or a group of blinds automatically or manually. One motor can be connected directly; alternatively motor controls can be connected and allow group settings for the connected blinds (and local according to the chosen motor control solution).

All products can be combined with two lux and one wind sensor to realize the automatic drive with equivalent setting. A rain, frost or temperature sensor can only be used with WISO Quattro.



Also available:

All controls with sensors and assembly kit.



WISO Control Set Crystal (incl. WISO Crystal Station)



WISO Control Set Plastic (incl. LS 30 Pro; WS XS; WISO bracket plastic)



WISO Control Set Alu (incl. WS SX Alu; LS 30 Pro; WISO bracket Alu)

WISO Quattro can be programmed on time (i.e. automatic up/down times per day).

WISO Quattro has a back lit touch display and is available in white and nero.

All products of the WISO series in 50 x 50 dimension can be adapted to standard switch range with intermediate frames.



WISO Quattro



WISO Quattro Nero

Also available:

All controls with sensors and assembly kit.

WISO Quattro Set Crystal : (incl. WISO Crystal Station)

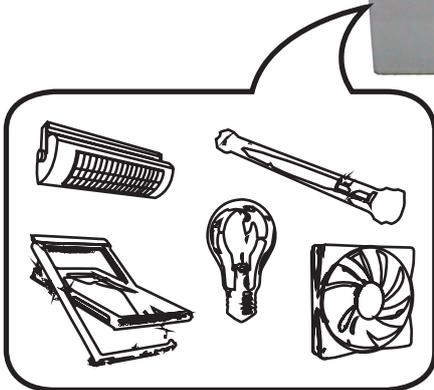
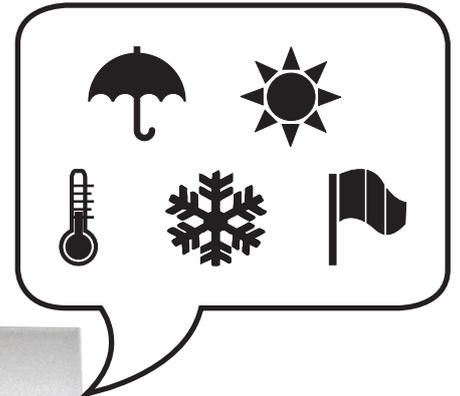
WISO Quattro Set Plastic : (incl. LS 30 Pro; WS XS; WISO bracket plastic)

WISO Quattro Set Alu : (incl. WS SX ALU; LS 30 Pro; WISO bracket Alu)

The Touch Centre

Convenient, easy, safe –
do you really need more?
From outside to inside...

... sensors capture all available information about wind, rain, sun, indoor temperature, outdoor temperature and frost. The setup assistant supports helpful tips and suggestions configuring and running the optimal sensor



... and out again.
...the control runs awnings, roller blinds as well as skylight, fans or lights. Benefit from the possibilities!

Central control with color display and timer, security, shade and energy saving program.

Central control with colored touch display for two or four potential-free groups to drive motors or motor controls (of the R-/P Series) 24 VDC/230 VAC

- Sensor connections (max.):
- 2 Wind sensors
- 4/8 lux sensors
- 1 Rain/frost sensor
- 2 Temperature sensors
- 1 DCF 77
- 1 Fire alarm
- 1 Maintenance switch



Color Information



Vestamatic Building Controller BS (VBC BS)

Vestamatic shade controls are on the market for over 30 years. They are popular for their ease of use, high product quality and long life.



- Established and trustworthy sun shade central control for the project business
- Easy to read and illuminated display
- Long life
- Large connection space
- Multilingual
- Output for error message
- wide range of uses
- Free sensor assignment / programming for each channel

Technical Data	
Power supply:	230VAC
Frequency in Hz:	50
rated Power in W:	30
Switching power output in A:	12
Protection degree / IP:	54
Dimension in cm:	32,3×32,6×8,5
Colour:	grey RAL 7035
Surface:	polished
Installation:	SMT
Channel:	8 bis 64
Central input:	Yes
Control:	Display
Motor running time:	Yes
Tilting time:	Yes
Compatible with:	VL-MM, VL-ME, VL-SMI, LL-ME

Solange® Building Controllers

Serena® Building Controllers Overview		Zones	Bus	Sun	Wind Speed	Rain	Frost	Temperature	Wind Direction	RS485 Control	PC InterFace (Option)
Quattro WISO		1	DCT	•	•	•	•				
Touch Centre 2C		2	DCT	•	•	•	•	•			
Touch Centre 4C		4	DCT	•	•	•	•	•			
Building Controller (VBC)		8 to 24	DCT	•	•	•	•	•	•	•	•
Building Controller BS (VBC BS)		8 to 24	Bus System (BS)	•	•	•	•	•	•	•	•

WE PREFER OPEN STANDARDS

- Seamless trouble free system integration
- Point to point communication
- Speed of commissioning
- Reduced components (cost / points of failure)
- Future proof
- Supply chain risk management

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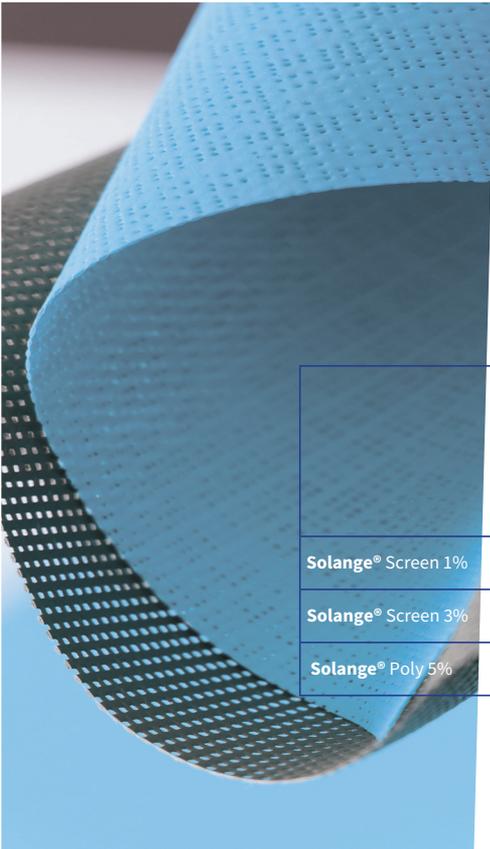


SYSTEMS INTEGRATION



- BMS
- Fire Alarm
- Audio Visual
- Occupancy
- Lighting
- IT Infrastructure

4. Fabric Specification



STANDARD SCREEN FABRICS

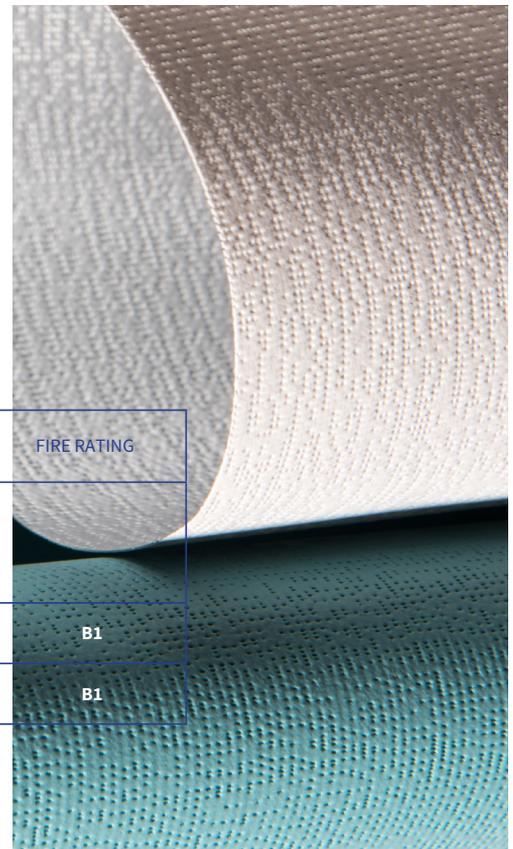
High performance polymer fabrics, woven or set and heat treated for strength and stability under tension. Composite construction offers minimal stretch characteristics at high tensile loads giving extended life and service intervals.

	HEAT PROTECTION		GLARE PROTECTION	COMPOSITION	FIRE RATING
	LOWEST INTERNAL gtot	LOWEST EXTERNAL gtot	LOWEST Tv		
Solange® Screen 1%	0.42	0.08	1.1	Fibre-reinforced Polymer	B1
Solange® Screen 3%	0.35	0.09	4.4	Fibre-reinforced Polymer	B1
Solange® Poly 5%	0.34	0.05	3.0	Polymer	B1

BLACKOUT FABRICS

High performance blackout fabrics, with precise multi-layered construction offering strength and flexibility under tension, and total light blocking performance.

	HEAT PROTECTION		GLARE PROTECTION	COMPOSITION	FIRE RATING
	LOWEST INTERNAL gtot	LOWEST EXTERNAL gtot	LOWEST Tv		
Solange® ScreenBlock	0.24	0.03	0	Fibre-reinforced & Polymer Laminate	B1
Solange® PolyBlock	0.34	0.03	0	Polymer	B1



5. Warranty



Introducing the 5 Year Warranty for ES Solange® Systems

As we trust the quality of our components and craftsmanship for our roller shading systems (Interior-Exterior use), therefore we give them a 5 year warranty. Euro Systems warrants the original purchasers that the hardware is of dependable service and is free of manufacturing defects in materials and workmanship for a period of 5 years.

The warranty period is defined to be the period of the project for which the product was originally purchased, from the date of shipping. This warranty does not depreciate in value. For full warranty details, please read the terms and conditions of our warranty.

Warranty Terms and Conditions

Warranty Terms and Conditions of Euro Systems. (Interior - Exterior large shadings) Euro Systems (ES) warrants to original purchasers that its products are free of manufacturing defects within factory products or workmanship for the following specified warranty periods:

Hardware

- 5 years of the interior project for which it was originally purchased, from the date of shipment for the Solange® motorized roller system

Motor (Interior use):

- 5 years from date of shipment for Solange® System products

Controls, Electrical, Electronic accessories:

- 2 years from date of shipment for Solange® System products

Fabrics :

- 5 years from date of shipment for Solange® System products

If any part of an ES product (except for images or artworks on fabrics) is found in the reasonable judgment of ES to be defective from factory materials or workmanship during the before prescribed warranty periods, ES will repair or replace the defective part at its own discretion. Repair or replacement under this warranty does not include labour or costs for installation, re-installation or removal of Euro Systems products, parts or components. The warranty valid to the original purchaser for all ES installed products.

The warranty does not apply if any of the following exclusions exist:

- The product has been subject to misuse, abuse, neglect, negligence, accident, or has been operated in any way contrary to the ES operating instructions or specifications.
- Damages or conditions that have resulted from improper cleaning, maintenance, care or repair of product.
- The product has not been installed by ES representatives.
- The product has been used to perform functions or operated in a manner contrary to its design or otherwise is used in a manner contrary to or in excess of ES's specifications, drawings or instructions.
- The product is used with electrical accessories or parts, including switch-es, relays or other accessory components that have not been previously approved in writing by the ES Engineering Department.
- If any electrical accessories and other components have been used in dis-regard to the basic wiring diagram for which they were designed.
- Failure to comply with ES's written instructions and specifications.
- Repairs made necessary from normal wear and tear of the product or by use of parts or accessories which are either incompatible with the product or otherwise adversely affects its operation, performance or durability.
- Product used for non-interior applications or otherwise exposed to outdoor environmental conditions.

If and when a claim has been accepted, at the discretion of Euro Systems the defective material/parts/products will either be repaired/replaced or refunded at the price of the defective material/part/product.

ES reserves the right to change or improve the design of any Euro Systems products without assuming any obligations to modify or retrofit any product previously manufactured or supplied.

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