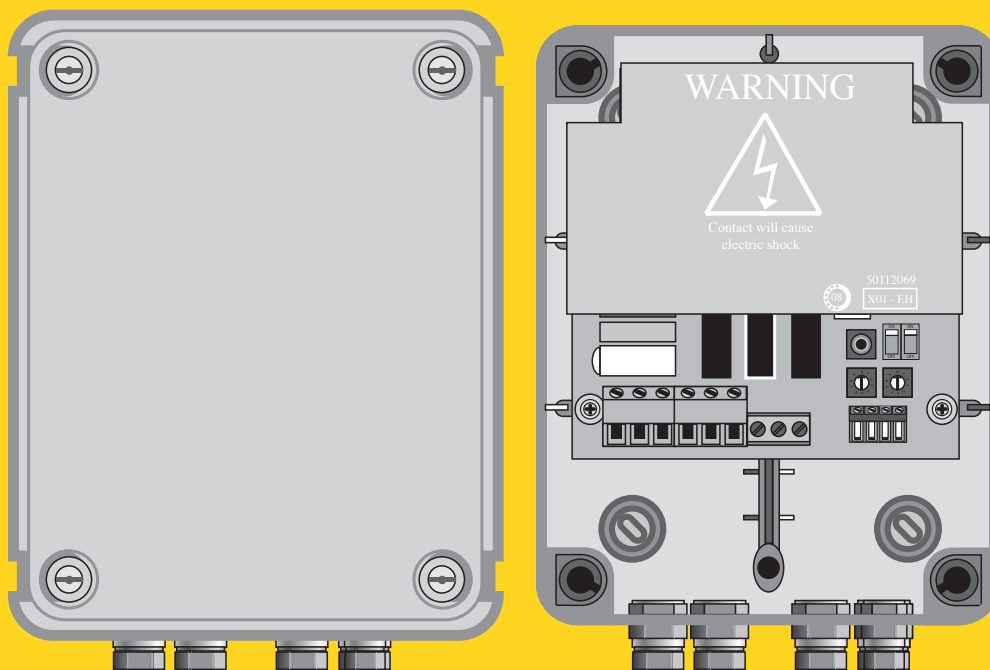


FTS SYSTEM



Principle - Advice on fitting - Installation
Electrical diagrams - Selection charts - Accessories

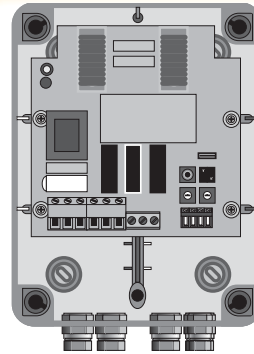
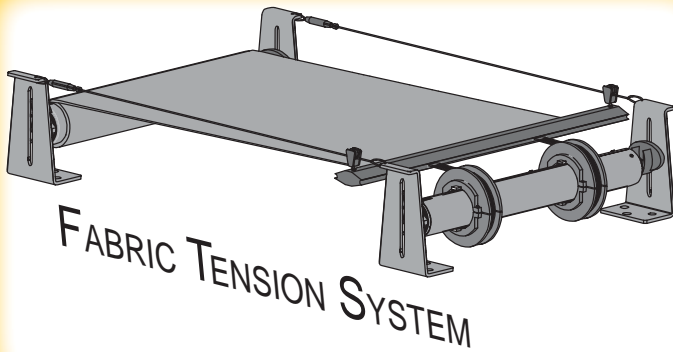
Contents

FTS system operating principle.....	2
Advice on installing the FTS system.....	12
FTS system installation guide	13
Wiring configurations of the FTS system.....	24
FTS control systems	36
FTS mechanical accessories.....	39
FTS charts (230v/50hz range motors)	52
Legal information on the FTS system	68

Important information:

- The selection of components such as the tube, the fabric and the load bar and any other accessories is the responsibility of the manufacturer and /or installer.
- The manufacturer of the complete solution is responsible for the complete test of the FTS system and must ensure that all the components are compatible with one another.
- All instructions must be followed closely regardless of the system's specification. Failure to do so shall absolve Somfy of any responsibility and void the warranty.
- The technical details of each product are available and can be supplied by Somfy's technical services.

FTS system operating principle



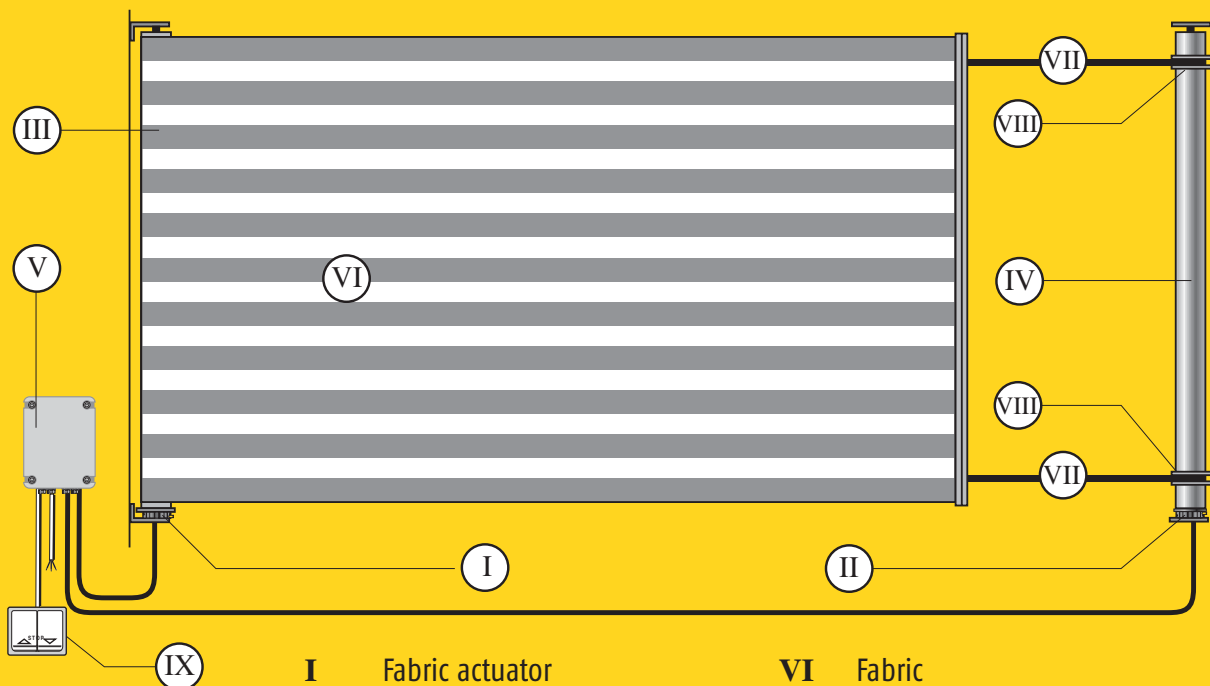
The FTS is a complete system. It comprises two FTS actuators, a control unit and accessories needed for installation (brackets, adaptors, etc.) and operation (control system).

The FTS is suited to horizontal protection installations that require optimised tension of the fabric.

The control is performed using a double push button or a sun/wind automatic function or radio remote controls, etc.

Function

The principle of the FTS system is of a fabric placed between two motorised roller tubes that is held under tension at all times when being rolled and unrolled. The first actuator is located in the roller tube of the fabric, the second is in the roller tube of the strap. The tension of the fabric is regulated by the FTS control unit. This unit sends the tension commands to the actuators. The control unit has two types of fabric tension: dynamic tension that lasts the duration of the unwinding and the final tension after the actuators have stopped, at the end limit or following a "stop" command.



I Fabric actuator
II Strap actuator
III Fabric tube
IV Straps tube
V FTS control box

VI Fabric
VII Straps
VIII Guide pulleys
IX Control system

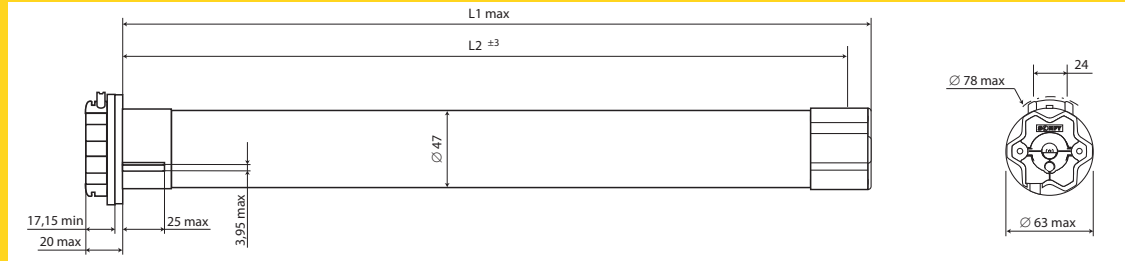
FTS system operating principle

The FTS Hi-Pro actuator

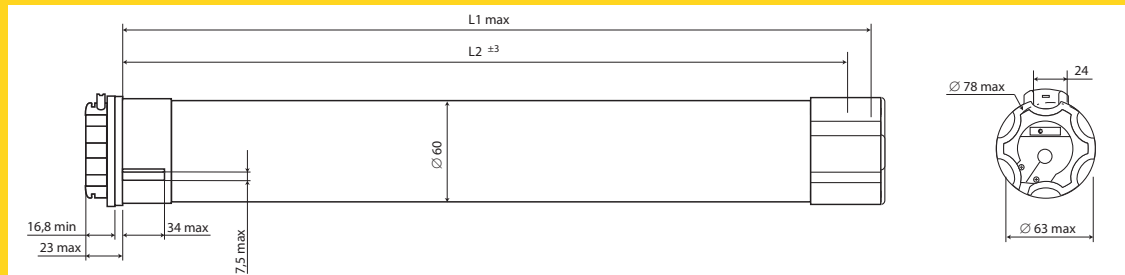
The FTS actuator is based on the LT50 or LT60 actuator, so it has the same general specifications of the other actuators of the Hi-Pro range, except:

- The brake power supply is independent of the electrical actuator (grey wire).
- The 5-conductor black RRF cable cannot be disconnected, length 1 or 2.5 metres.

FTS LT50 25/17



FTS LT60 55/17 FTS LT60 70/17



Technical data	Europe range			US/Japan range	
	FTS LT50 25/17	FTS LT60 55/17	FTS LT60 70/17	FTS LT50 25/17-20	FTS LT60 55/17
L1 (total length)	655	694		655	694
L2 (drive wheel mounting distance)	640	677		640	677
Torque (Nm)	25	55	70	25	55
Speed (rpm)	17			17 - 20	
Capacity of the end limit cage (number of turns)	46	35		46	35
Power consumption (W)	180	350	390	250	440
Normal supply voltage (V)	230			100	
Power supply frequency (Hz)	50			50/60	
Nominal rating (A)	0.95	1.5	1.9	2.35	4.3
Continuous operation time before thermal cut-out (min)	8	7		8	7
Thermal triggering temperature (°C)	130	140	150	130	140
Operating temperature	-10°C / +40°C			-10°C / +40°C	
Actuator diameter (mm)	47	60		47	60
Min diameter of roller tube (mm)	50 x 1.5	63 x 1.5		50 x 1.5	63 x 1.5
Weight of actuator alone (kg)	2.93	5	5.1	2.95	5
Length of pre-mounted cable (m) - non removable cable	1 / 2.5			1 / 2.5	
Cable wire gauge (mm ²)	0.75			0.75	
Number of wires in the cable	5			5	
Cable type	Black RRF			Black RRF	
Protection rating (actuator horizontal)	IP44			IP44	
CE marking	yes			no	

For the other actuator ranges, contact Somfy's technical service department.

FTS system operating principle

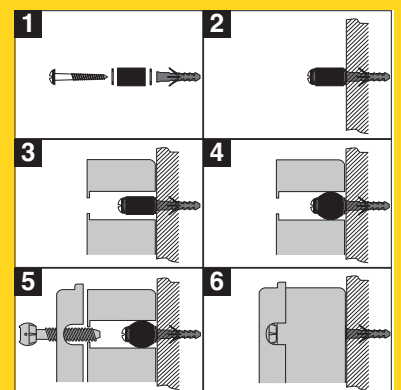
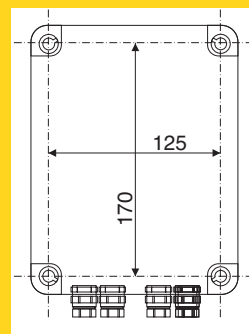
The control unit

- The FTS control unit allows the fabric and strap tension to be adjusted:
 - The dynamic tension makes it possible to brake the unrolling of the fabric or the straps while the system is in motion.
 - The final tension makes it possible to tighten the fabric perfectly when it stops moving.
- The FTS control unit uses a double push button (stop by pressing both push buttons) for automated operation or Somfy automated systems connected to dry contact pulsed outputs (potential-free).
- The safety function of the system when starting stops the system if one of the motors does not start after 1 second, either due to jamming or too much play in the installation.
- Compatible with control units, for example Soliris IB sun/wind automated functions or radio remote controls.
- Possibility of connecting a safety switch (normally closed switch).
- Thermal safety. Power supply of both actuators cut off in case of heat detection on one of the actuators.
- Output delay: 6 minutes.
- Brake: pressing this button releases the brakes of both actuators. The fabric is no longer taught and can be unrolled for assembly operations. The brake button can only be actuated for a maximum of 2 minutes.

Technical data, Europe range		
Housing	Material	ABS
	Colour	Grey
	Dimensions	190 x 145 x 80 mm
	Protection rating (with packing glands)	IP56
Power supply	Nominal	220 - 240 V
	Min / Max	198 / 255 V
	Frequency	50 - 60 Hz
Electromagnetic compatibility	CEI 1000-4-2	8 kV minimum
	CEI 1000-4-3	level III guaranteed
	CEI 1000-4-4	level III guaranteed
Temperature range	Operation	0°C to +40°C
	Storage	-15°C to +70°C
Level of relative humidity		90% max at 25°C
Terminals		screwed
Fuse		5 A - 230 V
Electromagnetic brake output relay		5 A max
Actuator control output		with triac 5 A max
Weight		0,935 kg
CE marking		Yes

Mounting the control box

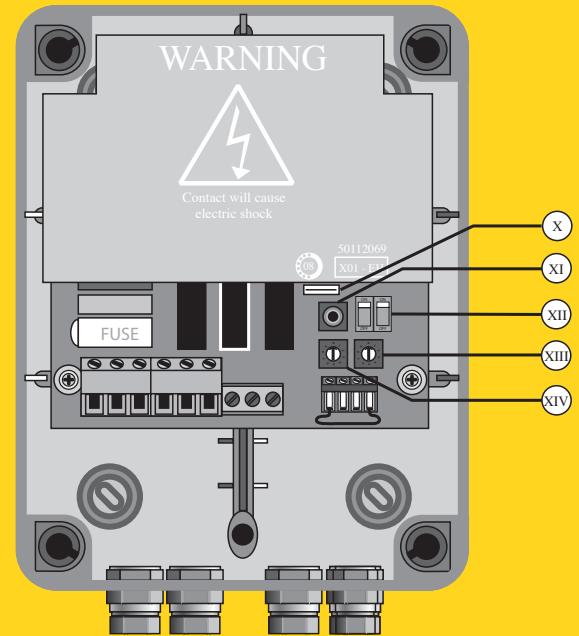
- Drill holes in the wall according to the drilling plan, and fit the screws with the rubber pad between the washers.
- Screw in until the clearance between the washers and the rubber pad has been eliminated.
- Position the box on the 4 screws.
- Tighten the screws until the rubber pads lock into the holes in the box.
- Install the cover after wiring.
- Tighten the screws.



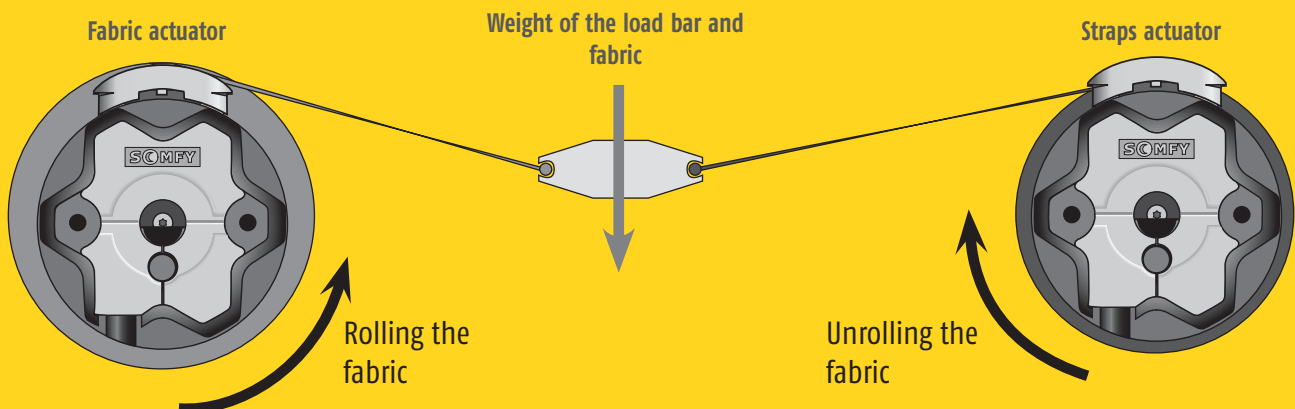
FTS system operating principle

Specifications

- **Individual one-touch control** via double push button. Compatible with SOMFY Soliris IB automated systems.
- **Symmetrical dynamic tension** (the preset dynamic brake will be applied to the straps actuator and the fabric actuator) or **dissymmetrical dynamic tension** (the preset dynamic brake will be applied to the straps actuator or the fabric actuator, depending on a dip switch selection). (XII)
- **Fabric dynamic tension** adjustable via potentiometer. (XIII)
- **Fabric final tension** adjustable via potentiometer. (XIV)
- **Safety contact**, e.g. for skylight, between terminals 10 and 13.
- **Thermal safety**: power supply of the actuators cut off in case of thermal cut-out detection on one of the actuators.
- **Simultaneous brake release**. (XI)
- **Delay on actuator outputs**: 6 min.
- **Power supply 50/60 Hz frequency setting**. (X)




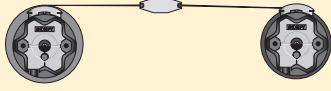

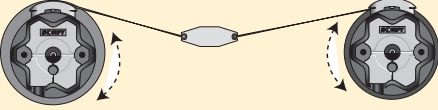
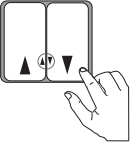
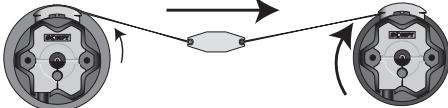
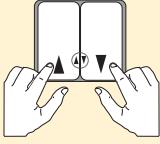
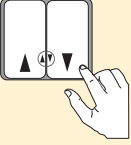
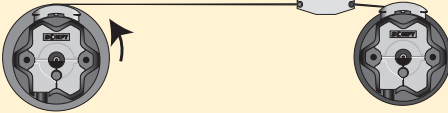
Concept of adjustment when the fabric or straps are being unrolled



Movement	Fabric actuator	Straps actuator
Unrolling the fabric	the dynamic tension brakes the unrolling of the fabric	The actuator rolls the straps until the end limit
Rolling the fabric	The actuator rolls the fabric until the end limit	the dynamic tension brakes the unrolling of the straps

- After the fabric is unrolled or rolled, the system must be re-tensioned, this function is performed by the control unit, providing the final tension.
- The dynamic tension and final tension can be adjusted at the control unit to adapt them to the constraints of the installation:
 - Forward movement of the system
 - Rigidity of the load bearing structure
 - Exposure to the wind
 - etc.

FTS system operating principle

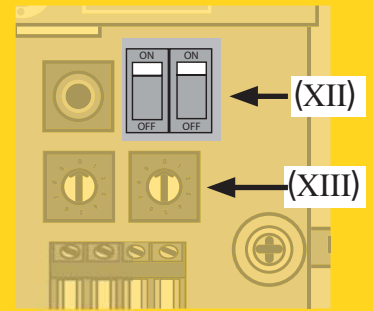
Operation of the FTS			
Control	Control unit	Actuators	Actuator power supply
<p>No order</p> 	<p>On standby</p>	<p>The fabric + strap assembly remains mechanically tensioned.</p> 	<p>None</p>
	<p>Press the brake release button.</p> 	<p>The fabric and strap tubes can rotate freely: they will turn under the weight of the system or if they are rotated manually.</p>  <p>(free rotation of the two actuators)</p>	<p>Power supply to the fabric and strap actuator brakes while the release button is pressed. Note: this function must only be used for a technical operation on the FTS system.</p>
<p>Press (1/2 sec.) on the awning out button.</p> 	<p>Outputs timed until the end limit is reached or the "stop" command is made using the control.</p>	<p>The strap tube rolls the straps, the fabric tube brakes the fabric to prevent it from sagging too much (dynamic tension).</p>  <p>Dynamic braking Roller</p>	<p>Power supply:</p> <ul style="list-style-type: none"> • for the 2 actuator brakes. • for the strap actuator in the direction that corresponds to the rolling of the straps. • for the fabric actuator at reduced tension (dynamic tension).
<p>Press both buttons,</p>  <p>or on the awning out button,</p>  <p>or stop at end limit of the system.</p>	<p>Output timed by the final tension setting.</p>	<p>The strap tube is locked, the fabric tube rolls the fabric to tension it for the duration of the final tension delay.</p> 	<p>Power supply:</p> <ul style="list-style-type: none"> • for the fabric actuator brake. • for the fabric actuator in the direction that corresponds to the rolling of the fabric.

FTS system operating principle

Setting the symmetric / asymmetric tension

This setting is entirely linked to the way the system has been fitted.

- Symmetrical tension of the fabric should be selected for horizontal installations.
- Asymmetric tension of the fabric should be selected for certain installations to fit special cases, **that have the prior approval of Somfy's technical services.**



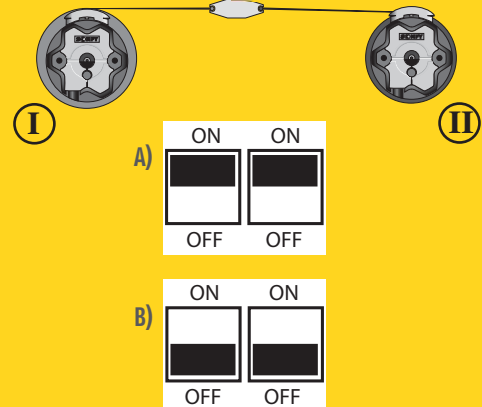
Symmetric tensioning of the fabric:

A) When the dipswitches (XII) are in the ON/ON position, the braking effect is active, for the two actuators (fabric actuator and strap actuator), according to the potentiometer setting (XIII).

This is the factory setting for standard cases.

B) When the dipswitches (XII) are in the OFF/OFF position, the braking effect is in the minimum range for the two actuators (fabric and strap actuators).

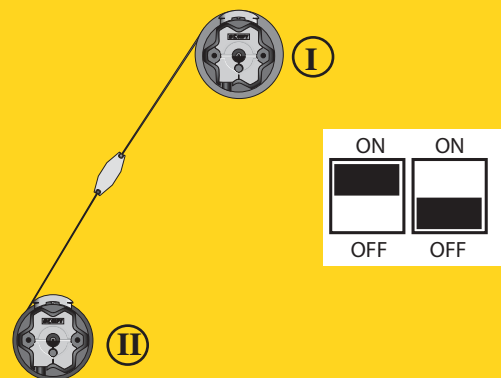
This setting requires prior approval by Somfy's technical services.



Asymmetric tension of the fabric, fabric actuator at the top:

When the dipswitches (XII) are in the ON/OFF position, the braking effect is active for the fabric actuator according to the potentiometer setting (XIII) and the braking effect is at the minimum setting for the strap actuator.

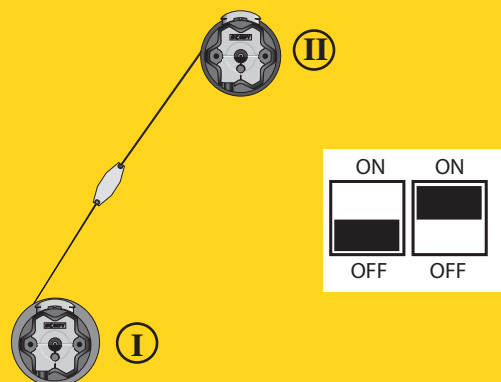
This type of installation requires prior approval by Somfy's technical services.



Asymmetric tension of the fabric, fabric actuator at the bottom:

When the dipswitches (XII) are in the OFF/ON position, the braking effect is active for the strap actuator according to the potentiometer setting (XIII) and the braking effect for the fabric actuator is at the minimum setting.

This type of installation requires prior approval by Somfy's technical services.



- ❶ Fabric actuator
- ❷ Straps actuator

FTS system operating principle

Setting the dynamic tension of the fabric (braking effect during unrolling)

To achieve an optimum setting, first set the potentiometer (XIII) to 0, then adjust the potentiometer gradually until the fabric is slightly tensioned when being rolled up and unrolled (too much dynamic tension will inhibit the operation of the system).

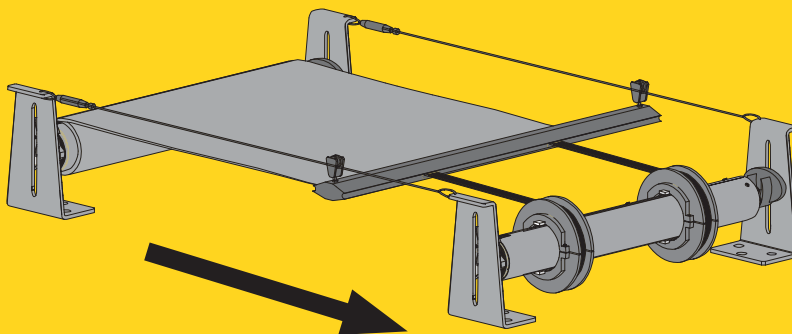
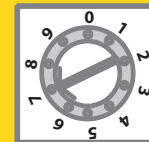
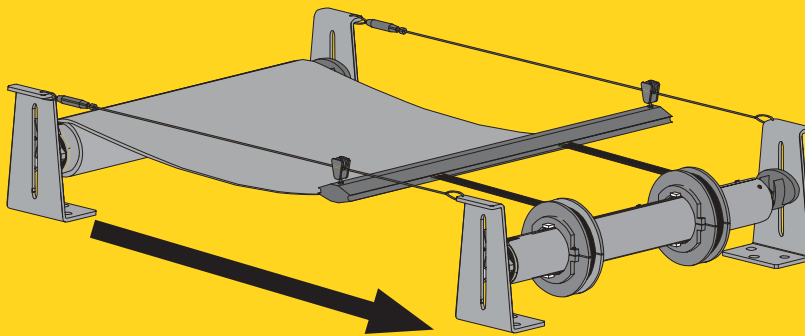
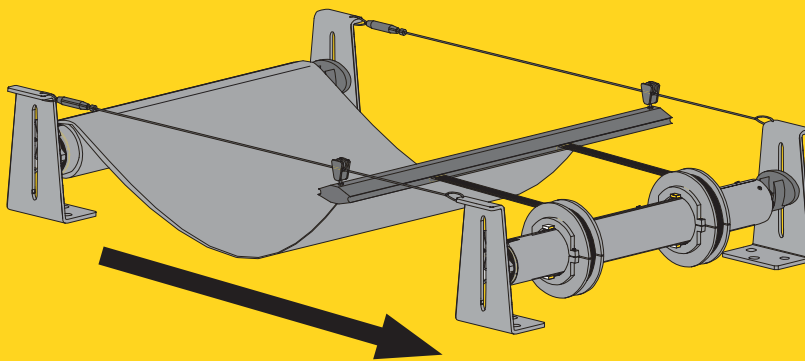
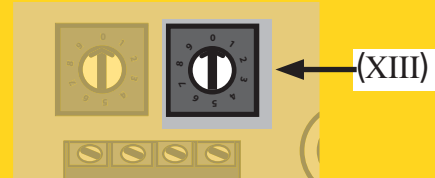
N.B.: the tension of the fabric will vary when the actuators are hot (the "thermal time" of the FTS actuators is on average 8 minutes for FTS LT50 actuators and 7 minutes for FTS LT60 actuators).

Note: this setting must be made after having selected the symmetric/asymmetric tension that corresponds to the installation and once the actuator end stops have been set (see previous page).

- Request fabric feed-out: during unwinding, the fabric actuator brakes the fabric very gently.

If the fabric unwinds too quickly, it will sag:

Using a flat-blade screwdriver, gradually increase the potentiometer value (XIII) to limit the sag of the fabric.



High stress on the structure!

FTS system operating principle

Adjusting the final tension

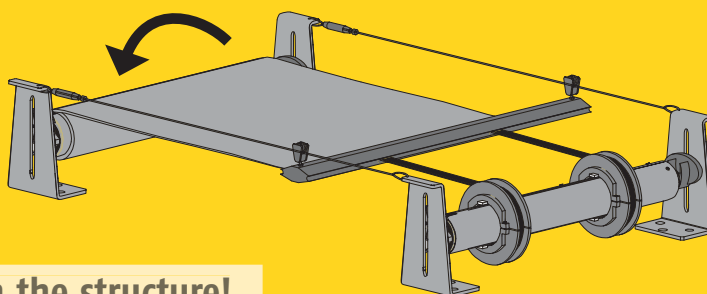
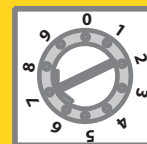
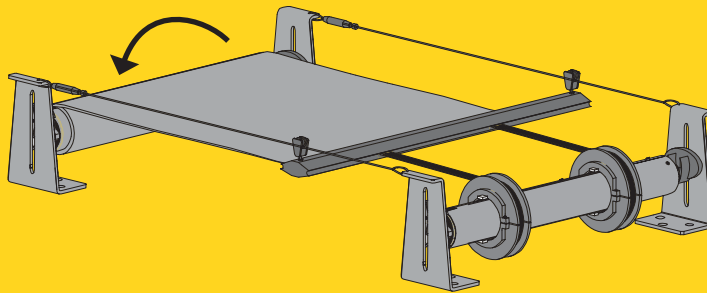
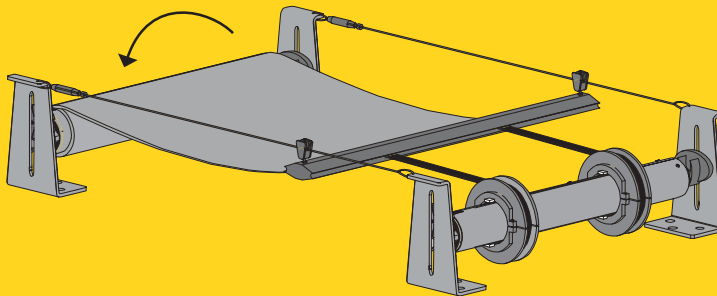
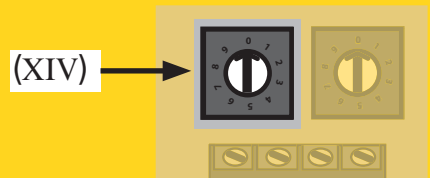
The final tension is always applied after the actuators have stopped at the end limits or after a "STOP" command has been made. The final tension will vary in strength according to the temperature of the actuators.

To achieve the optimum setting, first set the potentiometer (XIV) to 0, then gradually increase the potentiometer value until the fabric is correctly tensioned.

N.B.: the tension of the fabric will vary when the actuators are hot (the "thermal time" of the FTS actuators is on average 8 minutes for FTS LT50 actuators and 7 minutes for FTS LT60 actuators).

Note: This setting must be made after the end stops of the FTS actuators have been set as well as the symmetrical / asymmetric tension.

- Request fabric feed-out/in, followed by a "stop" order: the system will stop, and then re-tension the fabric. Perform various tests, gradually increasing the potentiometer value (XIV), until you obtain a correct fabric tension.



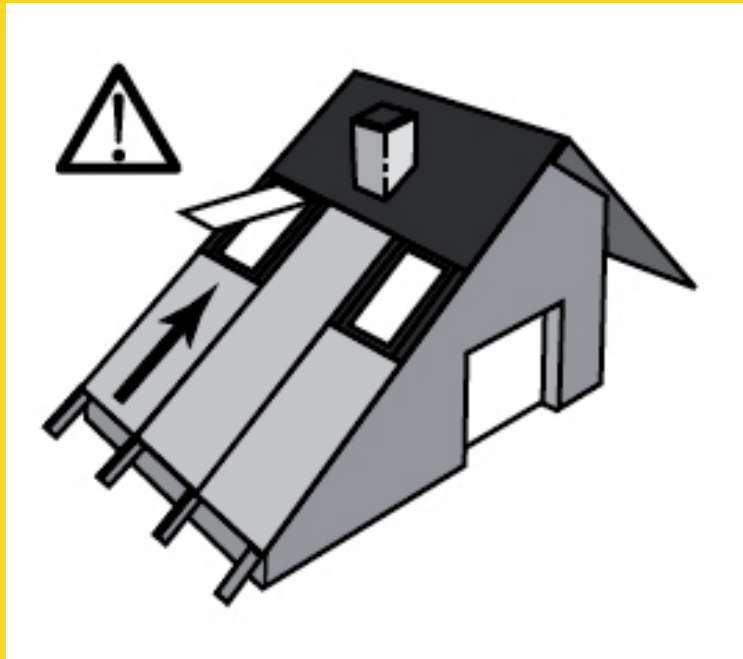
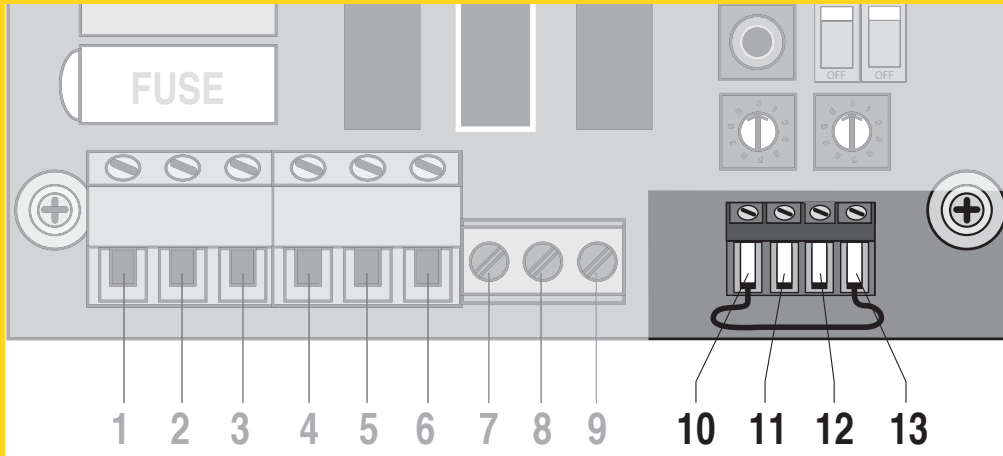
High stress on the structure!

FTS system operating principle

Safety switch

If, for example, a window is located in the area covered by the fabric, a safety switch should be fitted (normally closed switch) to protect the installation.

If there is no safety switch, the jumper (factory fitted) must remain between terminals 10 and 13.

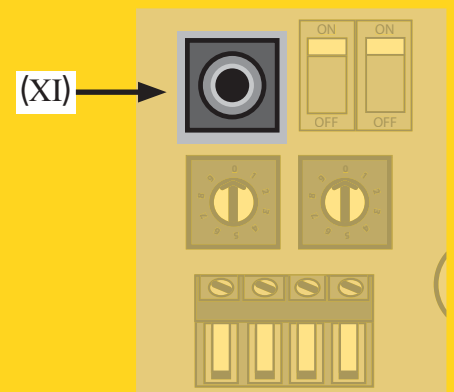


Simultaneous releasing of the brakes

Push button (XI) simultaneously activates the supply to the brakes on both actuators.

This operation eases the system tension, for example in order to adjust its parallel alignment.

N.B.: holding push button (XI) down too long (>1 minute) could damage the actuator brakes.



Advice on installing the FTS system

- The FTS system is entirely dedicated to sun protection.
- The selection charts are designed for horizontal shading or on a very slight incline (5 % max).
For a different application, please contact a Somfy technician who will study the feasibility of your installation with you (screen at high incline, vertical system, system with bevel gear, etc.)
- The FTS system requires correct mechanical and electrical fitting, which includes:
 - Parallel motorised shafts that are always fixed horizontally.

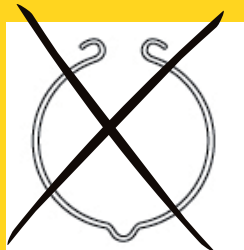


- Rigid tubes and load bar (minimal flex).

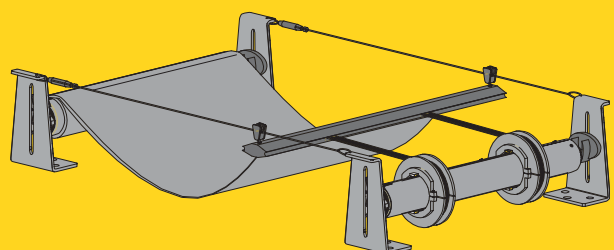
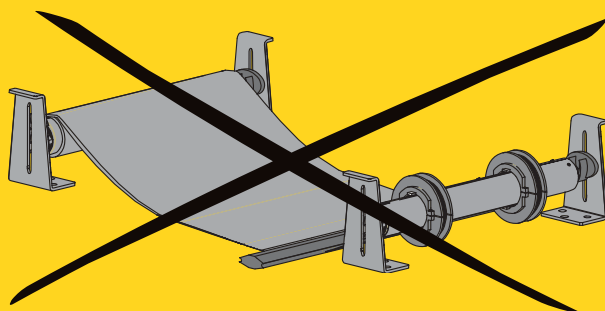


- A pre-stretched fabric (no stretching over time) that is well sewn or welded: the FTS system must be used with fabric that offers good dimensional stability and resists deforming in the direction of the frame (pre-stretched acrylic or polyester fabric for example).
- Equal length and parallel straps.
- Protection against water ingress in the actuator heads, the electrical connections and the control system.
- An electrical installation that conforms to the applicable standards (NF C 15-100, NFC 73-800).
- For effective protection from rain, the button covers must be refitted to the actuator setting buttons.
- For effective protection from rain, it is strongly recommended that the roller tubes be protected with a head rail.

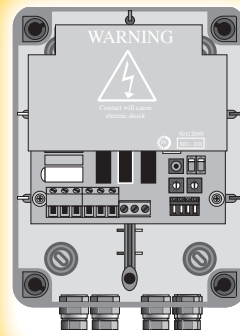
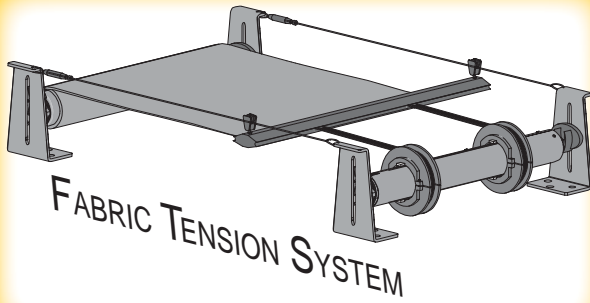
The FTS Hi-Pro actuators must always be fitted with the locking ring part no. 910002, to prevent the risk of the system falling (heavy strains on the supports).



The load bar must be guided so that its weight does not interfere with the FTS system.



FTS system installation guide



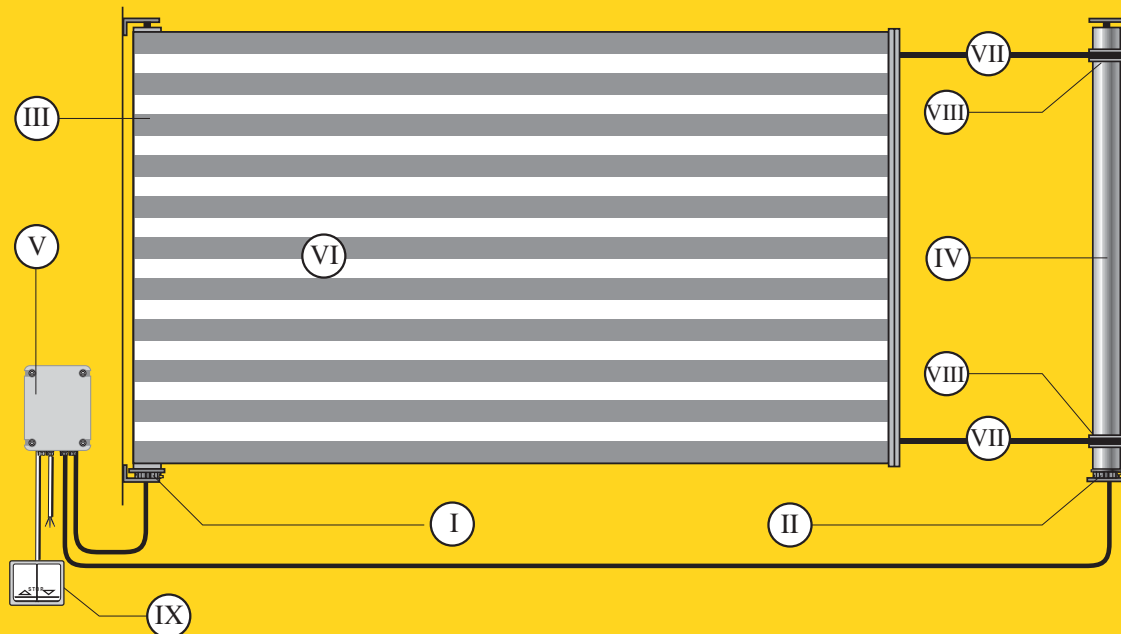
FABRIC TENSION SYSTEM
ELECTRONIC BOX

Contents

1. Introduction to the FTS system	p. 29	10. Recommendations for the control box.....	p. 34
2. Actuator specifications	p. 30	11. Control box terminal blocks	p. 35
3. Recommendations for the actuators	p. 30	12. Checks before wiring	p. 35
4. Installation configurations	p. 30	13. Wiring.....	p. 36
5. Preparing the roller tubes.....	p. 31	14. Adjusting the dynamic tension	p. 38
6. Preparing the guidance system	p. 31	15. Adjusting the final tension	p. 38
7. Preparing the fabric and straps	p. 32	16. Simultaneous brake release	p. 38
8. Setting the actuator end limits	p. 33	17. Repairs	p. 39
9. Control box specifications.....	p. 34		

1. Introduction to the FTS system

- The FTS is a complete system comprising 2 actuators and a control box.
- This system is used for unwinding fabric between 2 tubes, while controlling the tension.
- The fabric is unwound via a strap-drawn load bar to which the fabric is attached.
- One of the actuators is housed in the tube on which the fabric winds and unwinds. The other is housed in the opposite tube on which the straps wind and unwind, by means of the guidance pulleys.
- *The operation of the 2 actuators is co-ordinated via a special control box, which also ensures:*
 - *Dynamic fabric tension as it unwinds/winds.*
 - *An end fabric tension.*



- | | | |
|--------------------------|--------------------------|---------------------------|
| I Fabric actuator | IV Straps tube | VII Straps |
| II Strap actuator | V FTS control box | VIII Guide pulleys |
| III Fabric tube | VI Fabric | IX Control system |

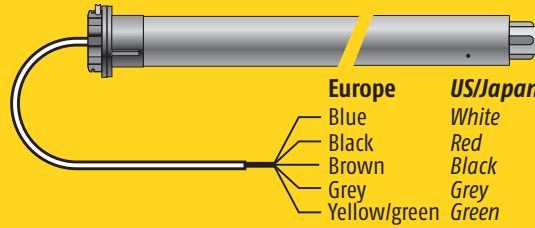
FTS system installation guide

2. Actuator specifications

- SOMFY HiPro-FTS 50 and FTS 60 actuators
 - FTS 50: tube min. \varnothing 50 mm
 - FTS 60: tube min. \varnothing 63 mm

Note: for the choice of actuators, refer to the FTS charts.

- Quick setting of the end limits.
- 6 options for actuator head orientation.
- Fitting SOMFY HiPro LT 50 and LT 60 adaptors.
- 2-way actuator, with electric brake release (5 conductor wire).
- 1 m or 2.5 m RRF anti-UV black cable, non removable, 5 x 0.75 mm².



"Europe" actuator range

FTS Range	Torque Nm	Speed Rpm	End limit switch capacity
LT 50	25	17	46 turns
LT 60	55	17	35 turns
LT 60	70	17	35 turns

3. Recommendations for the actuators

This section contains several images and technical specifications:

- Four images showing incorrect installation methods (e.g., using a bucket, using a screwdriver, using a wrench, using a hammer) with a large 'X' over them.
- Two images showing correct installation methods: one with a hand turning a knob and another with a hand holding a cable.
- A temperature scale showing a range from +70°C (158°F) to -20°C (-4°F).
- The IP44 protection rating.
- Technical specifications: Europe: Power supply 230 V/50 Hz.
- The 'Tube motor' logo with 'WIRED TECHNOLOGY' and a stylized 'W'.
- The CE mark.

4. Installation configurations

There are various possible installation configurations according to:

- The actuator positioning (head on right or left).
- The winding direction of the fabric or strap. (Overwinding or underwinding).

These different configurations require specific setting of the end limits and appropriate connection.

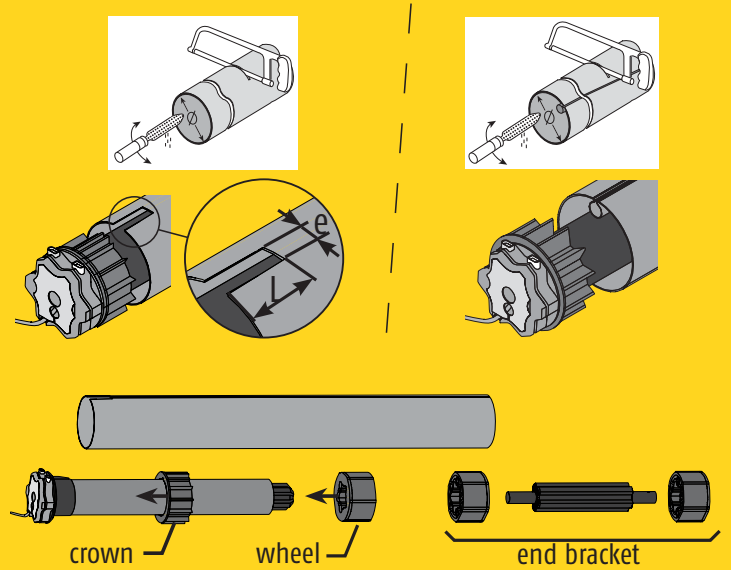
Examples of configurations:

<p>End limit: White push button (W)</p> <p>Winding: brown wire</p>				
<p>End limit: Yellow push button (Y)</p> <p>Winding: black wire</p>				

5. Preparing the roller tubes

1. Prepare the straps and fabric roller tubes.

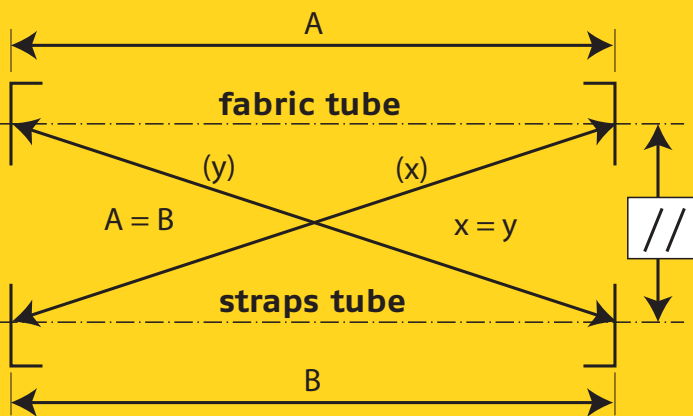
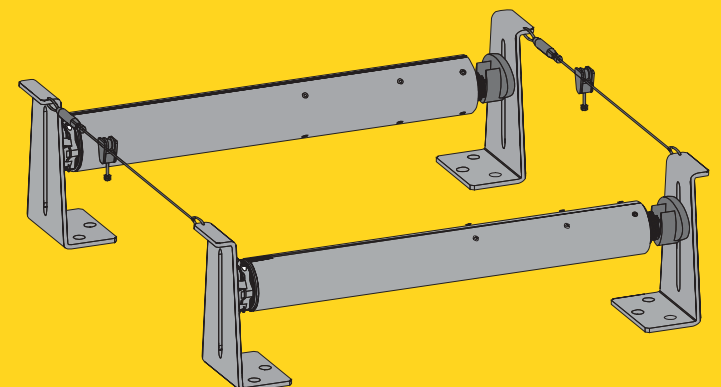
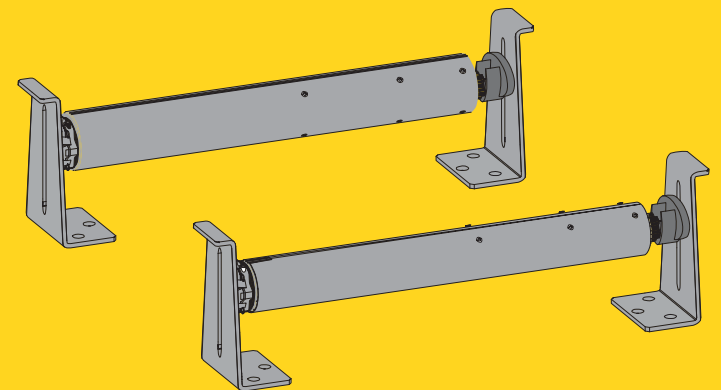
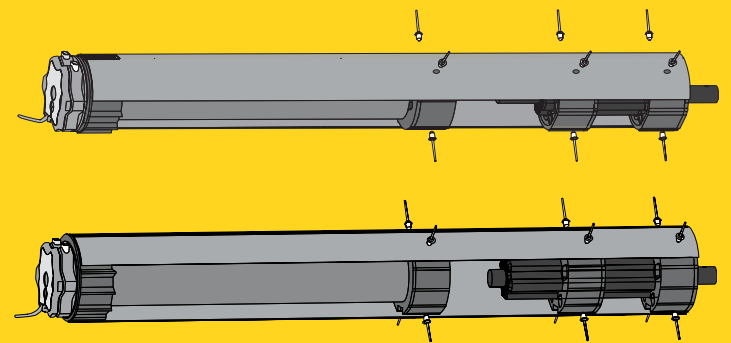
- **FTS 50:** $\varnothing \geq 47 \text{ mm}$ (1.85 in)
th. = 4 mm (0.16 in)
L = 25 mm (0.98 in)
- **FTS 60:** $\varnothing \geq 60 \text{ mm}$ (2.36 in)
th. = 8 mm (0.32 in)
L = 35 mm (1.38 in)



2. Assemble the roller tube for the straps.
Fasten the actuator wheel and the two end bracket wheels with 4 steel pop rivets $\varnothing 4 \text{ mm}$ at 90° for each wheel.

3. Assemble the fabric roller tube.
Fasten the actuator wheel and the two end bracket wheels with 4 steel pop rivets $\varnothing 4 \text{ mm}$ at 90° for each wheel.

4. Fit the roller tubes on the structure, making sure they are aligned in parallel.



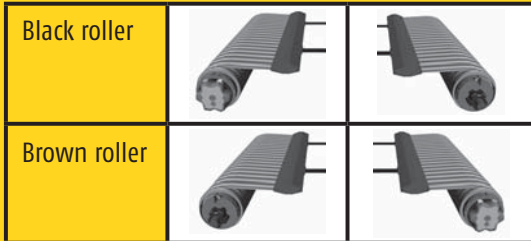
6. Preparing the guidance system

1. Prepare the load bar guidance system.

FTS system installation guide

7. Preparing the fabric and straps

1. Press the end limit setting push buttons on both actuators, to put them into the setting position (push buttons engaged).
2. Attach and wind the fabric onto its roller tube (using setting tool ref.: 9137080).



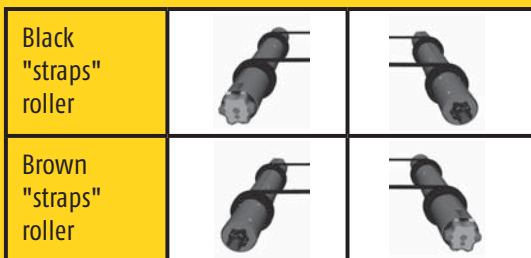
Note: The "dynamic tension" wire must be insulated with an electrical split fitting.

3. Mount the pulleys and straps, making sure that they are perpendicular to the roller tubes. Mount the load bar on its guidance system to prevent the fabric from sagging too much during the subsequent manoeuvres.

4. Wind the straps between the pulleys, using the setting tool ref.: 9137080.



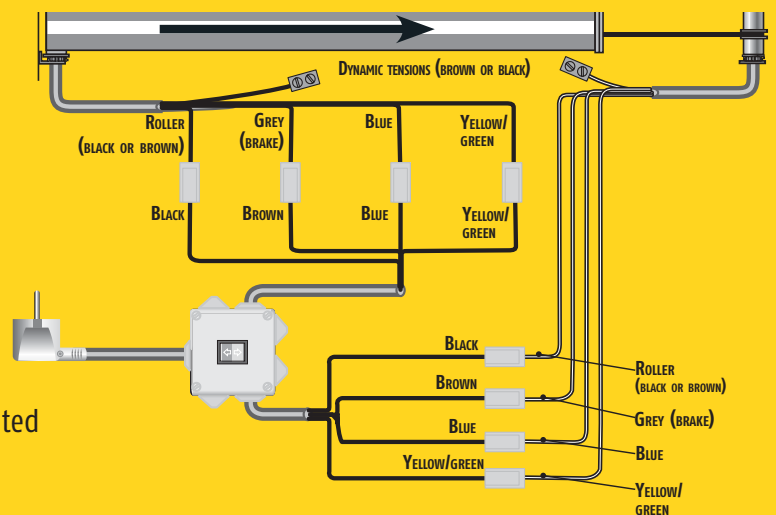
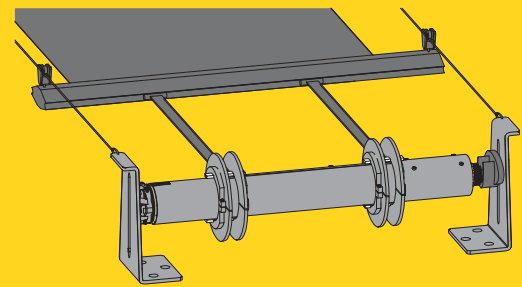
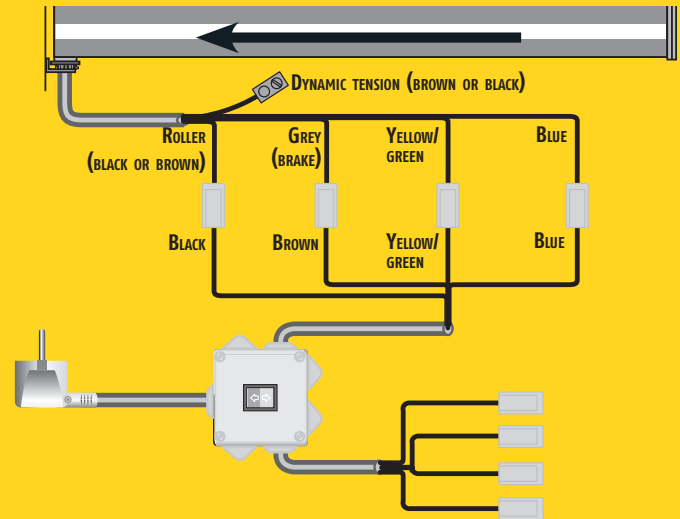
Note: The "dynamic tension" wires must be insulated with electrical split fittings.



PUSH BUTTON IN SETTING POSITION



Colours indicated on the diagrams: "Europe" range

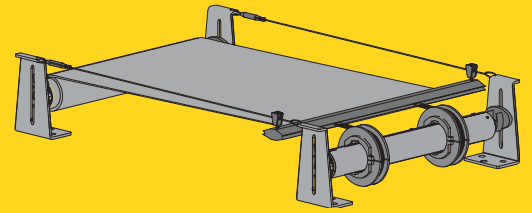


Europe	US/Japan	Comments
Blue	White	Shared
Black	Red	Yellow push button
Brown	Black	White push button
Grey	Grey	Brake
Yellow/green	Green	Earth

8. Setting the actuator end limits

SETTING THE "STRAPS" END LIMIT

- Maintaining the wiring set up in section 7.4, unwind the fabric to the desired end limit.



- Press the strap winding push button on the straps actuator to return it to normal position.

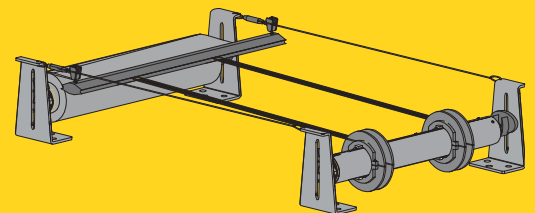


- Press the fabric motor push button which is not for winding the fabric, to return it to normal position.



SETTING THE "FABRIC" END LIMIT

- Maintaining the wiring set up in section 7.4, wind the fabric to the desired end limit.



- Press the fabric winding push button on the fabric actuator to return it to normal position.



- Press the push button which is still in the setting position on the straps actuator.

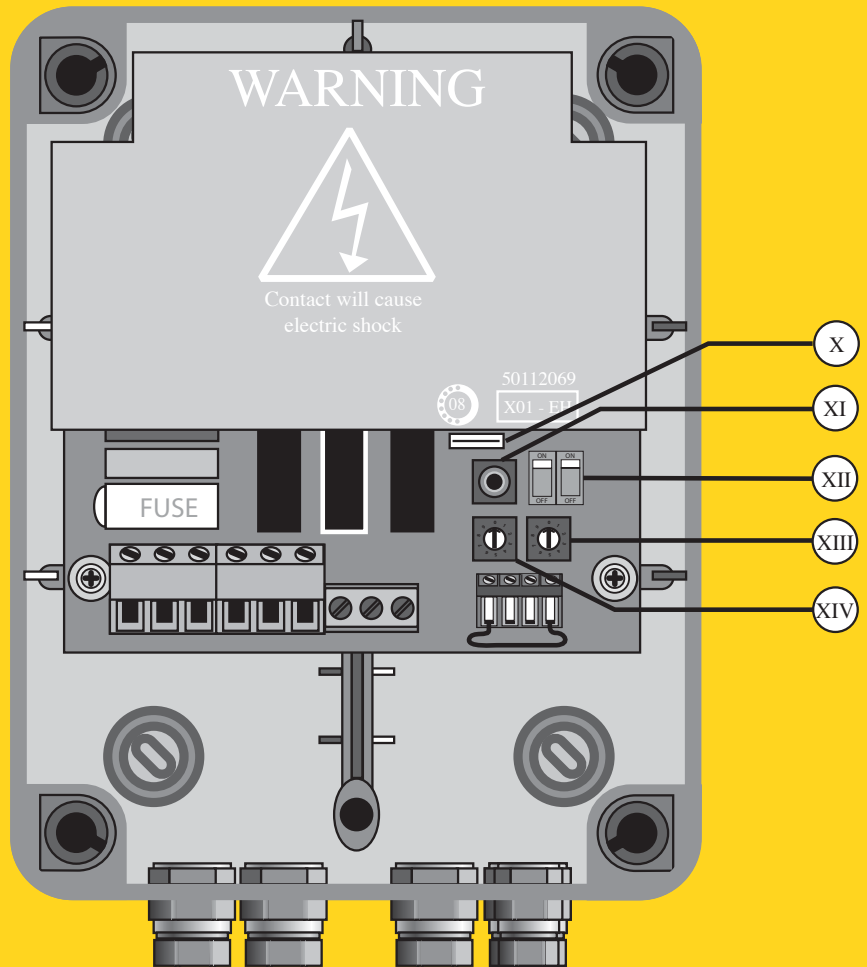


- Maintaining the wiring set up in section 7.4, perform an out & back movement to check the end limits, then unplug the setting tool from the power supply before disconnecting the actuators.

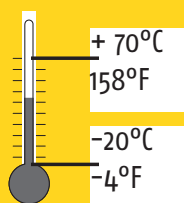
 **Never leave an end limit push button depressed when setting is carried out.**

9. Control box specifications

- IP56 waterproof box: 190 x 145 x 80 mm.
- Equipped with 5 packing glands.
- Functions:
 - **Individual one-touch control** via double push buttons. Compatible with SOMFY Soliris IB automated systems.
 - **Symmetrical dynamic tension** (the preset dynamic brake will be applied to the straps actuator and the fabric actuator) or **dissymmetrical dynamic tension** (the preset dynamic brake will be applied to the straps actuator or the fabric actuator, depending on a dip switch selection). (XII)
 - **Fabric dynamic tension** adjustable via potentiometer. (XIII)
 - **Fabric final tension** adjustable via potentiometer. (XIV)
 - **Safety contact**, e.g. for skylight, between terminals 10 and 13.
 - **Thermal safety**: actuator power supply cut off in case of heat detection on one of the actuators.
 - **Simultaneous brake release**. (XI)
 - **Delay on actuator outputs**: 6 min.
 - **Power supply 50/60 Hz frequency setting**. (X)



10. Recommendations for the control box



IP56

Europe:
Power supply
230 V/50 Hz



11. Control box terminal blocks

Power supply

- 1: Live
- 2: Neutral
- 3: Shared by actuators (blue wires from straps and fabric actuators)

Straps actuator

- 4: Straps winding (black or brown wire from actuator)
- 5: Straps tension (brown or black wire from actuator)
- 6: Straps electro-brake (grey wire from actuator)

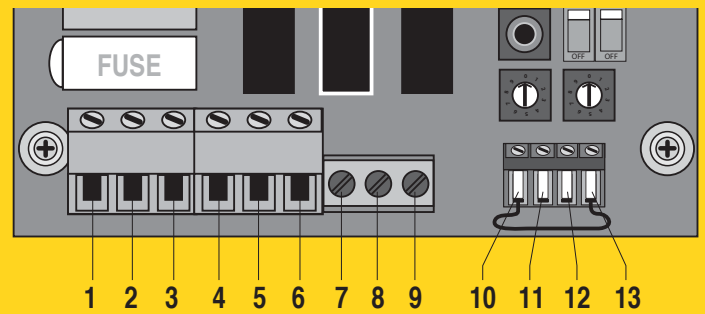
Fabric actuator

- 7: Fabric winding (black or brown wire from actuator)
- 8: Fabric tension (brown or black wire from actuator)
- 9: Fabric electro-brake (grey wire from actuator)

Control + safety

- 10: Control shared
- 11: Fabric unwinding control
- 12: Fabric winding control
- 13: Aperture safety (if not used, leave electric bridge between terminals 10 and 13)

- The earth wires (yellow/green) from the 2 actuators must be connected to the power supply earth on 1 electric split fitting separate from the circuit.
- One-touch control via double push buttons (stop by pressing both push buttons).




Do not feed the actuators' power supply cables and the control and safety cables through the same sheath.

12. Checks before wiring

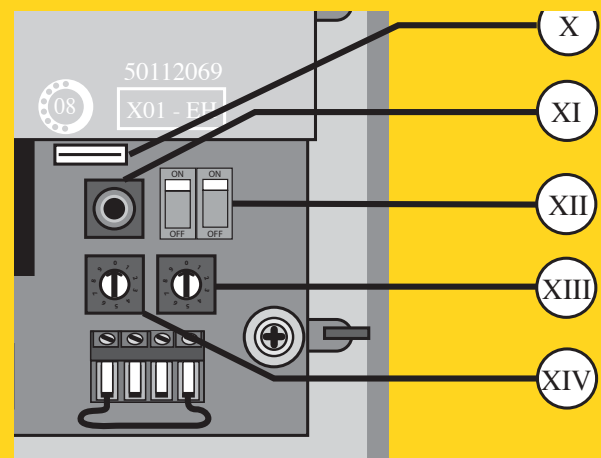
- The control box is equipped with a selection switch(X) for the power supply frequency: make sure this switch is disengaged to correspond to European voltage:

50 Hz power supply.

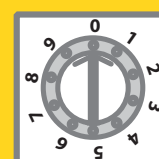
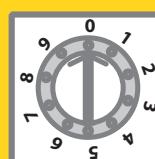
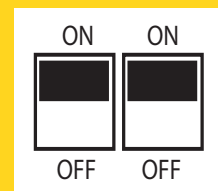
Switch  Factory configuration for Europe

60 Hz power supply.

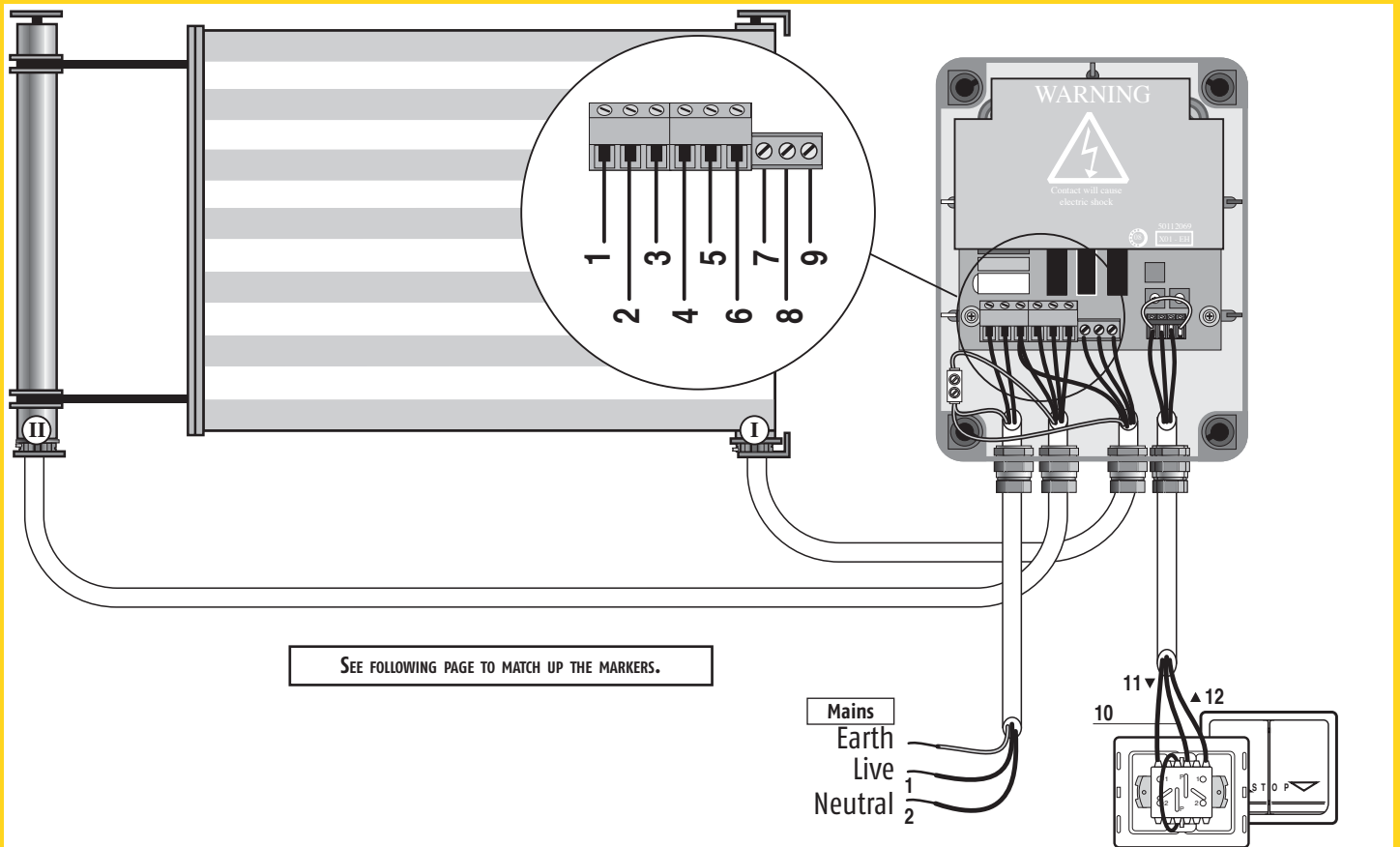
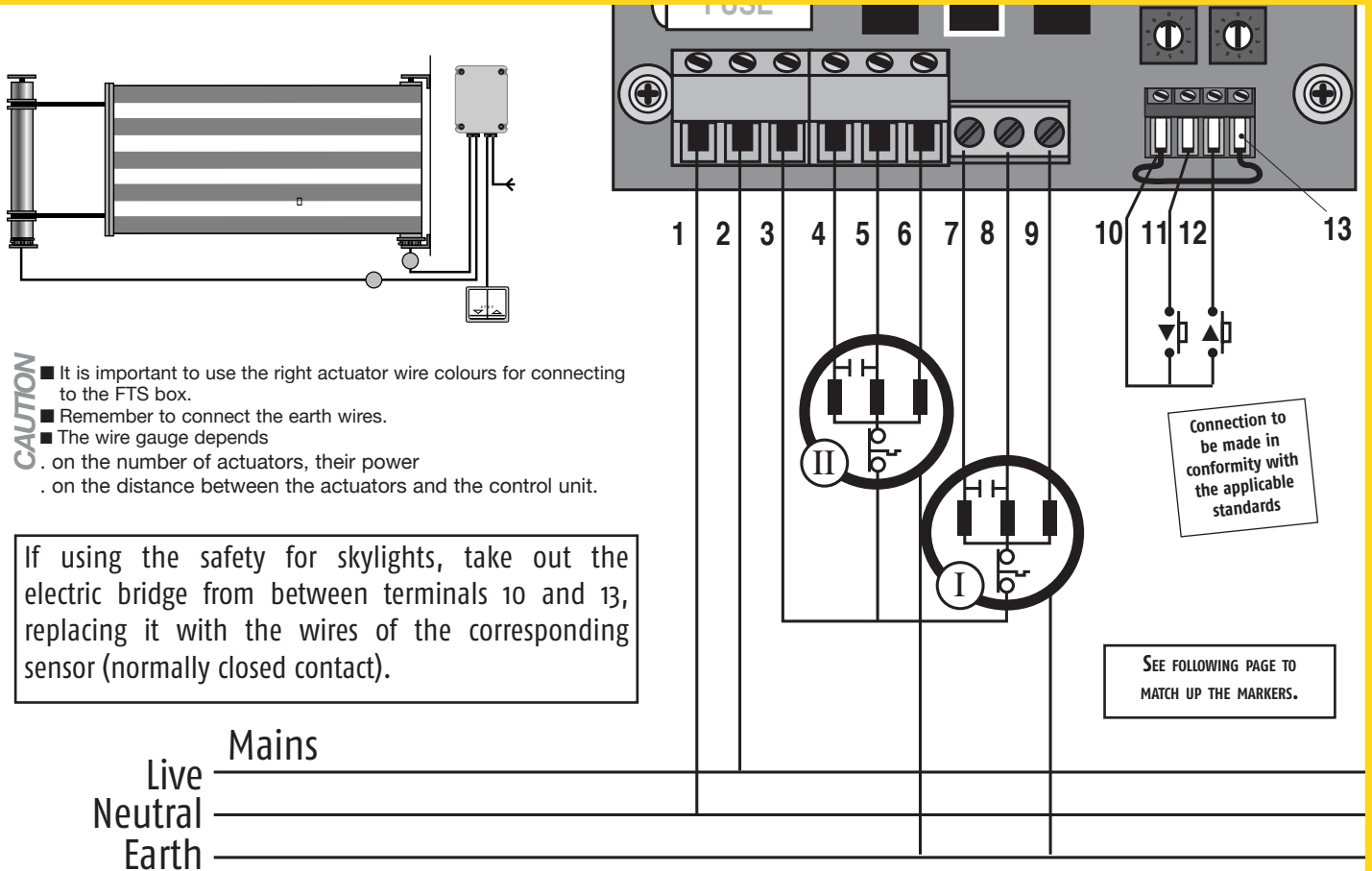
Switch 



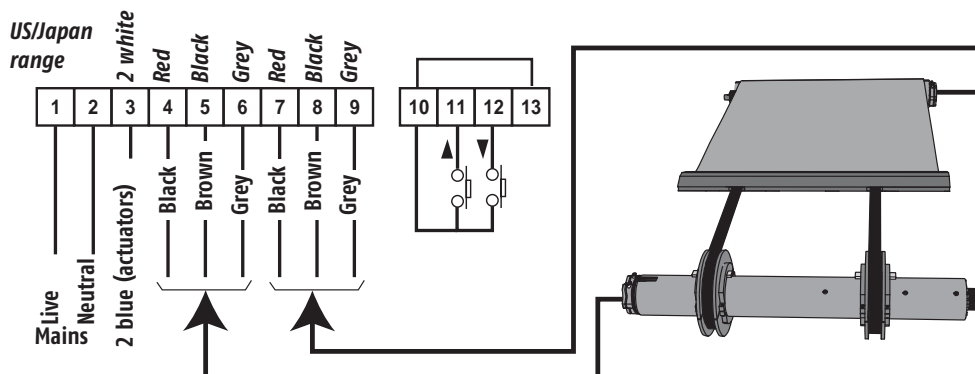
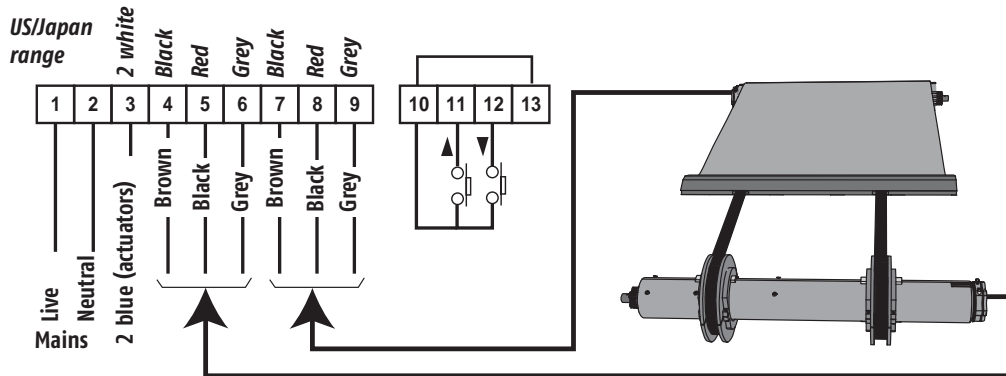
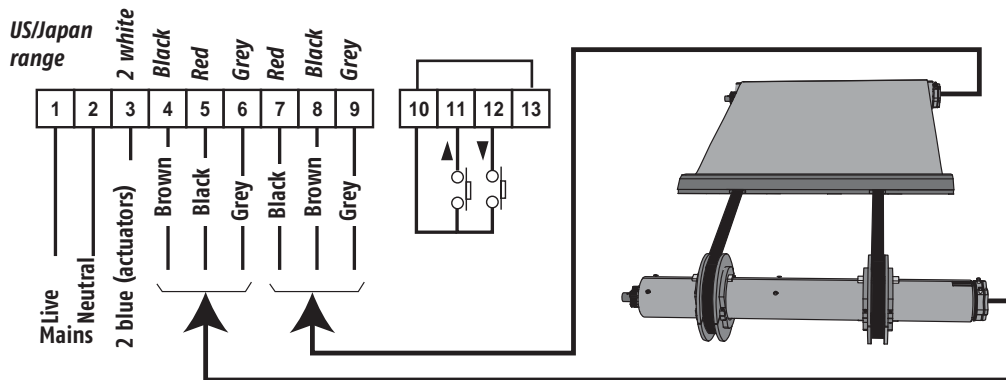
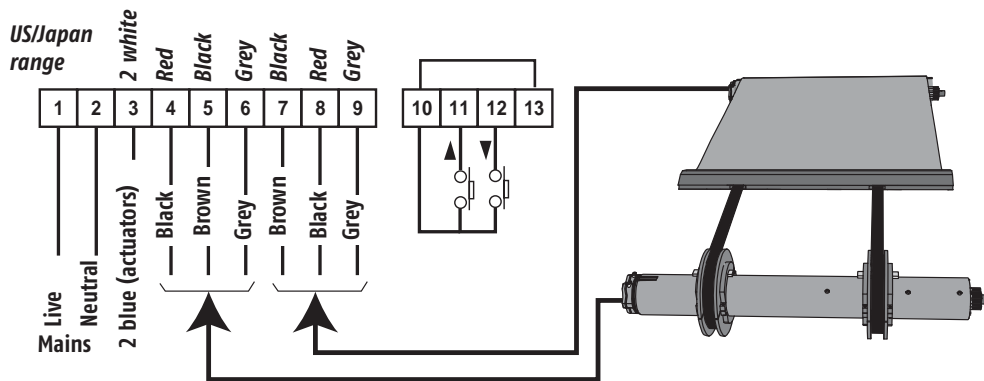
- Check that the dipswitches (XII) are in the ON position to obtain symmetrical dynamic voltage when the fabric is unwound and wound up. (except specific cases approved beforehand by Somfy's technical service.)
- Make sure that the potentiometers (XIII) and (XIV) are in position "0" so that the dynamic and final tensions are at minimum.



13. Wiring



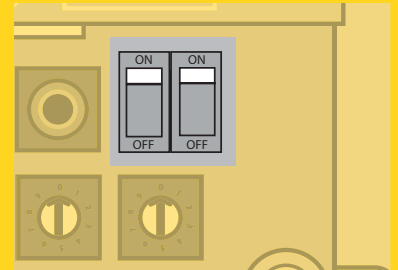
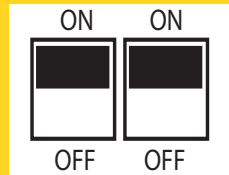
13. Wiring (continued)



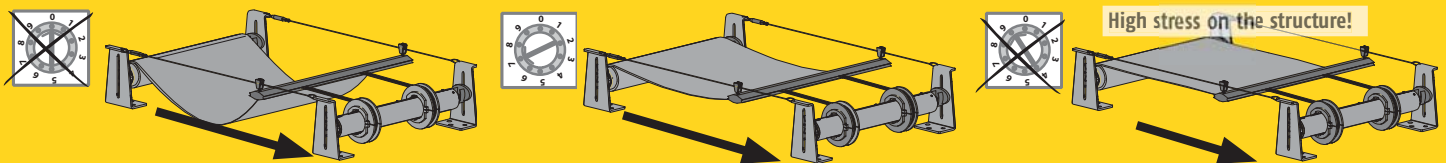
Europe	US/Japan	Comments
Blue	White	Shared
Black	Red	Yellow push button
Brown	Black	White push button
Grey	Grey	Brake
Yellow/green	Green	Earth

14. Adjusting the dynamic tension

- The dynamic tension prevents the fabric and straps from unwinding too quickly due to the weight of the load bar. In a conventional set-up (horizontal or very slightly sloping system), it is identical in both operating directions (symmetrical tension), which corresponds to the factory configuration of the dip switches (XII):



- In certain cases, such as a steep inclination, it is possible to alter the position of the dip switches (XII), to obtain a low or dissymmetrical dynamic tension. These set-ups should be validated with Somfy's technical service.
- The dynamic tension then needs to be adjusted using the potentiometer (XIII), graduated from 0 to 9.
- Request fabric feed-out: during unwinding, the fabric actuator brakes the fabric very gently. If the fabric unwinds too quickly, it will sag:
Using a flat-blade screwdriver, gradually increase the potentiometer value (XIII) to limit the sag of the fabric.



- Request fabric retraction: if the straps unwind too quickly (sag) or too slowly (high tension), readjust the potentiometer value (XIII).

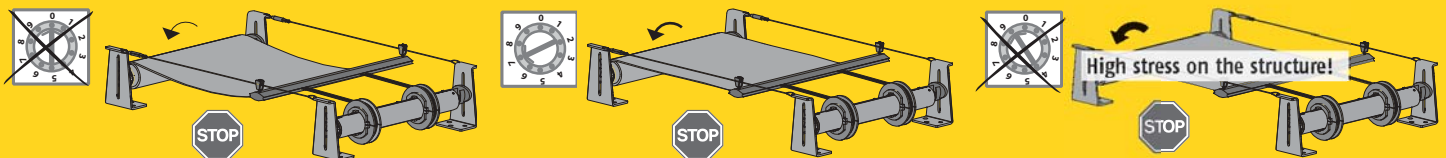
15. Adjusting the final tension

The final tension is set automatically by the control box, after every end limit stop or after a STOP request. The final tension needs to be adjusted on the potentiometer (XIV), graduated from 0 to 9.



- Request fabric feed-out, followed by a "stop" order: the system will stop, and then tension the fabric slightly. Perform various tests, gradually increasing the potentiometer value (XIV), until you obtain a correct tension.

N.B.: too high a final tension may weaken the structure!



16. Simultaneous brake release

Push button (XI) simultaneously activates the supply to the brakes on both actuators.

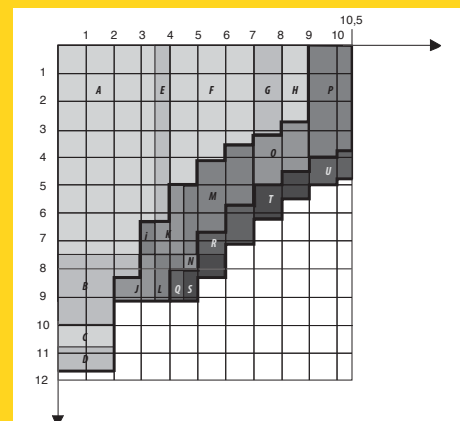
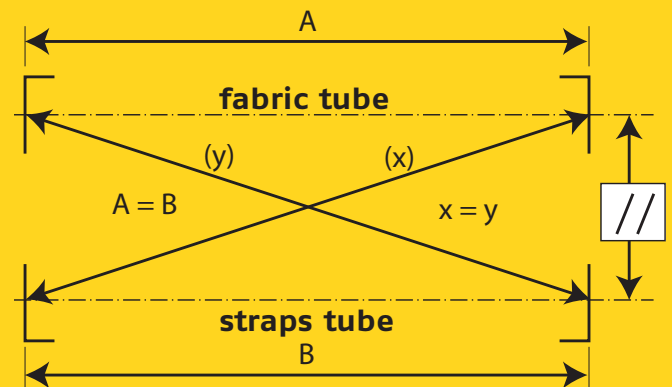
This operation eases the system tension, for example in order to adjust its parallel alignment.

N.B.: holding push button (XI) down too long (>1 minute) could damage the actuator brakes.



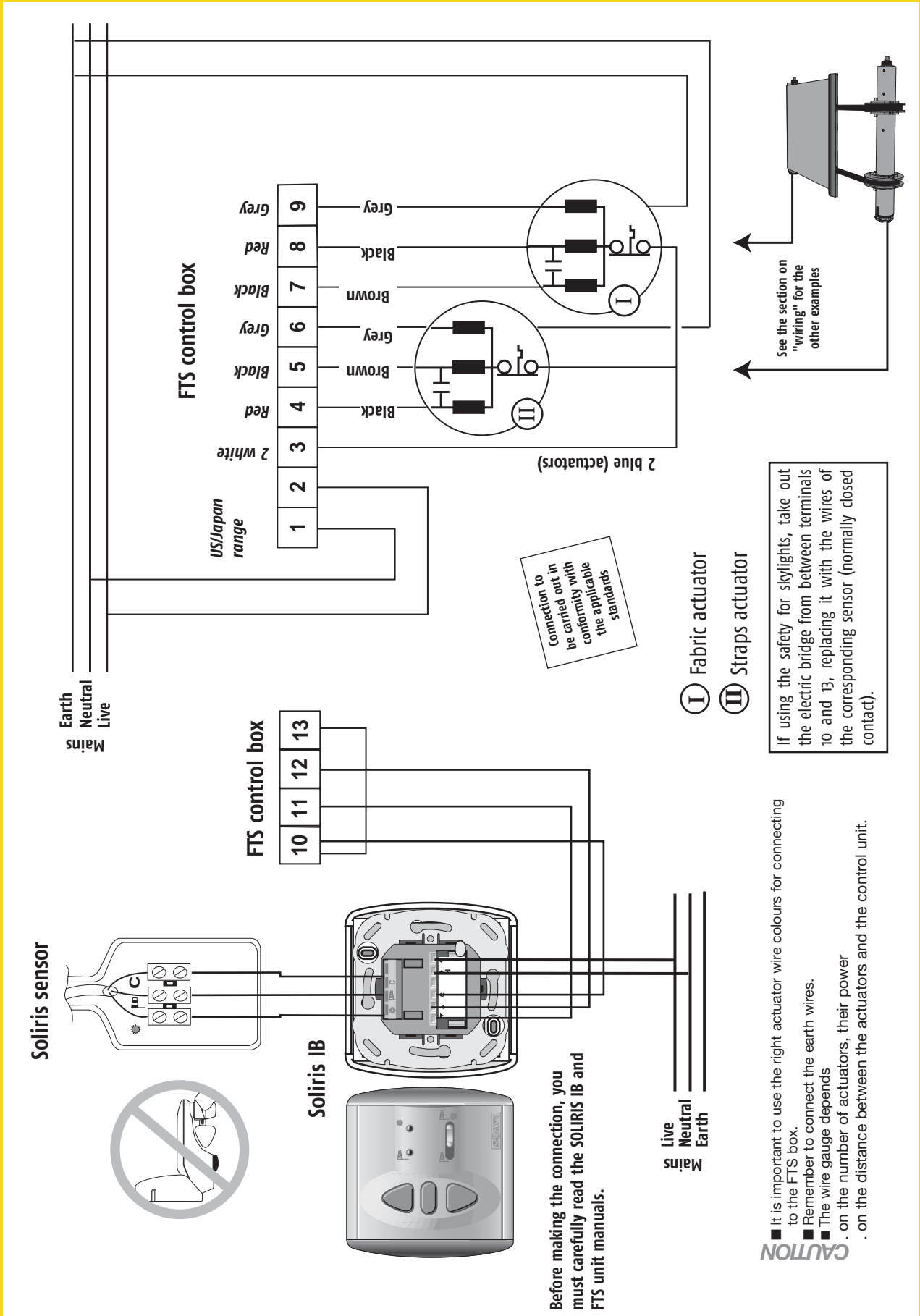
17. Repairs

- The FTS is not working:
 - Check the power supply (circuit breaker + control box fuse)
 - Check for the electric bridge between terminals 10 and 13 of the control box, or make sure that the safety contact is properly closed.
 - Press the end limit setting push buttons on both actuators, to put them into setting position (push buttons engaged), if they are at the end limit in both directions.
- The FTS stops during a manoeuvre and will not work:
 - If the thermal safety on one of the actuators has been triggered, you need to wait around 1/2 hour before operating the FTS again.
 - If the problem persists, disconnect the actuators from the control box to test them with the setting tool.
 - Check the power supply (circuit breaker + control box fuse).
- The system only starts after 2 or 3 presses on the control system:
 - This problem is due to mechanical clearance on a load-bearing component; indeed the time between the request being made on the control system and the actuator being released from its end limit must not exceed 1.1 seconds.
- The fabric winds onto the tube in a spiral:
 - Make sure that the edges of the fabric are perpendicular to the roller tube and the load bar.
 - Make sure that the straps are perpendicular to the roller tube and the load bar.
- The fabric unwinds jerkily and the actuators seem to be abnormally forced (noisy):
 - Reduce the dynamic tension on the potentiometer (XIII).
 - Make sure that the guidance system is not generating excessive stress.
- Whenever it is stopped, the system seems to strain the structure abnormally:
 - Reduce the final tension on the potentiometer (XIV).
 - Make sure that the actuators used are those recommended on our charts.



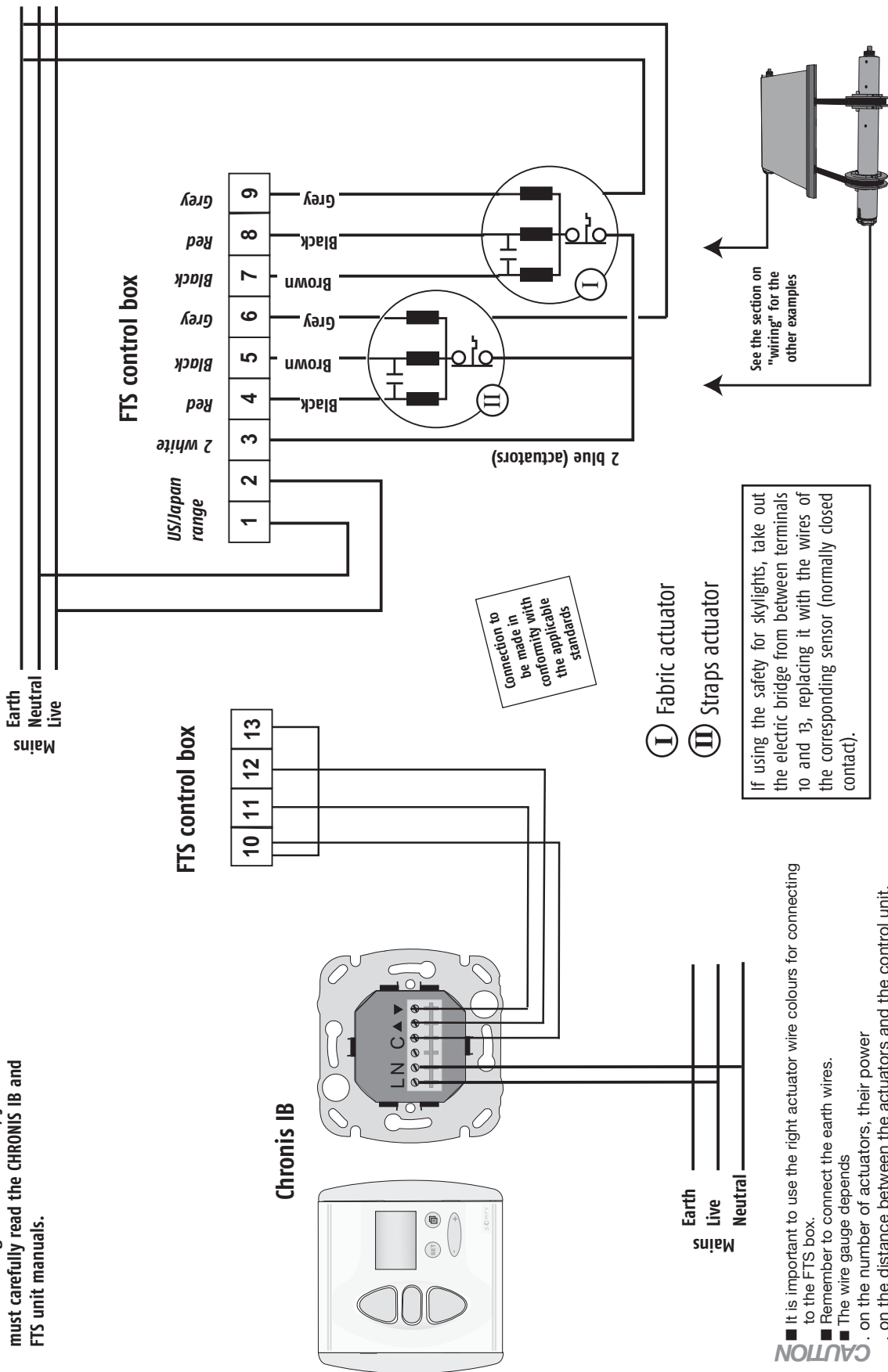
Wiring configurations of the FTS system

1. FTS system controlled by a Soliris IB



2. FTS system controlled by a Chronis IB

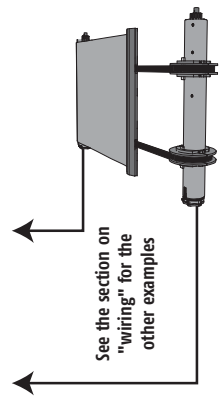
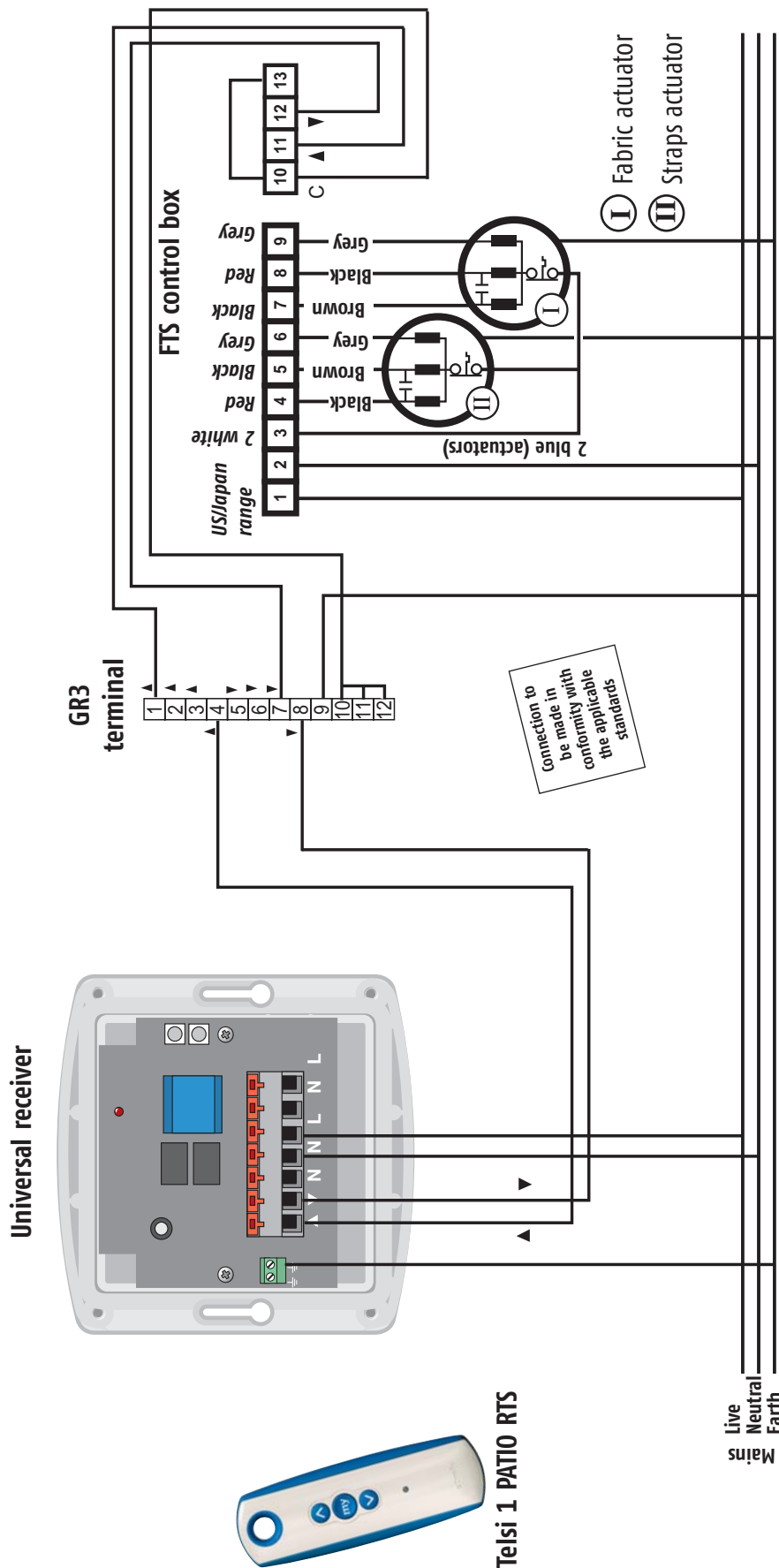
Before making the connection, you must carefully read the CHRONIS IB and FTS unit manuals.



Wiring configurations of the FTS system

3. FTS system controlled by a universal radio receiver connected to a GR3

Before making the connection, you must carefully read the universal receiver, GR3 module and FTS unit manuals.



If using the safety for skylights, take out the electric bridge from between terminals 10 and 13, replacing it with the wires of the corresponding sensor (normally closed contact).

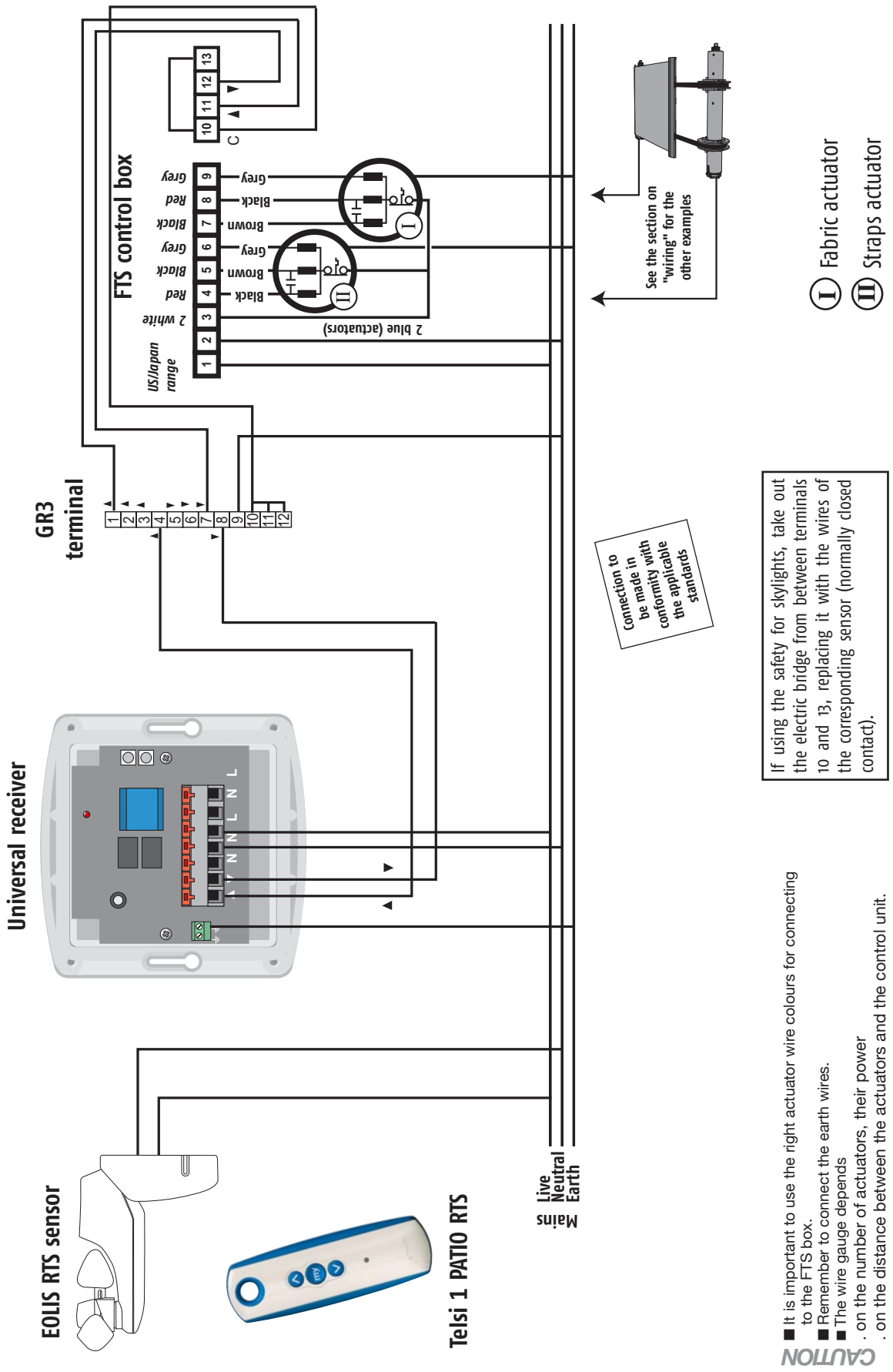
- It is important to use the right actuator wire colours for connecting to the FTS box.
- Remember to connect the earth wires.
- The wire gauge depends on the number of actuators, their power . on the distance between the actuators and the control unit.

CAUTION

Wiring configurations of the FTS system

4. FTS system controlled by a universal radio receiver connected to a GR3, with wind protection

Before making the connection, you must carefully read the universal receiver, Eolis RTS sensor, GR3 module and FTS unit manuals.

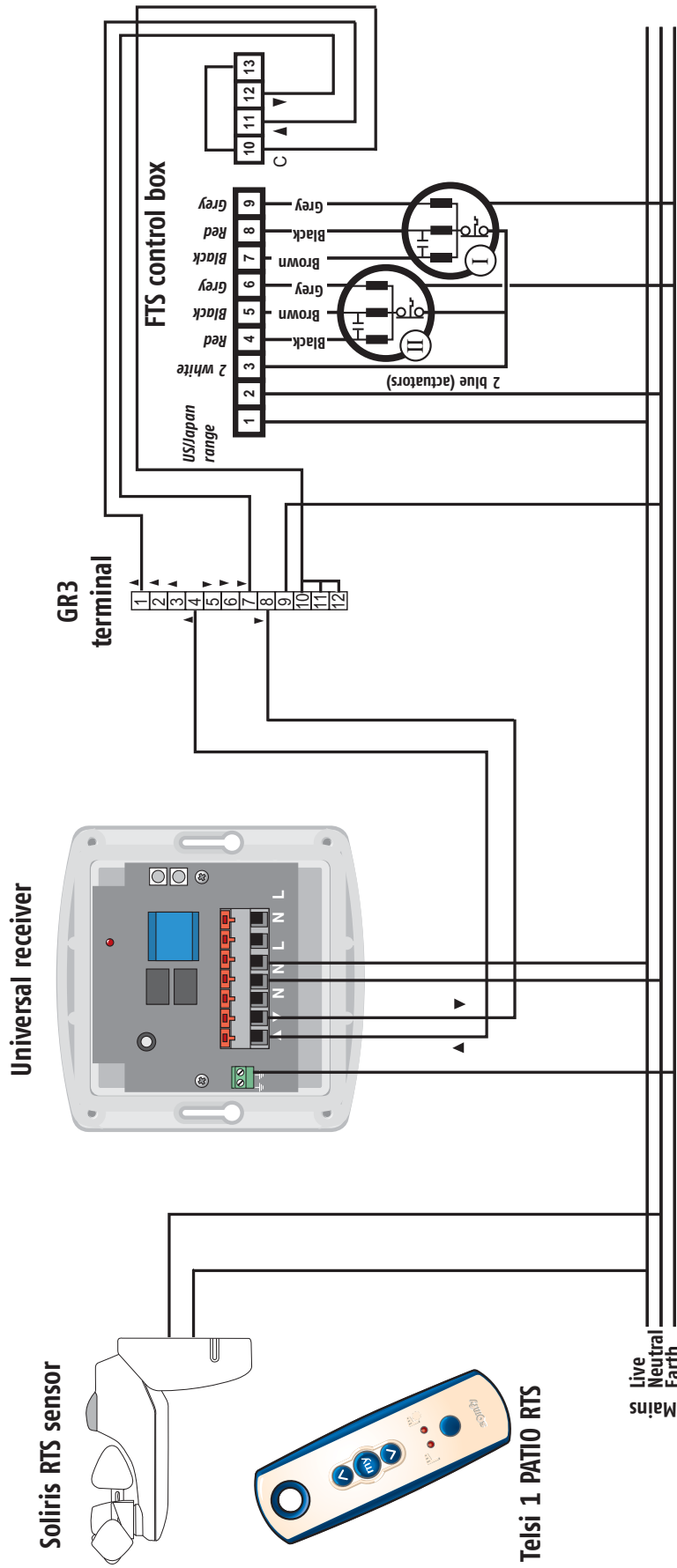


CAUTION

Wiring configurations of the FTS system

5. FTS system controlled by a universal radio receiver connected to a GR3, with wind/sun protection

Before making the connection, you must carefully read the universal receiver, Soliris RTS sensor, GR3 module and FTS unit manuals.

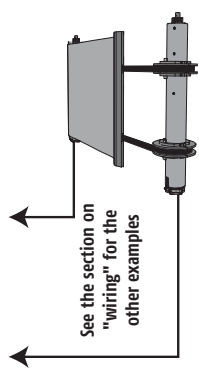


Connection to be made in conformity with the applicable standards

If using the safety for skylights, take out the electric bridge from between terminals 10 and 13, replacing it with the wires of the corresponding sensor (normally closed contact).

CAUTION

- It is important to use the right actuator wire colours for connecting to the FTS box.
- Remember to connect the earth wires.
- The wire gauge depends on the number of actuators, their power and on the distance between the actuators and the control unit.

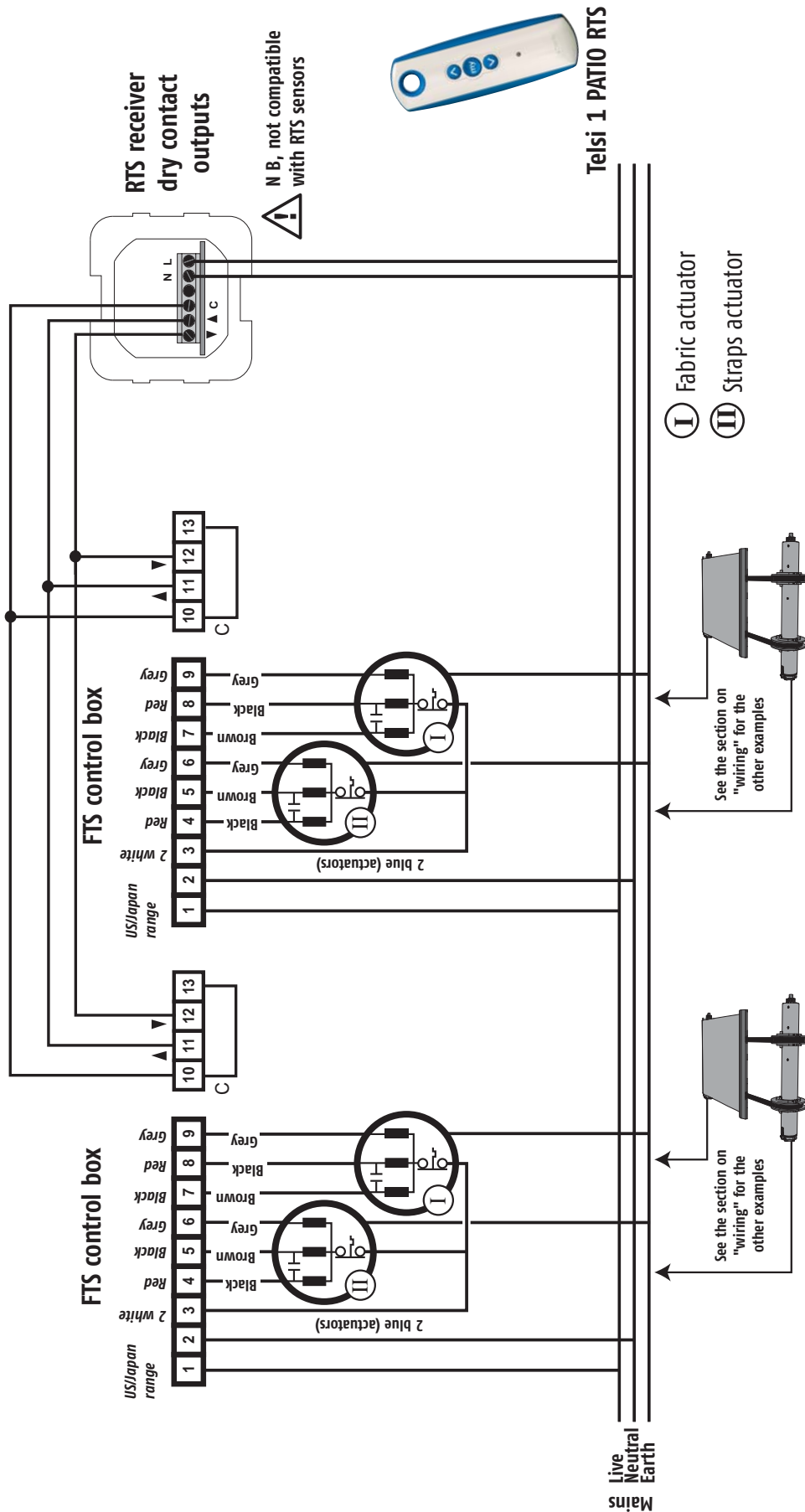


- Ⓘ Fabric actuator
- Ⓜ Straps actuator

Wiring configurations of the FTS system

6. 2 FTS systems controlled by an RTS sensor with dry contact outputs, with Telis patio RTS

Before making the connection, you must carefully read the dry contact output receiver and FTS unit manuals.



Connection to be made in conformity with the applicable standards

If using the safety for skylights, take out the electric bridge from between terminals 10 and 13, replacing it with the wires of the corresponding sensor (normally closed contact).

- I Fabric actuator
- II Straps actuator

See the section on "wiring" for the other examples

See the section on "wiring" for the other examples

- It is important to use the right actuator wire colours for connecting to the FTS box.
- Remember to connect the earth wires.
- The wire gauge depends on the number of actuators, their power . on the distance between the actuators and the control unit.



Wiring configurations of the FTS system

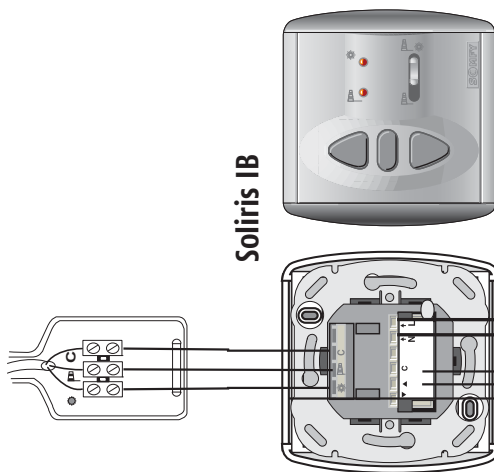
7. 2 FTS systems controlled by a Soliris IB

Before making the connection, you must carefully read the Soliris IB and FTS unit manuals.

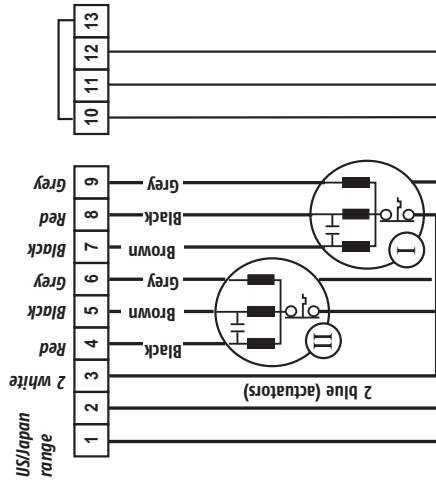
If using the safety for skylights, take out the electric bridge from between terminals 10 and 13, replacing it with the wires of the corresponding sensor (normally closed contact).

Connection to be carried out in conformity with the applicable standards

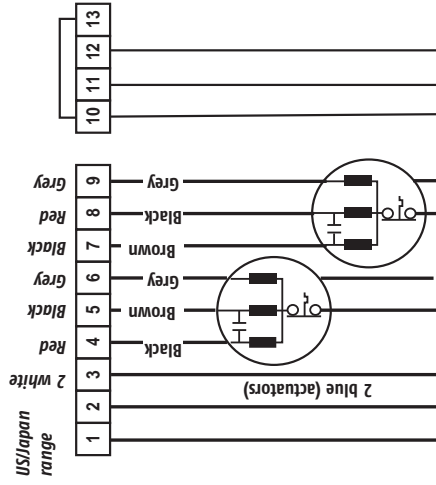
Soliris sensor



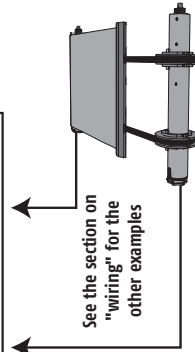
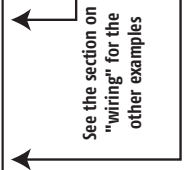
FTS control box



FTS control box



Live
Neutral
Earth
Mains



See the section on "wiring" for the other examples

See the section on "wiring" for the other examples

- I Fabricator
- II Straps

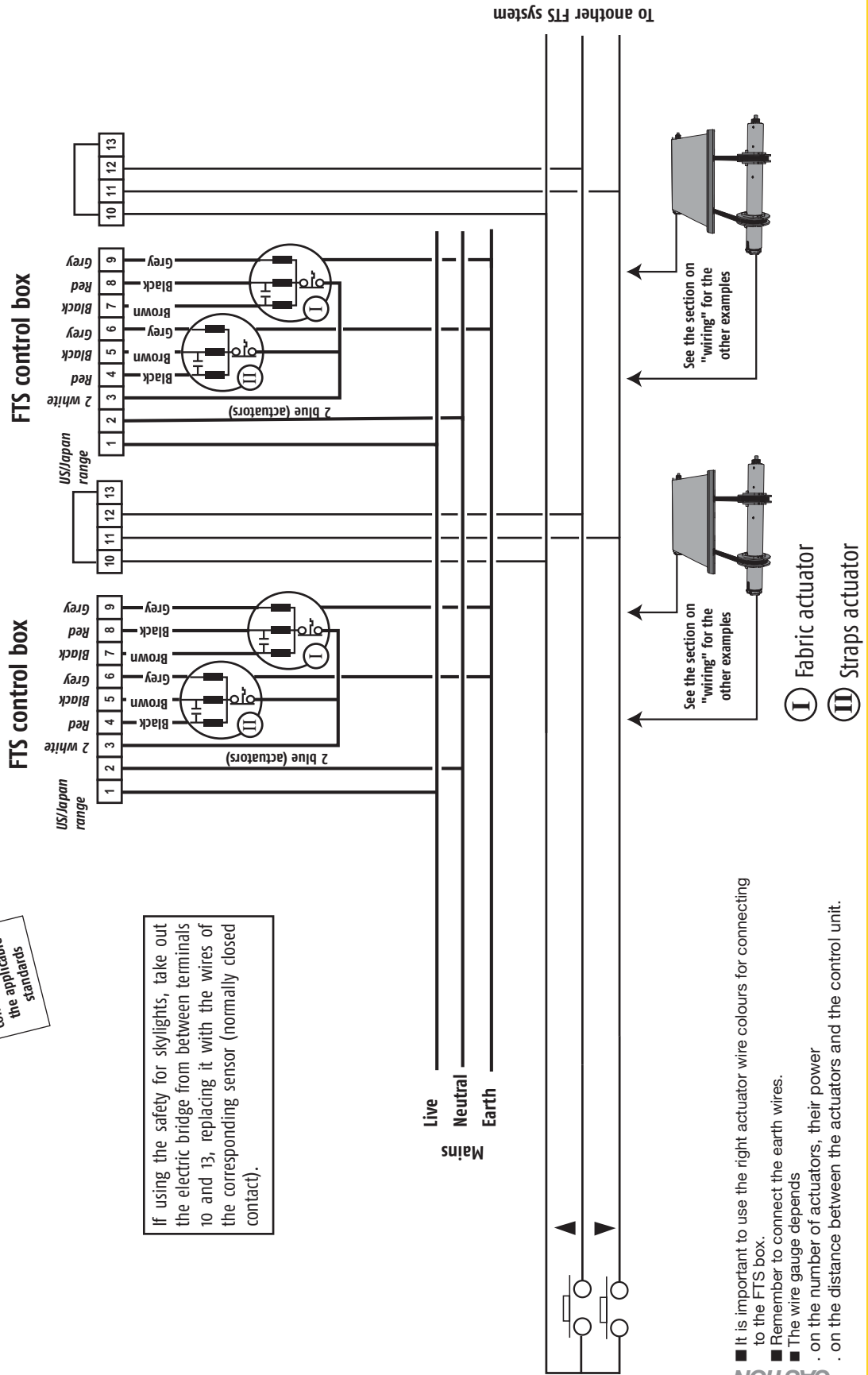
- CAUTION**
- It is important to use the right actuator wire colours for connecting to the FTS box.
 - Remember to connect the earth wires.
 - The wire gauge depends . on the number of actuators, their power . on the distance between the actuators and the control unit.

8. 2 FTS systems controlled by a double push button

Before making the connection, you must carefully read the FTS unit manual.

Connection to be made in conformity with the applicable standards

If using the safety for skylights, take out the electric bridge from between terminals 10 and 13, replacing it with the wires of the corresponding sensor (normally closed contact).



- CAUTION**
- It is important to use the right actuator wire colours for connecting to the FTS box.
 - Remember to connect the earth wires.
 - The wire gauge depends on the number of actuators, their power and on the distance between the actuators and the control unit.

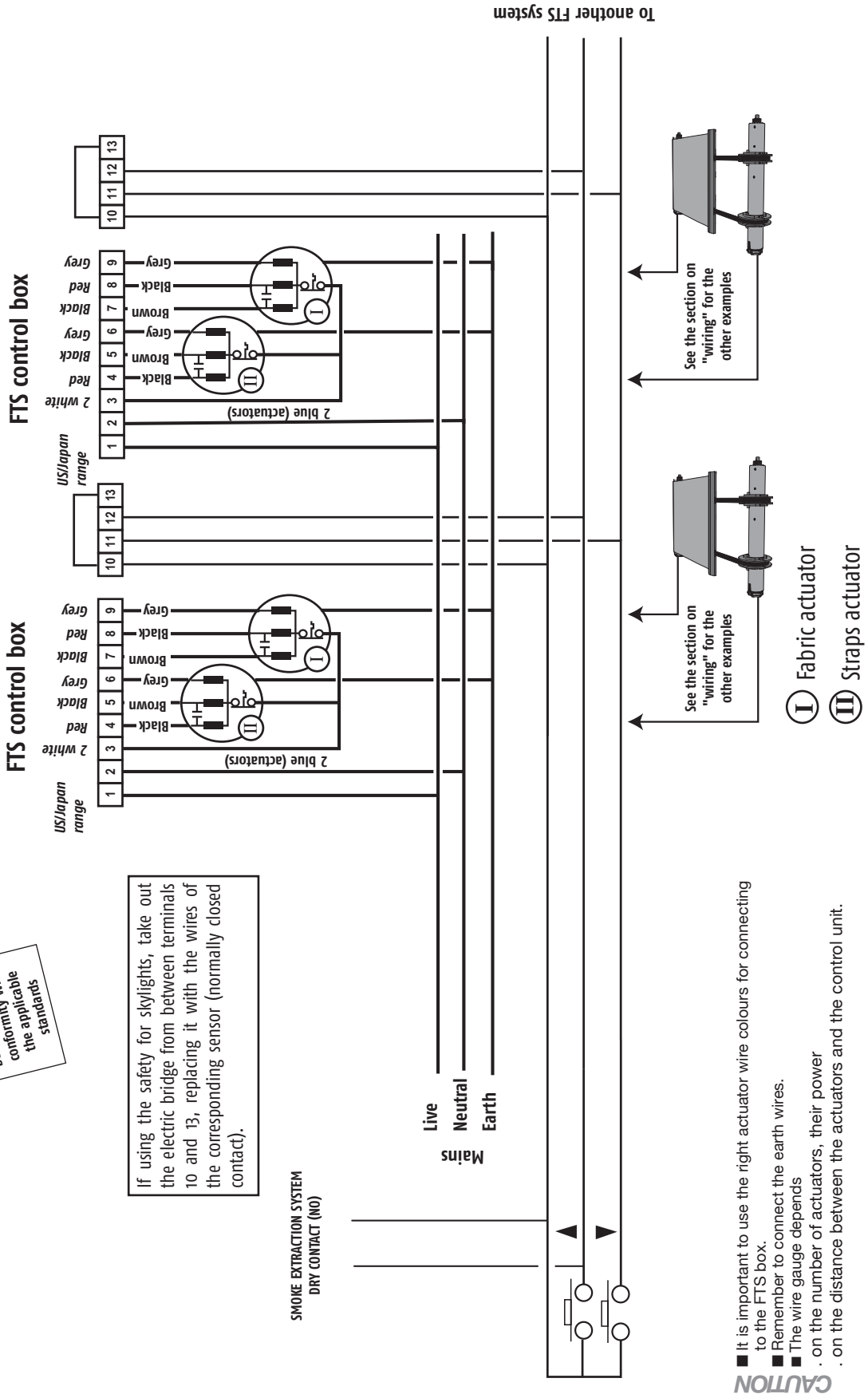
Wiring configurations of the FTS system

9. 2 FTS systems controlled by a double push button, with a smoke extraction system

Before making the connection, you must carefully read the FTS unit manual.

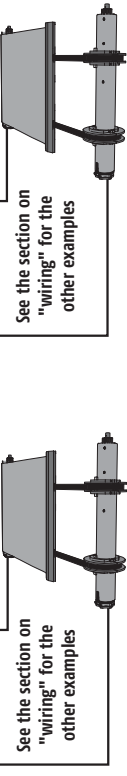
Connection to be carried out in conformity with the applicable standards

If using the safety for skylights, take out the electric bridge from between terminals 10 and 13, replacing it with the wires of the corresponding sensor (normally closed contact).



- CAUTION**
- It is important to use the right actuator wire colours for connecting to the FTS box.
 - Remember to connect the earth wires.
 - The wire gauge depends on the number of actuators, their power and on the distance between the actuators and the control unit.

- I Fabric actuator
- II Straps actuator



To another FTS system

SMOKE EXTRACTION SYSTEM DRY CONTACT (NO)

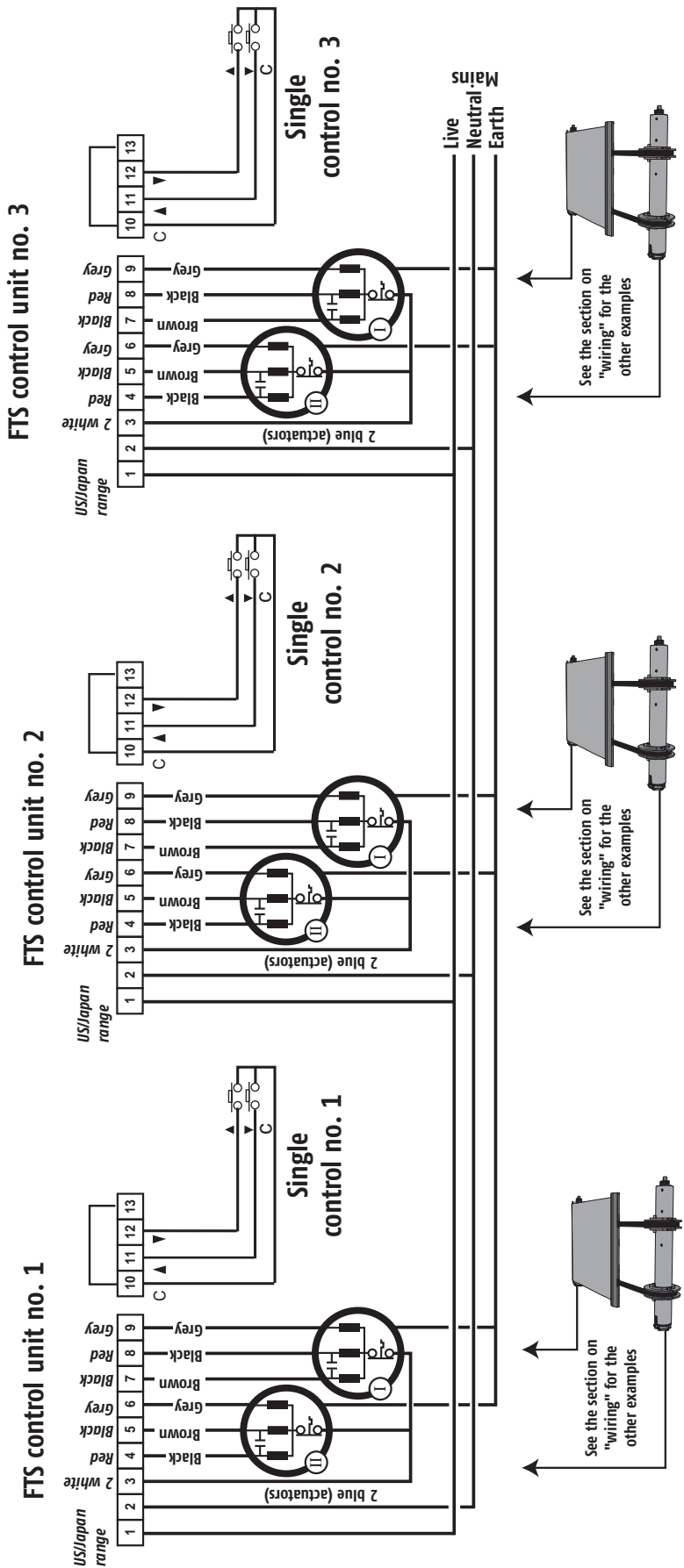
Mains
Live
Neutral
Earth

Wiring configurations of the FTS system

10. Three FTS systems controlled by single controls with push buttons

Before making the connection, you must carefully read the FTS unit manual.

Connection to be made in conformity with the applicable standards



If using the safety for skylights, take out the electric bridge from between terminals 10 and 13, replacing it with the wires of the corresponding sensor (normally closed contact).

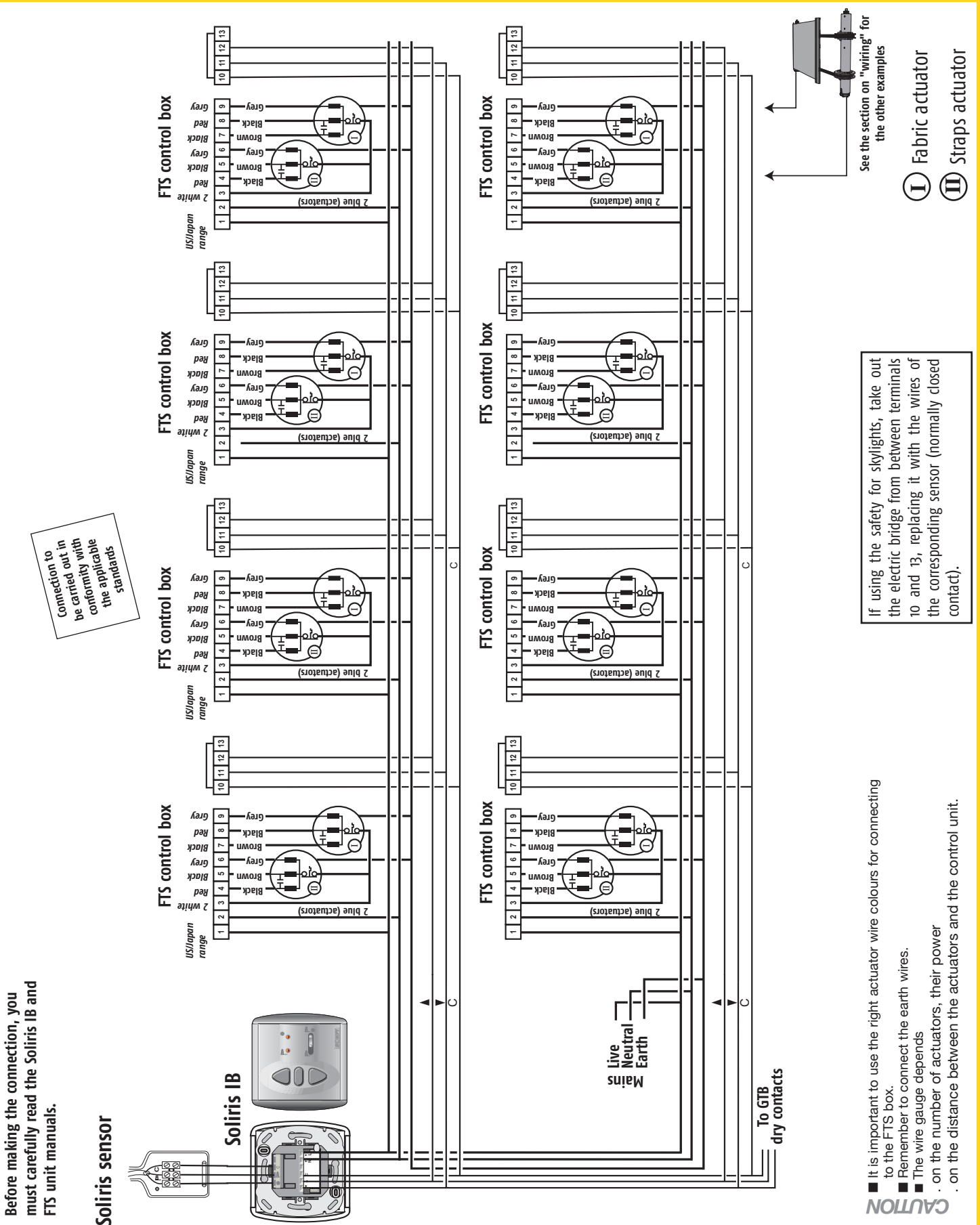
- I Fabric actuator
- II Straps actuator

- It is important to use the right actuator wire colours for connecting to the FTS box.
- Remember to connect the earth wires.
- The wire gauge depends on the number of actuators, their power and on the distance between the actuators and the control unit.

CAUTION

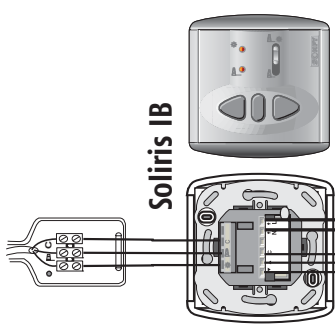
Wiring configurations of the FTS system

11. Several FTS systems controlled by a Soliris IB



Before making the connection, you must carefully read the Soliris IB and FTS unit manuals.

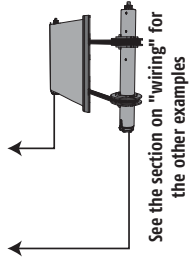
Soliris sensor



- It is important to use the right actuator wire colours for connecting to the FTS box.
- Remember to connect the earth wires.
- The wire gauge depends
 - on the number of actuators, their power
 - on the distance between the actuators and the control unit.

If using the safety for skylights, take out the electric bridge from between terminals 10 and 13, replacing it with the wires of the corresponding sensor (normally closed contact).

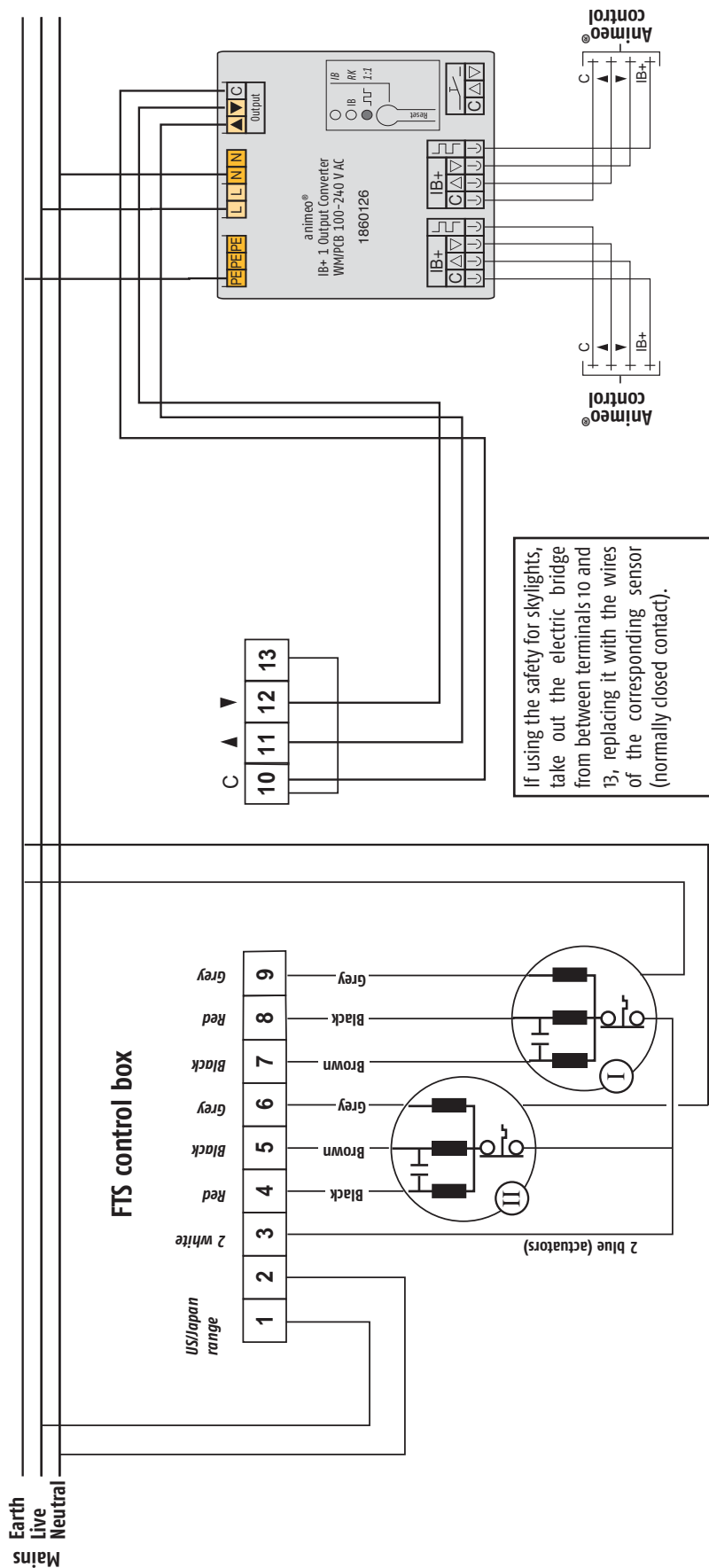
- I Fabric actuator
- II Straps actuator



Connection to be carried out in conformity with the applicable standards

10. FTS system controlled by an animeo® IB+ 1 Output Converter WM/PCB 100-240 V AC

Before making the connection, you must carefully read the animeo® IB+ 1 Output Converter WM/PCB 100-240 V AC and FTS unit manuals.



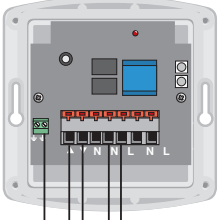

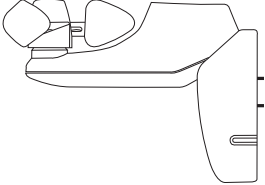
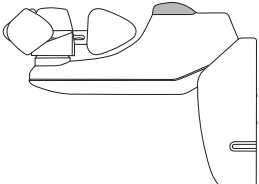


Double push buttons


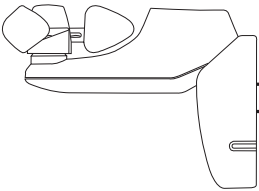
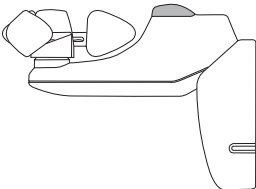


Product	Comments
Arnould double push buttons Espace series 1810228	
Arnould double push buttons Profil 2 series 1810239	
Arnould double push buttons Light series 1810395	
Arnould double push buttons Initia series 1810394	
Legrand double push buttons Mosaïc 45 series 1810226	
Somfy double push buttons Centralis IB 1810138	

FTS control systems

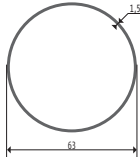
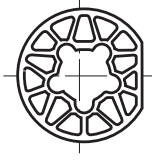

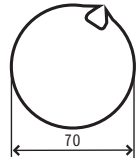
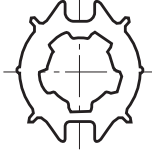
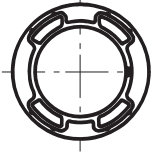
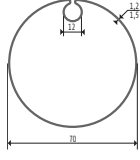
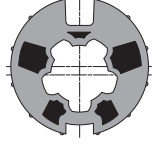
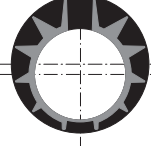
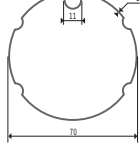
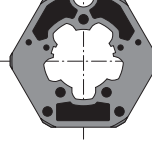
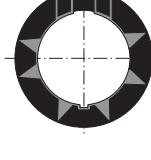
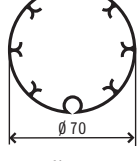

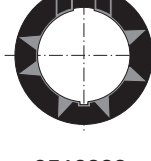
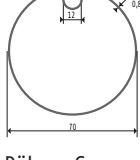
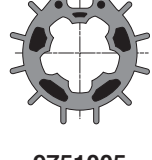
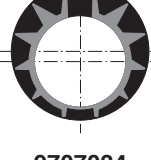
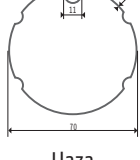


Automated functions

Product	Comments
<p>Soliris IB</p> <p>1818172</p> 	
<p>Chronis IB</p> <p>1805024</p> 	
<p>Universal receiver</p> <p>1810624</p> 	
<p>GR3</p> <p>1810054</p>	
<p>Telsi 1 PATIO RTS</p> <p>1810642</p> 	
<p>Eolis RTS sensor</p> <p>9000829</p> 	
<p>Soliris RTS sensor</p> <p>9000832</p> 	

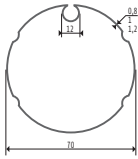
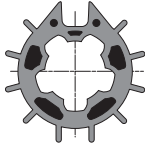
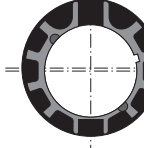
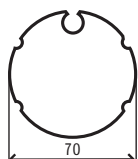
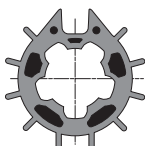
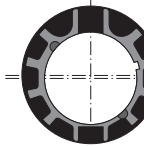
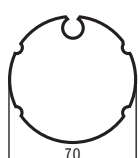
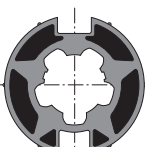
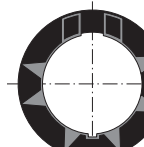

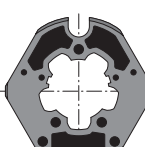
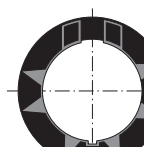
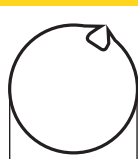
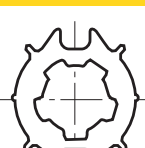

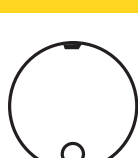

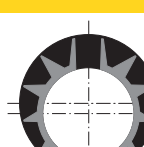
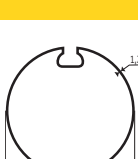


Automated functions

Product		Comments
<p>RTS receiver dry contact outputs</p> <p>1810750</p>		
<p>Eolis sensor</p> <p>9101481</p>		
<p>Soliris sensor</p> <p>9101475</p>		
<p>animeo® IB+ 1 Output Converter WM/PCB 100-240 V AC</p> <p>1860125</p>		
<p>animeo® IB+ 1 Output Converter WM/PCB 100-240 V AC</p> <p>1860126</p>		

LT50 adaptors

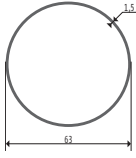
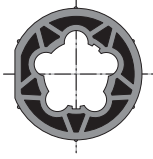

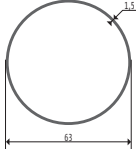
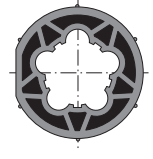
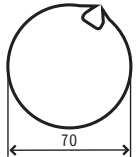
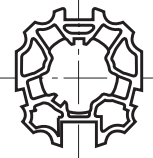
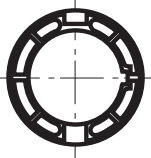
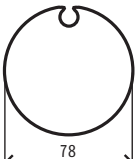
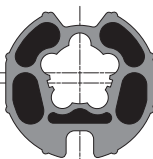
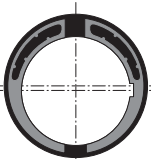
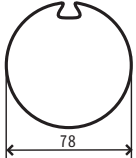
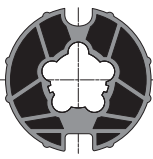
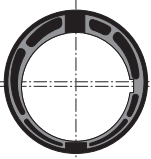
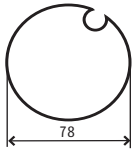
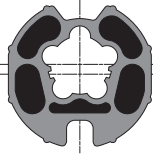
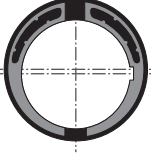
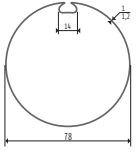
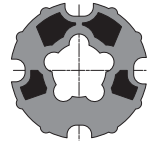
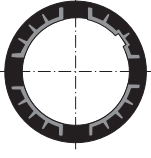
Tube	Wheel	Crown	Comments
ø63 63x1.5 	 9206019	 9707026	9206019
			9707026
			9206019 + 9707026 = 9410317
ø70 70x2.2 Perma 	 9751015	 9707036	9751015
			9707036
ø70 Döhner 70x1.2 70x1.5 Döhner 	 9751010	 9707034	9751010 Eccentricity: 3 mm.
			9707034 Eccentricity: 3 mm.
			9751010 + 9707034 = 9410421
ø70 Griesser 70 Griesser 	 9410406	 9510333	9410406
			9510333
			9410406 + 9510333 = 9410405
ø70 Heliostore 70 Heliostore 	 9410304	 9510333	9410304
			9510333
ø70 Döhner 70x1 70x0.8 Döhner Gamma 	 9751005	 9707034	9751005 Eccentricity: 2.2 mm.
			9707034 Eccentricity: 3 mm.
			9751005 + 9707034 = 9410313
ø70 Llaza 70 Llaza 	 9751005	 9707034	9751005 Eccentricity: 2.2 mm.
			9707034 Eccentricity: 3 mm.
			9751005 + 9707034 = 9410313

LT50 adaptors


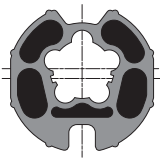
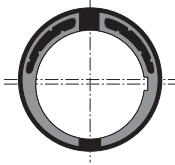
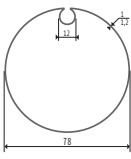
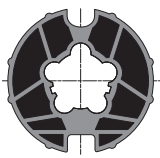
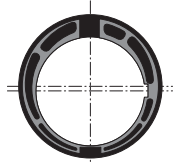
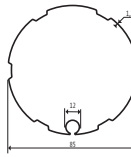
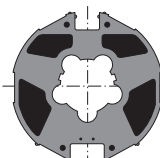
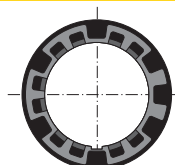
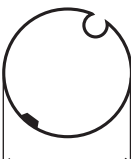
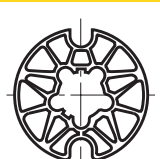

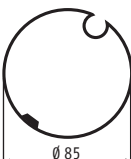
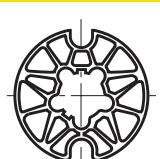
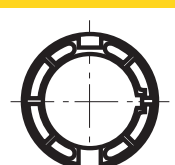
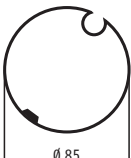
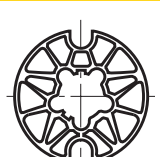
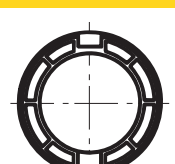
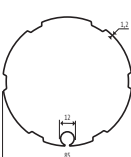
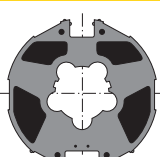
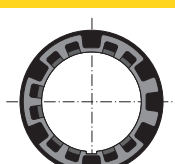
Tube	Wheel	Crown	Comments
<p>ø70 Imbac with round ridge</p>  <p>Imbac</p>	 <p>9751005</p>	 <p>9128424</p>	<p>9751005 Eccentricity: 2.2 mm.</p> <p>9128424 Eccentricity: 2 mm.</p> <p>9751005 + 9128424 = 9410351</p>
<p>ø70 70 with ridge</p> 	 <p>9751005</p>	 <p>9128424</p>	<p>9751005 Eccentricity: 2.2 mm.</p> <p>9128424 Eccentricity: 2 mm.</p> <p>9751005 + 9128424 = 9410351</p>
<p>ø70 round ridge</p> 	 <p>9410303</p>	 <p>9510333</p>	<p>9410303</p> <p>9510333</p> <p>9410303 + 9510333 = 9410315</p>
<p>ø70 with ridge</p> 	 <p>9410406</p>	 <p>9510333</p>	<p>9410406</p> <p>9510333</p> <p>9410406 + 9510333 = 9410380</p>
<p>ø70 Perma Ericson Aulina + Bäck Ahlquist</p> 	 <p>9751015</p>	 <p>9707036</p>	<p>9751015</p> <p>9707036</p>
<p>ø70 Röchling TS119</p>  <p>Röchling</p>	 <p>9751005</p>	 <p>9707034</p>	<p>9751005 Eccentricity: 2.2 mm.</p> <p>9707034 Eccentricity: 3 mm.</p> <p>9751005 + 9707034 = 9410313</p>
<p>ø70 Welser 70x1.2</p>  <p>Welser</p>	 <p>9410303</p>	 <p>9128429</p>	<p>9410303</p> <p>9128429 Centered.</p> <p>9410303 + 9128429 = 9410314</p>

FTS mechanical accessories

LT60 adaptors

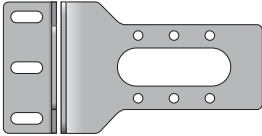
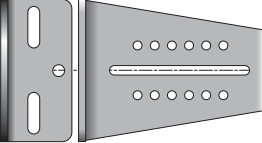
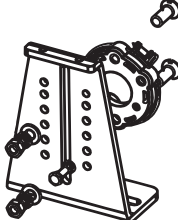

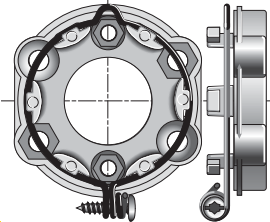
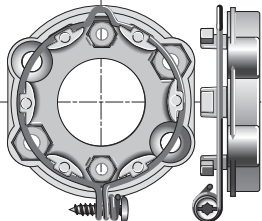
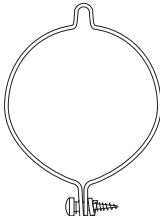
Tube	Wheel	Crown	Comments
<p>ø63 63x1.5</p> 	 <p>9206019 / 9420367</p>	<p>Actuator crown</p>	<p>9206019 sold in packs of 10 9420367 single item</p>
 <p>ø63 63x1.5</p> 	 <p>9206041 / 9420368</p>	<p>Actuator crown</p>	<p>9206041 sold in packs of 10 9420368 single item</p>
<p>ø70 Perma</p>  <p>Perma</p>	 <p>9761011</p>	 <p>9277167</p>	<p>9761011 Eccentricity: 4 mm.</p> <p>9277167 Eccentricity: 3.5 mm.</p> <p>9761011 + 9277167 = 9420325</p>
<p>ø78 Imbac ø 78 round ridge</p>  <p>Imbac</p>	 <p>9761005</p>	 <p>9707640</p>	<p>9761005 Eccentricity: 4.4 mm.</p> <p>9707640 Eccentricity: 4.4 mm.</p> <p>9761005+ 9707640 = 9420326</p>
<p>ø78 Imbac ø 78 flat ridge</p>  <p>Imbac</p>	 <p>9761004</p>	 <p>9707639</p>	<p>9761004 Eccentricity: 2.5 mm.</p> <p>9707639 Eccentricity: 2.5 mm.</p> <p>9761004+ 9707639 = 9420328</p>
<p>ø78 Mitjavila</p>  <p>Mitjavila</p>	 <p>9761005</p>	 <p>9707640 or 9701051</p>	<p>9761005 Eccentricity: 4.4 mm.</p> <p>9707640 Eccentricity: 4.4 mm.</p> <p>9761005+ 9707640 = 9420326</p>
<p>ø78 Döhner E-DS flat ridge</p>  <p>Döhner</p>	 <p>9761001</p>	 <p>9705341 or 9700985</p>	<p>9761001</p> <p>9705341</p> <p>9761001+ 9705341 = 9420327</p>

LT50 adaptors

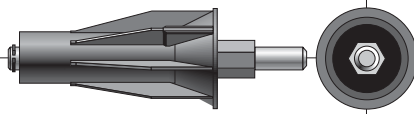
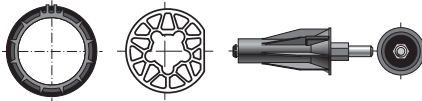
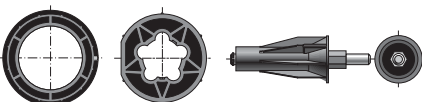
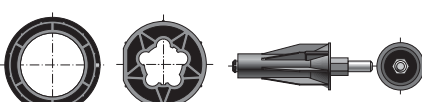
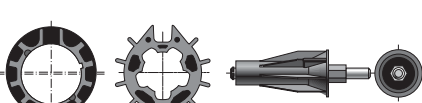
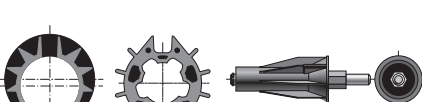
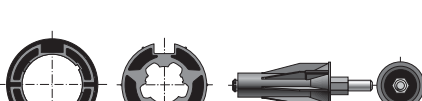
Tube	Wheel	Crown	Comments		
<p>ø78</p> <p>Döhner E-DS 78/R round ridge</p>  <p>Döhner</p>	 <p>9761005</p>	 <p>9707640 or 9701051</p>	<p>9761005 Eccentricity: 4.4 mm.</p> <table border="1"> <tr> <td>9707640 Eccentricity: 4.4 mm.</td> <td>9701051 Eccentricity: 4.4 mm.</td> </tr> </table> <p>9761005+ 9707640 = 9420326</p>	9707640 Eccentricity: 4.4 mm.	9701051 Eccentricity: 4.4 mm.
9707640 Eccentricity: 4.4 mm.	9701051 Eccentricity: 4.4 mm.				
<p>ø78</p> <p>Döhner E-DS 78/D</p>  <p>Döhner</p>	 <p>9761004</p>	 <p>9707639 or 9701061</p>	<p>9761004 Eccentricity: 2.5 mm.</p> <table border="1"> <tr> <td>9707639 Eccentricity: 2.5 mm.</td> <td>9701061 Eccentricity: 2.5 mm.</td> </tr> </table> <p>9761004+ 9707639 = 9420328</p>	9707639 Eccentricity: 2.5 mm.	9701061 Eccentricity: 2.5 mm.
9707639 Eccentricity: 2.5 mm.	9701061 Eccentricity: 2.5 mm.				
<p>ø85</p> <p>Imbac 85</p>  <p>Imbac</p>	 <p>9420300</p>	 <p>9690085</p>	<p>9420300</p> <p>9690085 Eccentricity: 3 mm.</p> <p>9420300 + 9690085 = 9420331</p>		
<p>ø85</p> <p>Döhner 85</p>  <p>Döhner</p>	 <p>9761003</p>	 <p>9707641 or 9701053</p>	<p>9761003</p> <table border="1"> <tr> <td>9707641 Eccentricity: 1 mm.</td> <td>9701053</td> </tr> </table> <p>9761003+ 9707641 = 9420330</p>	9707641 Eccentricity: 1 mm.	9701053
9707641 Eccentricity: 1 mm.	9701053				
<p>ø85</p> <p>Döhner E-DS 85 with ridge</p>  <p>Döhner E-DS 85</p>	 <p>9761003</p>	 <p>9701189</p>	<p>9761003</p> <p>9701189</p> <p>9761003+ 9701189 = 9420332</p>		
<p>ø85</p> <p>Warema 85</p>  <p>Warema</p>	 <p>9761003</p>	 <p>9705776</p>	<p>9761003</p> <p>9705776</p>		
<p>ø85</p> <p>Imbac 85 with ridge</p>  <p>Imbac</p>	 <p>9420300</p>	 <p>9690085</p>	<p>9420300</p> <p>9690085</p> <p>9420300+ 9690085 = 9420331</p>		

FTS mechanical accessories

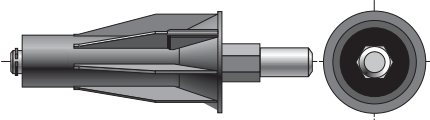
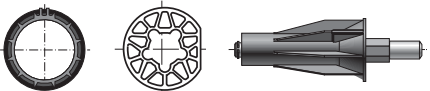
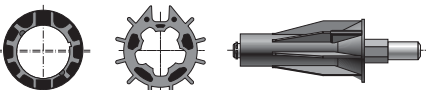
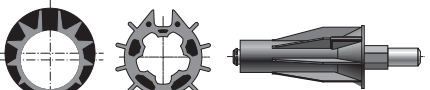
LT50 / LT60 brackets

Product		Comments
Bracket to be fixed to wall or ceiling 9420604		To be used with a universal bracket Max: FTS60 55/17. Mounting centre-to-centre distance: 49 and 98 mm/ $\varnothing 10$. Supplied in bulk.
Bracket LT FTS50 and 60 9430600		Max: FTS60 70/17. Mounting centre-to-centre distance: from 50 to 100 mm with M10 bolt.
Actuator bracket FTS LT50/60 9430601		Max: FTS60 70/17. Mounting centre-to-centre distance: from 50 to 100 mm with M10 bolt. Mazac universal bracket supplied with screws.
Adjustable plate with lockable ring 9763702		Max: FTS60 55 Nm.
Mazac universal bracket + lockable ring 9910003		Max: FTS60 70 Nm. Mounting centre-to-centre distance: 48 and 60 mm. Supplied with no screws.
Universal bracket 9910007		Max: FTS60 70 Nm. Mounting centre-to-centre distance: 48 and 60 mm. Supplied with mounting screws.
Lockable ring 9910002		Max: FTS60 70Nm.

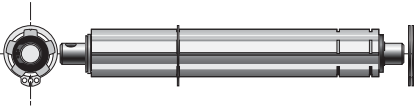
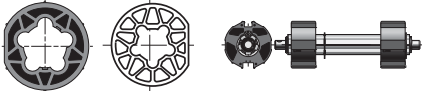
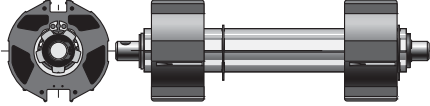
LT50 end pieces

Product	Image	Comments
Adjustable end piece - shaft D12 9420801		Supplied in bulk. Max: FTS50 25/17. To be used with an adaptor set for the roller tube.
End piece for tube D63x1.5 - shaft D12 9410820		Supplied in bulk. Max: FTS50 25/17.
End piece for tube D70x2 - shaft D12 9410818		Supplied in bulk. Max: FTS50 25/17.
End piece for tube D70x1.5 - shaft D12 9410819		Supplied in bulk. Max: FTS50 25/17.
End piece for tube lmbac 70 - shaft D12 9410817		Supplied in bulk. Max: FTS50 25/17.
End piece for tube Döhner 70 - shaft D12 9430616		Supplied in bulk. Max: FTS50 25/17.
End piece for tube Welser 70 - shaft D12 9430618		Supplied in bulk. Max: FTS50 25/17.

LT50 end pieces

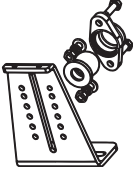
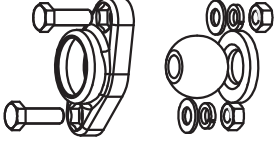
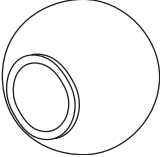
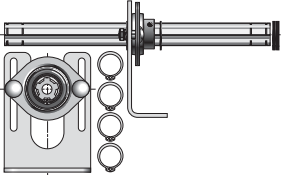
Product		Comments
<p>Adjustable end piece - shaft D14 9420802</p>		<p>Supplied in bulk. Max: FTS50 25/17. To be used with an adaptor set for the roller tube.</p>
<p>End piece for tube D63x1.5 - shaft D14 9430614</p>		<p>Supplied in bulk. Max: FTS50 25/17.</p>
<p>End piece for tube Imbac 70 - shaft D14 9430615</p>		<p>Supplied in bulk. Max: FTS50 25/17.</p>
<p>End piece for tube Döhner 70 - shaft D14 9430617</p>		<p>Supplied in bulk. Max: FTS50 25/17.</p>

End pieces LT60

Product	Comments
<p>Heavy load end piece 9420674</p> 	<p>Supplied in bulk. Max: FTS60 70/17. To be used with two drive wheels adapted to the roller tube.</p>
<p>Heavy load end piece D63 9430620</p> 	<p>Supplied in a bag, drive wheels fitted. Max: FTS60 70/17.</p>
<p>Heavy load end piece D85 9430626</p> 	<p>Supplied in a bag, drive wheels fitted. Max: FTS60 70/17.</p>

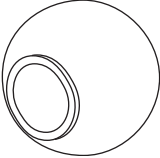
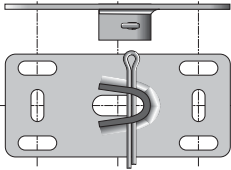
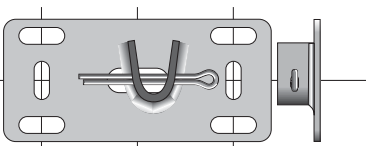
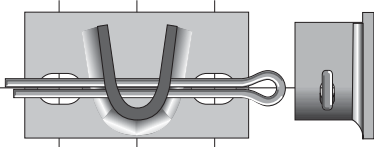
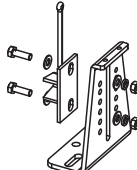
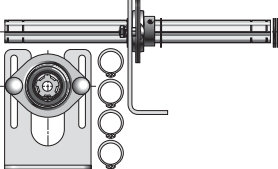
FTS mechanical accessories

End brackets FTS LT50

Product	Comments
<p>End bracket FTS50 - for shaft dia 12 9430602</p> 	<p>Supplied in bag. Max: FTS50 25/17.</p>
<p>End bracket with ball joint - for shaft dia 12 9430610</p> 	<p>Mounting centre-to-centre distance: 60 mm. Max: FTS50 25/17. Supplied in bag.</p>
<p>Nylon ball joint ext dia: 33 int dia: 12 9128642</p> 	<p>Max: FTS60 55/12.</p>
Empty row	
<p>Intermediate support complete 9420673</p> 	<p>To be used with four drive wheels adapted to the roller tube. Max: FTS60 70/17. Supplied in bag.</p>
Empty row	
Empty row	

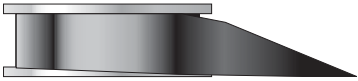

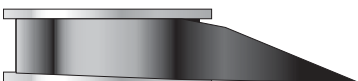
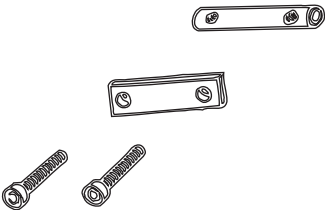
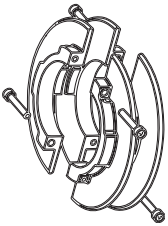
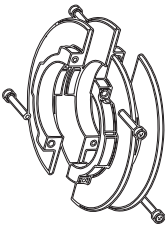
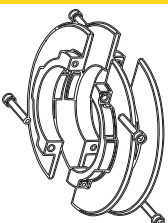
FTS mechanical accessories

End brackets FTS LT60

Product	Comments
<p>Nylon ball joint ext dia: 33 int dia: 16 9028532</p> 	<p>Max: FTS60 55/12.</p>
<p>Adjustable end bracket 9132065</p> 	<p>Max: FTS60 70/12.</p>
<p>Adjustable end bracket 9520600</p> 	<p>Max: FTS60 55/17.</p>
<p>Adjustable end bracket 9540786</p> 	<p>Max: FTS60 55/17.</p>
<p>End bracket FTS60 9430603</p> 	<p>Supplied in bag. Max: FTS60 70/17.</p>
Empty row	
<p>Complete intermediate bracket 9420673</p> 	<p>To be used with four drive wheels adapted to the roller tube. Max: FTS60 70/17. Supplied in bag.</p>

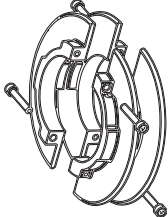
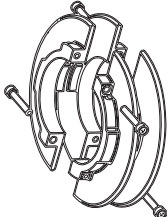
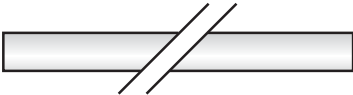
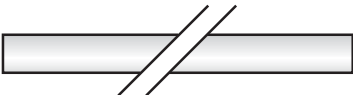
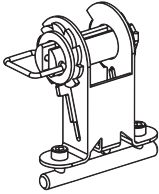
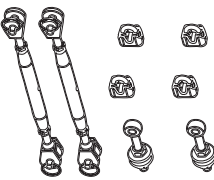

FTS mechanical accessories

Various accessories

Product	Image	Comments
<p>15 m strap</p> <p>9146046</p>		<p>Black strap 20 mm wide. Break resistance: 1000 daN.</p>
<p>20 m strap</p> <p>9146047</p>		<p>Black strap 20 mm wide. Break resistance: 1000 daN.</p>
<p>50 m strap</p> <p>9132077</p>		<p>Black strap 20 mm wide. Break resistance: 1000 daN.</p>
<p>Slide</p> <p>9146065</p>		<p>Allows the strap to be fixed to the load bar, compatible with ridges Ø5.</p>
<p>Guide pulley Int. dia. 63 Ext. dia. 130</p> <p>9146071</p>		<p>Allows 5 m of strap to be rolled up.</p>
<p>Guide pulley Int. dia. 63 Ext. dia. 160</p> <p>9146072</p>		<p>Allows 9 m of strap to be rolled up.</p>
<p>Guide pulley Int. dia. 63 Ext. dia. 175</p> <p>9430612</p>		<p>Allows 12 m of strap to be rolled up.</p>

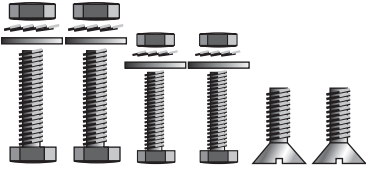
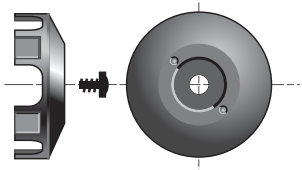
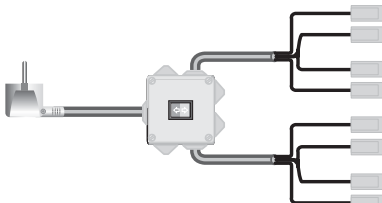
FTS mechanical accessories

Various accessories

Product		Comments
Guide pulley Int. dia. 70 Ext. dia. 160 950600		Allows 9 m of strap to be rolled up.
Guide pulley Int. dia. 50 Ext. dia. 110 9146035		Allows 4 m of strap to be rolled up.
Strip dia. 5 9146040		length = 3 m
Strip dia. 6 for tube 78 9146268		length = 3 m
Ratchet tensioner 9430606		Compatible with the 20 mm strap and the load bars with ridge Ø5.
Guiding accessory 9430611		For FTS guiding, contains: <ul style="list-style-type: none"> • 2 eye screws • 4 cable tighteners • 2 turnbuckles Compatible with cable Ø4.
Stainless steel cable Ø4 9430607A		

FTS mechanical accessories

Various accessories

Product	Comments
<p>Bolts and nuts for universal actuator bracket</p> <p>9670002</p> 	
<p>Wheel stop LT50</p> <p>9910004</p> 	<p>Supplied in a bag with a bolt. Max: FTS LT50 25/17.</p>
<p>FTS setting tool</p> <p>9137080</p> 	<p>For LS 40, LT 50 and LT 60 motors. Length 3m.</p>

FTS charts (230v/50hz range motors)

- The FTS system is entirely dedicated to sun protection.
- The selection charts are designed for horizontal shading or on a very slight incline (5 % max).

For a different application, please contact a Somfy technician who will study the feasibility of your installation with you (screen at high incline, vertical system, etc.)

1. Selection of actuators and tubes

The power of the actuators must be adapted to the solidity of the support structure:

- Veranda type light structure: FTS LT50 25/17 only.
- Rigid structure: FTS LT50 25/17 (25 m² max), FTS LT60 55/17 (40 m² max) or FTS LT60 70/17 (50 m² max).

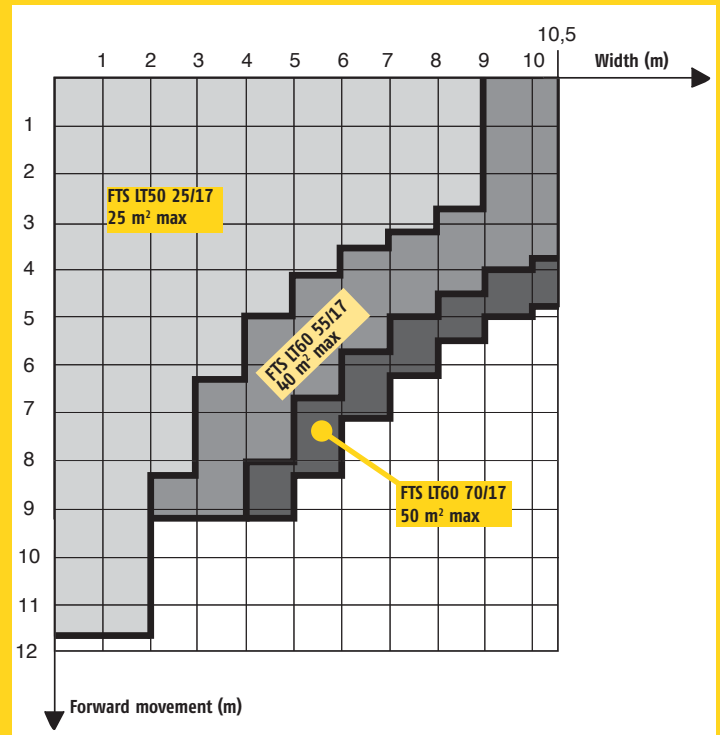
FTS LT50 25/17: strap tube Ø 63 x 1.5 mm smooth
fabric tube Ø 70 grooved

FTS LT60 55/17: strap tube Ø 63 x 1.5 mm smooth
fabric tube Ø 78 grooved

2. Accessory selection

- Guiding is necessary for all forward movement.
- Pulleys Ø 130 mm up to 5 m forward movement.
- Pulleys Ø 160 mm up to 9 m forward movement.
- Pulleys Ø 175 mm up to 12 m forward movement.

Note: The maximum capacity of the end limit cage of the FTS LT50 25/17 is 46 turns, which allows 11.7 m of fabric to be coiled on a Ø 70 mm tube.



Selection chart for the Europe range

3. Intermediate supports

Beyond a certain width, it is necessary to split the roller tubes, the load bar and the fabric to avoid heavy flexing of the system.

The maximum dimensions are given as a guide and will depend on the mechanical characteristics of the tubes and the load bar that are used.

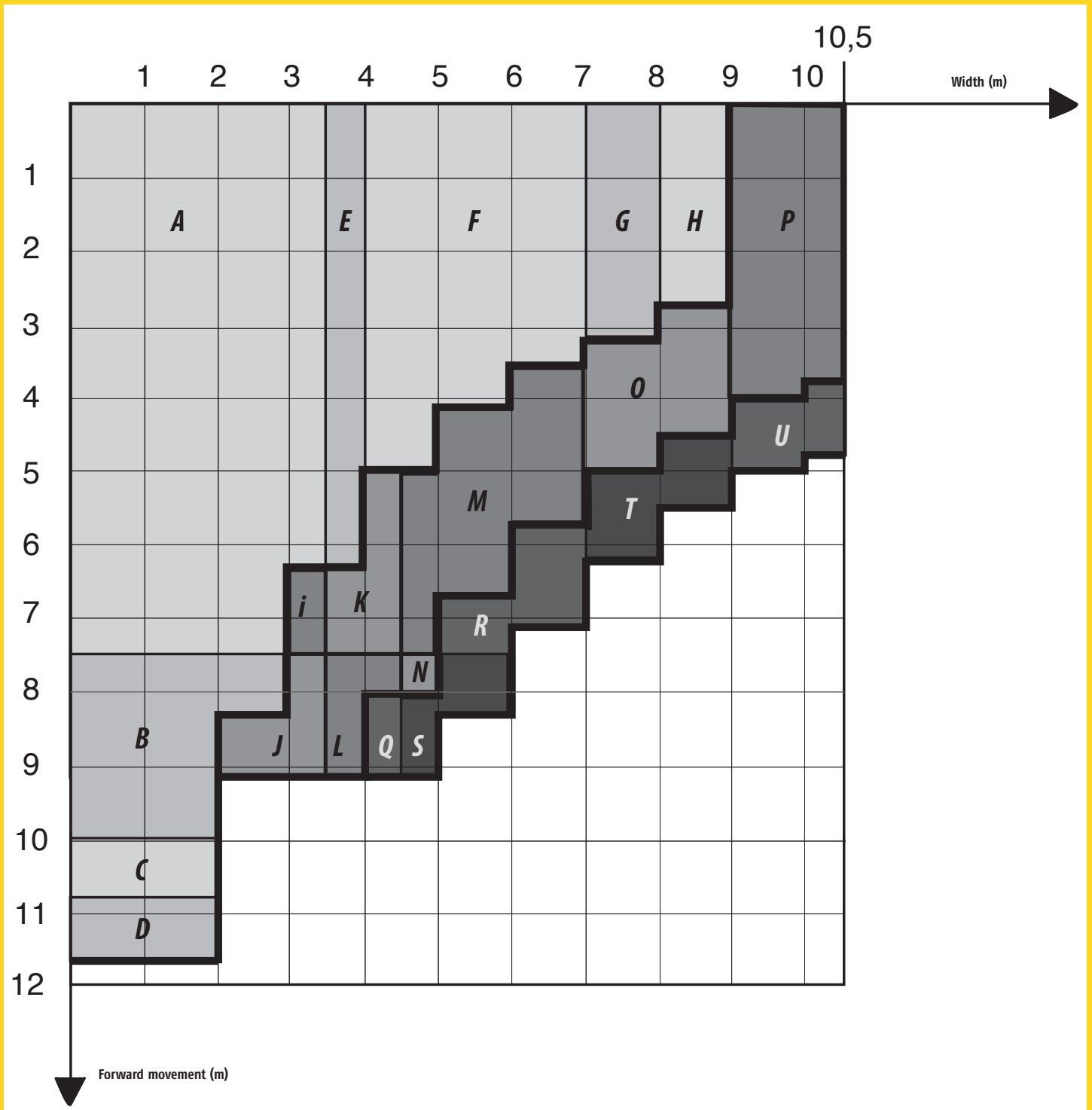
Number of intermediate supports according to the width of the system:

Straps tube				
0	1	2		Ø 63 x 1.5 mm
Fabric tube				
0	1	2		Ø 70 ridged
0	1	2		Ø 78 ridged

Width in metres: 3.5, 4.0, 4.5, 5.0, 7.0, 8.0, 9.0, 10.0, 10.5

FTS charts (230v/50hz range motors)

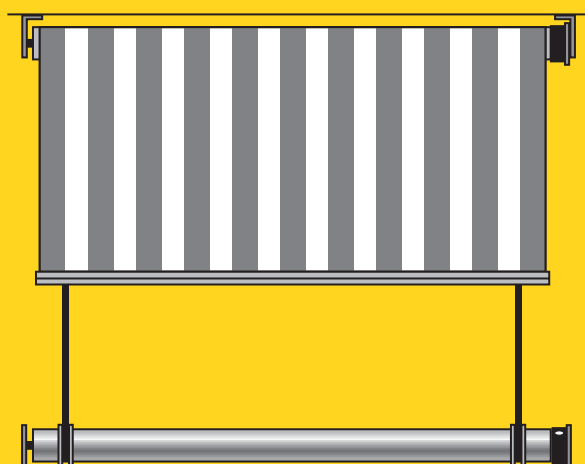
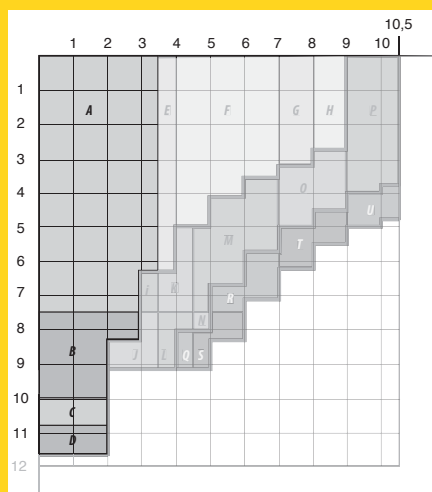
4. General charts with usage case - Europe range



Note: The different cases indicated above correspond to accessory lists developed on the following pages.

FTS charts (230v/50hz range motors)

5. Case A - B - C - D (FTS LT50 25/17)



Description	Part number	Case A	Case B	Case C	Case D
FTS LT50 25/17	1126000		2		
FTS Hi-Pro unit	1822009		1		
Adapter set \varnothing 63 (*)	9410317	2 (1 for strap actuator + 1 for end piece)			
Adapter set \varnothing 70 (*)	9410351	2 (1 for fabric actuator + 1 for end piece)			
Actuator bracket	9430601		2		
End bracket with shoe \varnothing 12	9430602		2		
Adjustable end piece \varnothing 12	9420801		2		
Ratchet tensioner	9430606		2		
Strip \varnothing 5 (3 metres)	9146040	2 (width < 3m) 3 (3 m \leq width < 3.5 m)		2	
Pulley \varnothing 63 / \varnothing 130	9146071				
Pulley \varnothing 63 / \varnothing 160	9146072	2	2	2	
Pulley \varnothing 63 / \varnothing 175	9430612				2
Black strap 15 metres	9146046	1			
Black strap 20 metres	9146047				
Black strap 50 metres	9132077		1	1	1
Cable guiding accessory	9430611		1		
Stainless steel cable 30 metres	9430607A		1		
Control system			1		

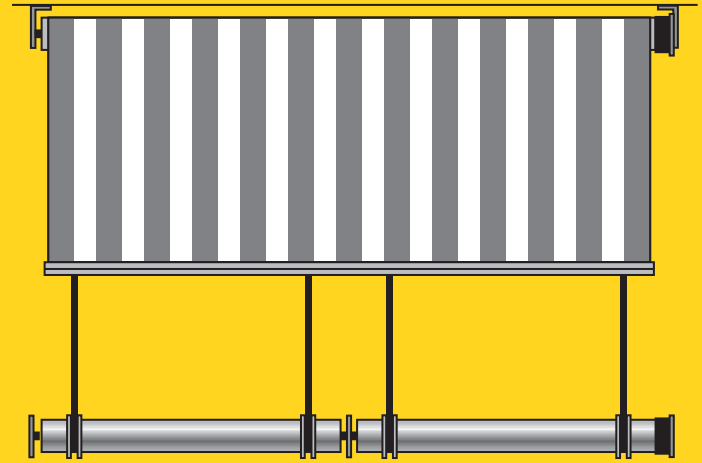
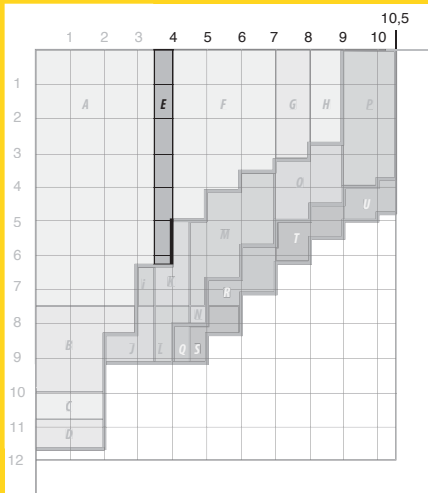
(*) see note 1

Note:

- When using different tubes, it is necessary to modify the adaptor references.
- This accessory list does not include the load bar (not supplied by Somfy).
- For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

FTS charts (230v/50hz range motors)

6. Case E (FTS LT50 25/17)



Description	Part number	Case E
FTS LT50 25/17	1126000	2
FTS Hi-Pro unit	1822009	1
Adapter set \varnothing 63 (*)	9410317	2 (1 for strap actuator + 1 for end piece)
Adapter set \varnothing 70 (*)	9410351	2 (1 for fabric actuator + 1 for end piece)
Actuator bracket	9430601	2
End bracket with shoe \varnothing 12	9430602	2
Adjustable end piece \varnothing 12	9420801	2
Intermediate support	9420673	1
Wheel for tube \varnothing 63 (*)	9206019	4
Ratchet tensioner	9430606	4
Strip \varnothing 5 (3 metres)	9146040	3
Pulley \varnothing 63 / \varnothing 130	9146071	
Pulley \varnothing 63 / \varnothing 160	9146072	4
Pulley \varnothing 63 / \varnothing 175	9430612	
Black strap 15 metres	9146046	
Black strap 20 metres	9146047	1 (if forward movement < 5 metres)
Black strap 50 metres	9132077	1 (if forward movement \geq 5 metres)
Cable guiding accessory	9430611	1
Stainless steel cable 30 metres	9430607A	1
Control system		1

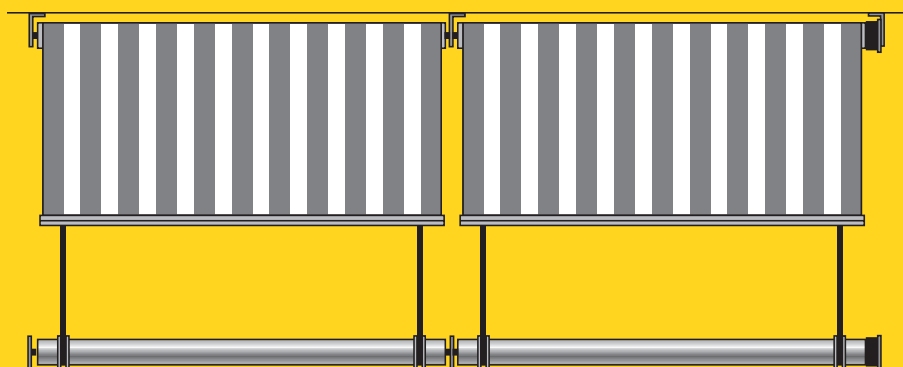
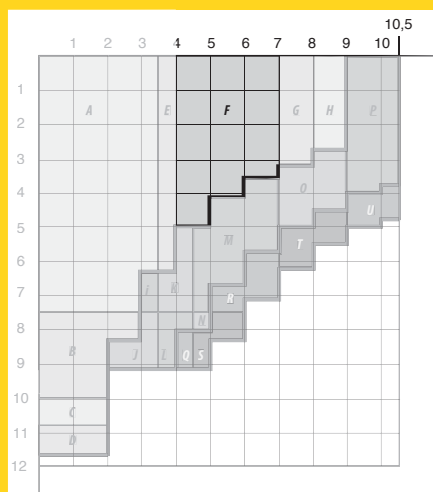
(*) see note 1

Note:

- When using different tubes, it is necessary to modify the adaptor references.
- This accessory list does not include the load bar (not supplied by Somfy).
- For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

FTS charts (230v/50hz range motors)

7. Case F (FTS LT50 25/17)



Description	Part number	Case F
FTS LT50 25/17	1126000	2
FTS Hi-Pro unit	1822009	1
Adapter set \varnothing 63 (*)	9410317	2 (1 for strap actuator + 1 for end piece)
Adapter set \varnothing 70 (*)	9410351	2 (1 for fabric actuator + 1 for end piece)
Actuator bracket	9430601	2
End bracket with shoe \varnothing 12	9430602	2
Adjustable end piece \varnothing 12	9420801	2
Intermediate support	9420673	2
Wheel for tube \varnothing 63 (*)	9206019	4
Wheel for tube \varnothing 70 (*)	9751005	4
Ratchet tensioner	9430606	4
Strip \varnothing 5 (3 metres)	9146040	4 (width < 6 m) 5 (6 m \leq width < 7 m)
Pulley \varnothing 63 / \varnothing 130	9146071	4
Pulley \varnothing 63 / \varnothing 160	9146072	
Pulley \varnothing 63 / \varnothing 175	9430612	
Black strap 15 metres	9146046	
Black strap 20 metres	9146047	1
Black strap 50 metres	9132077	
Cable guiding accessory	9430611	2
Stainless steel cable 30 metres	9430607A	1
Control system		1

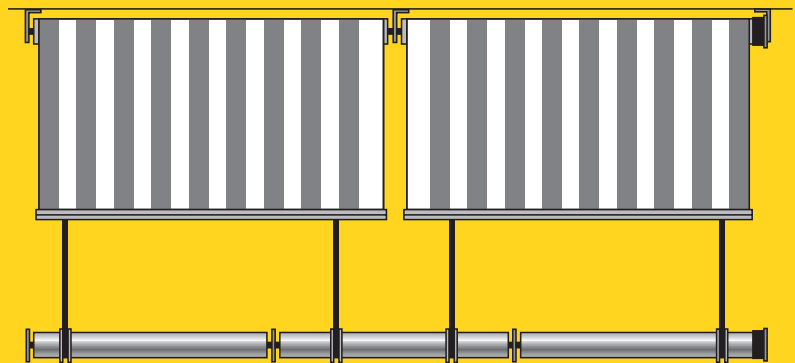
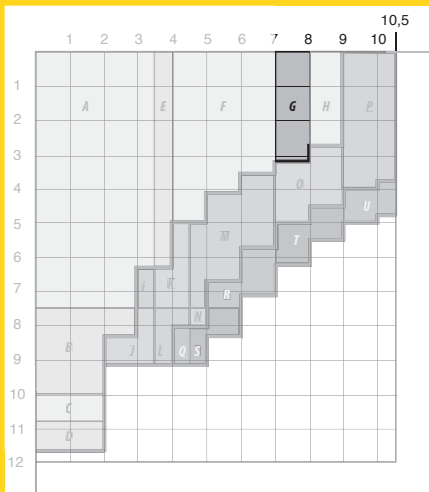
(*) see note 1

Note:

- When using different tubes, it is necessary to modify the adaptor references.
- This accessory list does not include the load bar (not supplied by Somfy).
- For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

FTS charts (230v/50hz range motors)

8. Case G (FTS LT50 25/17)



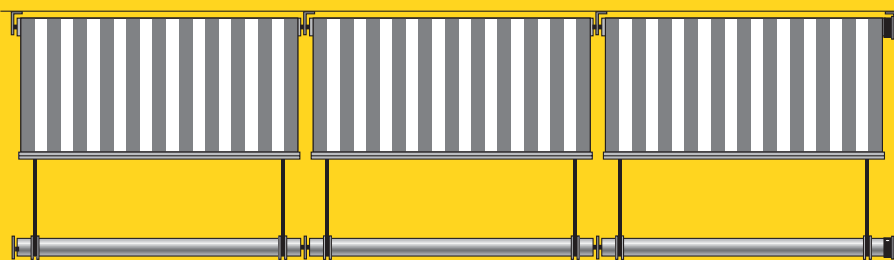
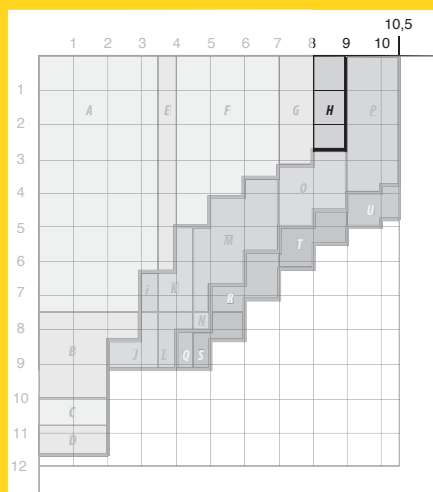
Description	Part number	Case G
FTS LT50 25/17	1126000	2
FTS Hi-Pro unit	1822009	1
Adapter set \varnothing 63 (*)	9410317	2 (1 for strap actuator + 1 for end piece)
Adapter set \varnothing 70 (*)	9410351	2 (1 for fabric actuator + 1 for end piece)
Actuator bracket	9430601	2
End bracket with shoe \varnothing 12	9430602	2
Adjustable end piece \varnothing 12	9420801	2
Intermediate support	9420673	3
Wheel for tube \varnothing 63 (*)	9206019	8
Wheel for tube \varnothing 70 (*)	9751005	4
Ratchet tensioner	9430606	4
Strip \varnothing 5 (3 metres)	9146040	6
Pulley \varnothing 63 / \varnothing 130	9146071	4
Pulley \varnothing 63 / \varnothing 160	9146072	
Pulley \varnothing 63 / \varnothing 175	9430612	
Black strap 15 metres	9146046	
Black strap 20 metres	9146047	
Black strap 50 metres	9132077	1
Cable guiding accessory	9430611	2
Stainless steel cable 30 metres	9430607A	1
Control system		1

(*) see note 1

- Note:**
- When using different tubes, it is necessary to modify the adaptor references.
 - This accessory list does not include the load bar (not supplied by Somfy).
 - For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

FTS charts (230v/50hz range motors)

9. Case H (FTS LT50 25/17)



Description	Part number	Case H
FTS LT50 25/17	1126000	2
FTS Hi-Pro unit	1822009	1
Adapter set \varnothing 63 (*)	9410317	2 (1 for strap actuator + 1 for end piece)
Adapter set \varnothing 70 (*)	9410351	2 (1 for fabric actuator + 1 for end piece)
Actuator bracket	9430601	2
End bracket with shoe \varnothing 12	9430602	2
Adjustable end piece \varnothing 12	9420801	2
Intermediate support	9420673	4
Wheel for tube \varnothing 63 (*)	9206019	8
Wheel for tube \varnothing 70 (*)	9751005	8
Ratchet tensioner	9430606	6
Strip \varnothing 5 (3 metres)	9146040	6
Pulley \varnothing 63 / \varnothing 130	9146071	6
Pulley \varnothing 63 / \varnothing 160	9146072	
Pulley \varnothing 63 / \varnothing 175	9430612	
Black strap 15 metres	9146046	
Black strap 20 metres	9146047	1
Black strap 50 metres	9132077	
Cable guiding accessory	9430611	3
Stainless steel cable 30 metres	9430607A	1
Control system		1

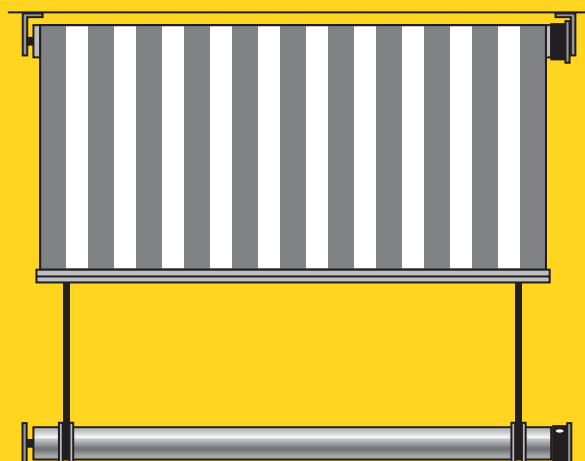
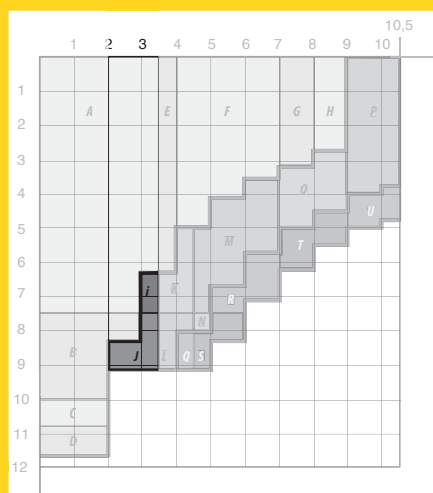
(*) see note 1

Note:

- When using different tubes, it is necessary to modify the adaptor references.
- This accessory list does not include the load bar (not supplied by Somfy).
- For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

FTS charts (230v/50hz range motors)

10. Case i - J (FTS LT60 55/17)



Description	Part number	Case i	Case J
FTS LT60 55/17	1185000	2	
FTS Hi-Pro unit	1822009	1	
Wheel Ø 63 (*)	9206019	3 (1 for strap actuator + 2 for end piece)	
Adapter set Ø 78 (*)	9420327	1	
Actuator bracket	9430601	2	
End piece bracket	9430603	2	
Heavy load end piece	9420674	2	
Wheel Ø 78 (*)	9761001	2 (for end piece)	
Ratchet tensioner	9430606	2	
Strip Ø 5 (3 metres)	9146040	2	1 (width < 3m) 2 (3 m ≤ width < 3.5 m)
Strip Ø 6 (3 metres)	9146268	2	1 (width < 3m) 2 (3 m ≤ width < 3.5 m)
Pulley Ø 63 / Ø 130	9146071		
Pulley Ø 63 / Ø 160	9146072	2	2
Black strap 15 metres	9146046		
Black strap 20 metres	9146047	1	1
Black strap 50 metres	9132077		
Cable guiding accessory	9430611	1	
Stainless steel cable 30 metres	9430607A	1	
Control system		1	

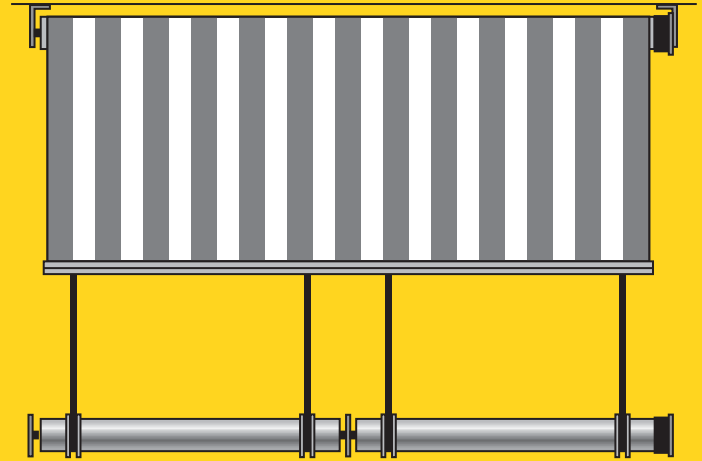
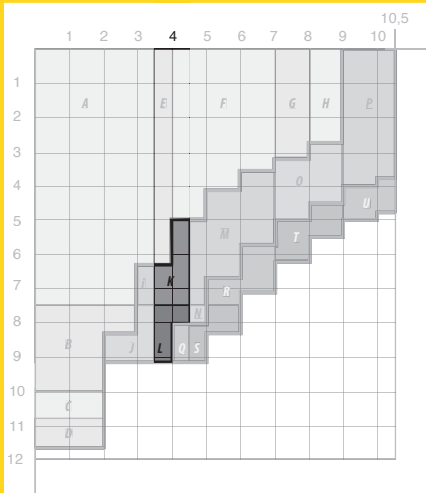
(*) see note 1

Note:

- When using different tubes, it is necessary to modify the adaptor references.
- This accessory list does not include the load bar (not supplied by Somfy).
- For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

FTS charts (230v/50hz range motors)

11. Case K - L (FTS LT60 55/17)



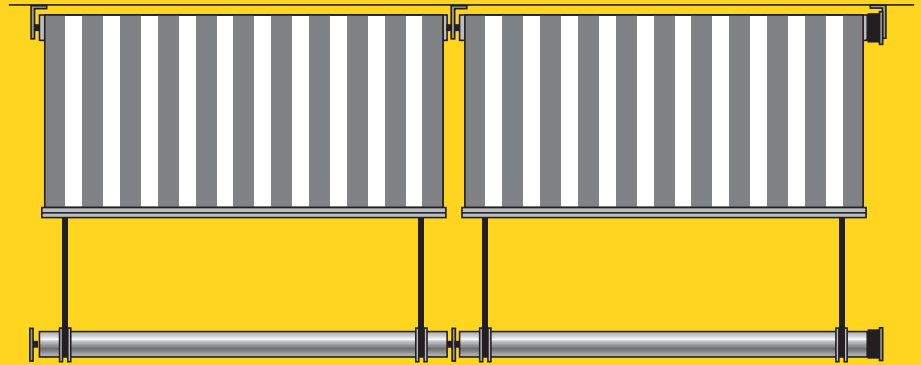
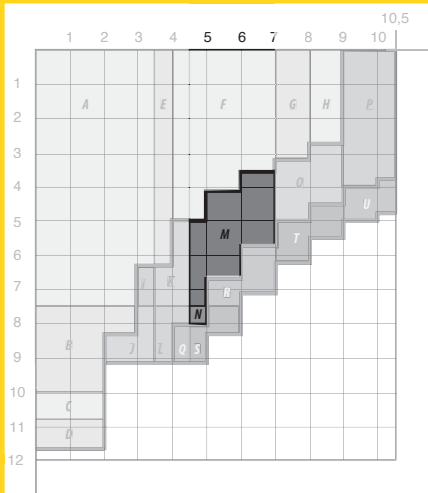
Description	Part number	Case K	Case L
FTS LT60 55/17	1185000		2
FTS Hi-Pro unit	1822009		1
Wheel Ø 63 (*)	9206019	<i>7 (1 for strap actuator + 6 for the end pieces)</i>	
Adapter set Ø 78 (*)	9420327		1
Actuator bracket	9430601		2
End piece bracket	9430603		2
Heavy load end piece	9420674		2
Wheel Ø 78 (*)	9761001	<i>2 (for end piece)</i>	
Intermediate support	9420673		1
Ratchet tensioner	9430606		4
Strip Ø 5 (3 metres)	9146040		2
Strip Ø 6 (3 metres)	9146268		2
Pulley Ø 63 / Ø 130	9146071		
Pulley Ø 63 / Ø 160	9146072	4	4
Black strap 15 metres	9146046		
Black strap 20 metres	9146047	2	2
Black strap 50 metres	9132077		
Cable guiding accessory	9430611		1
Stainless steel cable 30 metres	9430607A		1
Control system			1

(*) see note 1

- Note:**
- When using different tubes, it is necessary to modify the adaptor references.
 - This accessory list does not include the load bar (not supplied by Somfy).
 - For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

FTS charts (230v/50hz range motors)

12. Case M - N (FTS LT60 55/17)



Description	Part number	Case M	Case N
FTS LT60 55/17	1185000		2
FTS Hi-Pro unit	1822009		1
Wheel Ø 63 (*)	9206019	7 (1 for strap actuator + 6 for the end pieces)	
Adapter set Ø 78 (*)	9420327		1
Actuator bracket	9430601		2
End piece bracket	9430603		2
Heavy load end piece	9420674		2
Wheel Ø 78 (*)	9761001	6 (for the end pieces)	
Intermediate support	9420673		2
Ratchet tensioner	9430606		4
Strip Ø 5 (3 metres)	9146040	2 (width < 6 m) 3 (6 m ≤ width < 7 m)	2
Strip Ø 6 (3 metres)	9146268	2 (width < 6 m) 3 (6 m ≤ width < 7 m)	2
Pulley Ø 63 / Ø 130	9146071		
Pulley Ø 63 / Ø 160	9146072	4	4
Black strap 15 metres	9146046		
Black strap 20 metres	9146047		
Black strap 50 metres	9132077	1	1
Cable guiding accessory	9430611	1	2
Stainless steel cable 30 metres	9430607A	1	2
Control system			1

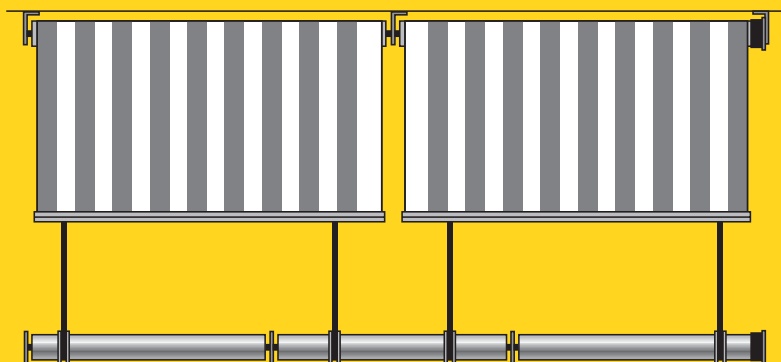
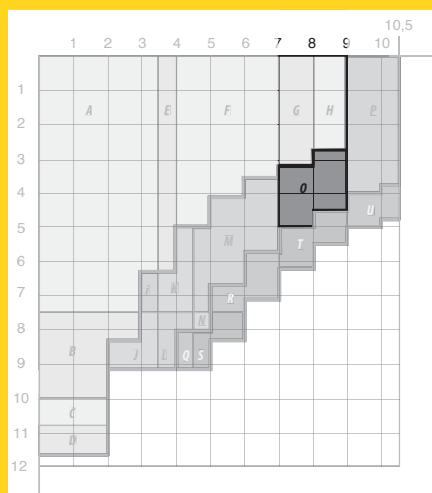
(*) see note 1

Note:

- When using different tubes, it is necessary to modify the adaptor references.
- This accessory list does not include the load bar (not supplied by Somfy).
- For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

FTS charts (230v/50hz range motors)

13. Case 0 (FTS LT60 55/17)



Description	Part number	Case 0
FTS LT60 55/17	1185000	2
FTS Hi-Pro unit	1822009	1
Wheel Ø 63 (*)	9206019	11 (1 for strap actuator + 10 for the end pieces)
Adapter set Ø 78 (*)	9420327	1
Actuator bracket	9430601	2
End piece bracket	9430603	2
Heavy load end piece	9420674	2
Wheel Ø 78 (*)	9761001	6 (for the end pieces)
Intermediate support	9420673	3
Ratchet tensioner	9430606	4
Strip Ø 5 (3 metres)	9146040	3
Strip Ø 6 (3 metres)	9146268	3
Pulley Ø 63 / Ø 130	9146071	4
Pulley Ø 63 / Ø 160	9146072	
Black strap 15 metres	9146046	
Black strap 20 metres	9146047	1
Black strap 50 metres	9132077	
Cable guiding accessory	9430611	2
Stainless steel cable 30 metres	9430607A	1
Control system		1

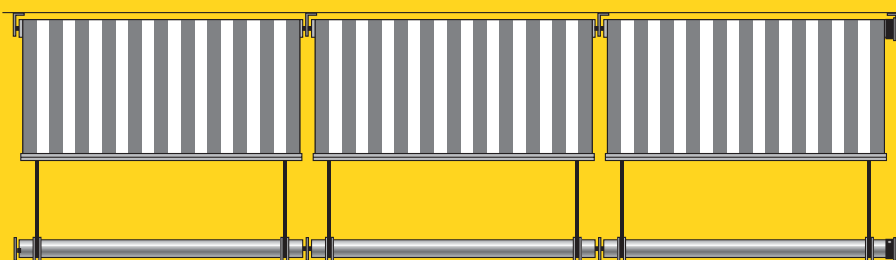
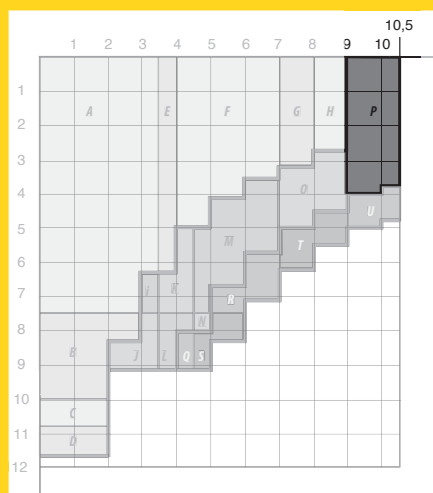
(*) see note 1

Note:

- When using different tubes, it is necessary to modify the adaptor references.
- This accessory list does not include the load bar (not supplied by Somfy).
- For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

FTS charts (230v/50hz range motors)

14. Case P (FTS LT60 55/17)



Description	Part number	Case P
FTS LT60 55/17	1185000	2
FTS Hi-Pro unit	1822009	1
Wheel Ø 63 (*)	9206019	11 (1 for strap actuator + 10 for the end pieces)
Adapter set Ø 78 (*)	9420327	1
Actuator bracket	9430601	2
End piece bracket	9430603	2
Heavy load end piece	9420674	2
Wheel Ø 78 (*)	9761001	10 (for the end pieces)
Intermediate support	9420673	4
Ratchet tensioner	9430606	6
Strip Ø 5 (3 metres)	9146040	4
Strip Ø 6 (3 metres)	9146268	4
Pulley Ø 63 / Ø 130	9146071	6
Pulley Ø 63 / Ø 160	9146072	
Black strap 15 metres	9146046	
Black strap 20 metres	9146047	
Black strap 50 metres	9132077	1
Cable guiding accessory	9430611	3
Stainless steel cable 30 metres	9430607A	1
Control system		1

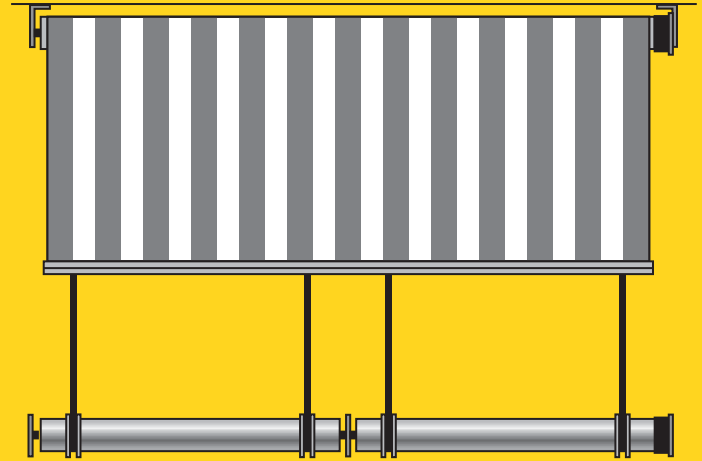
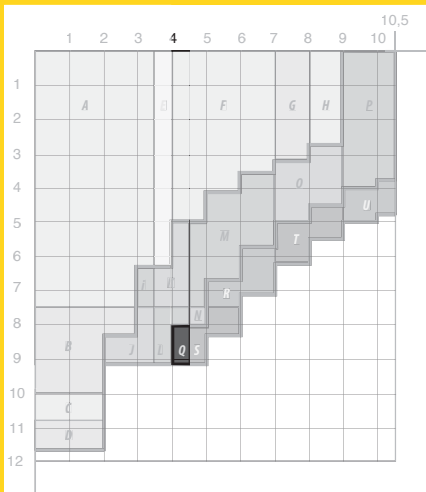
(*) see note 1

Note:

- When using different tubes, it is necessary to modify the adaptor references.
- This accessory list does not include the load bar (not supplied by Somfy).
- For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

FTS charts (230v/50hz range motors)

15. Case Q (FTS LT60 70/17)



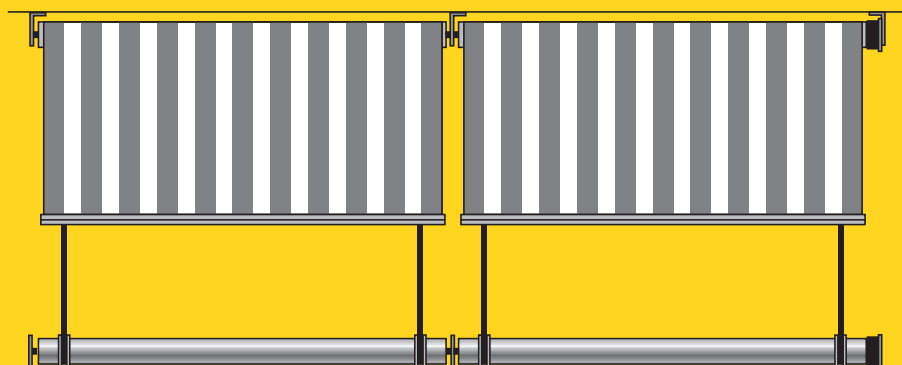
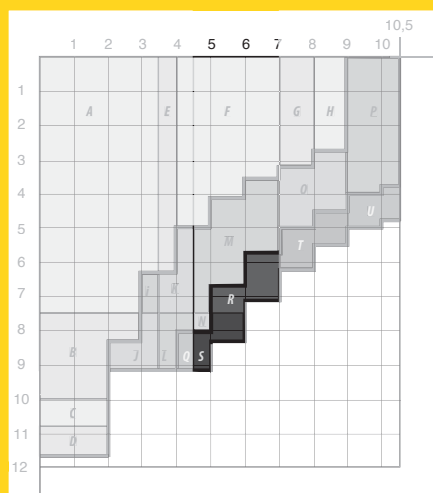
Description	Part number	Case Q
FTS LT60 70/17	1185005	2
FTS Hi-Pro unit	1822009	1
Wheel Ø 63 (*)	9206019	7 (1 for strap actuator + 6 for the end pieces)
Adapter set Ø 78 (*)	9420327	1
Actuator bracket	9430601	2
End piece bracket	9430603	2
Heavy load end piece	9420674	2
Wheel Ø 78 (*)	9761001	2 (for end piece)
Intermediate support	9420673	1
Ratchet tensioner	9430606	4
Strip Ø 5 (3 metres)	9146040	2
Strip Ø 6 (3 metres)	9146268	2
Pulley Ø 63 / Ø 130	9146071	
Pulley Ø 63 / Ø 160	9146072	4
Black strap 15 metres	9146046	
Black strap 20 metres	9146047	2
Black strap 50 metres	9132077	
Cable guiding accessory	9430611	1
Stainless steel cable 30 metres	9430607A	1
Control system		1

(*) see note 1

- Note:**
- When using different tubes, it is necessary to modify the adaptor references.
 - This accessory list does not include the load bar (not supplied by Somfy).
 - For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

FTS charts (230v/50hz range motors)

16. Case R - S (FTS LT60 70/17)



Description	Part number	Case R	Case S
FTS LT60 70/17	1185005		2
FTS Hi-Pro unit	1822009		1
Wheel Ø 63 (*)	9206019	7 (1 for strap actuator + 6 for the end pieces)	
Adapter set Ø 78 (*)	9420327		1
Actuator bracket	9430601		2
End piece bracket	9430603		2
Heavy load end piece	9420674		2
Wheel Ø 78 (*)	9761001	6 (for the end pieces)	
Intermediate support	9420673		2
Ratchet tensioner	9430606		4
Strip Ø 5 (3 metres)	9146040	2 (width < 6 m) 3 (6 m ≤ width < 7 m)	2
Strip Ø 6 (3 metres)	9146268	2 (width < 6 m) 3 (6 m ≤ width < 7 m)	2
Pulley Ø 63 / Ø 130	9146071		
Pulley Ø 63 / Ø 160	9146072	4	4
Black strap 15 metres	9146046		
Black strap 20 metres	9146047	2	
Black strap 50 metres	9132077		1
Cable guiding accessory	9430611	1	2
Stainless steel cable 30 metres	9430607A	1	2
Control system		1	

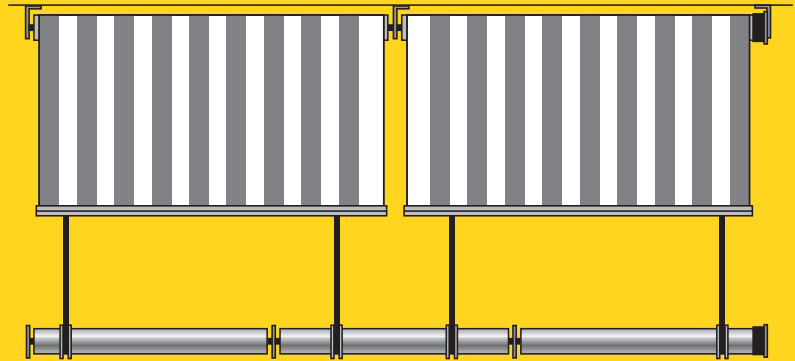
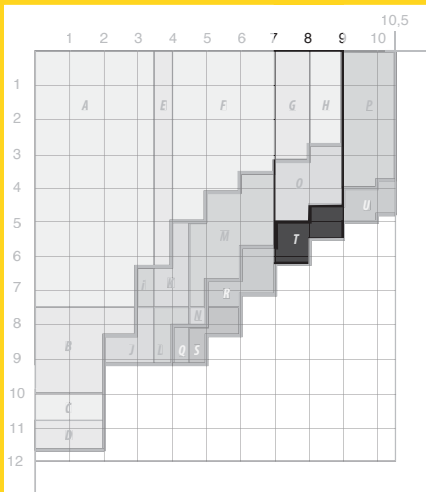
(*) see note 1

Note:

- When using different tubes, it is necessary to modify the adaptor references.
- This accessory list does not include the load bar (not supplied by Somfy).
- For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

FTS charts (230v/50hz range motors)

17. Case T (FTS LT60 70/17)



Description	Part number	Case T
FTS LT60 70/17	1185005	2
FTS Hi-Pro unit	1822009	1
Wheel Ø 63 (*)	9206019	11 (1 for strap actuator + 10 for the end pieces)
Adapter set Ø 78 (*)	9420327	1
Actuator bracket	9430601	2
End piece bracket	9430603	2
Heavy load end piece	9420674	2
Wheel Ø 78 (*)	9761001	6 (for the end pieces)
Intermediate support	9420673	3
Ratchet tensioner	9430606	4
Strip Ø 5 (3 metres)	9146040	3
Strip Ø 6 (3 metres)	9146268	3
Pulley Ø 63 / Ø 130	9146071	
Pulley Ø 63 / Ø 160	9146072	4
Black strap 15 metres	9146046	
Black strap 20 metres	9146047	
Black strap 50 metres	9132077	1
Cable guiding accessory	9430611	2
Stainless steel cable 30 metres	9430607A	1
Control system		1

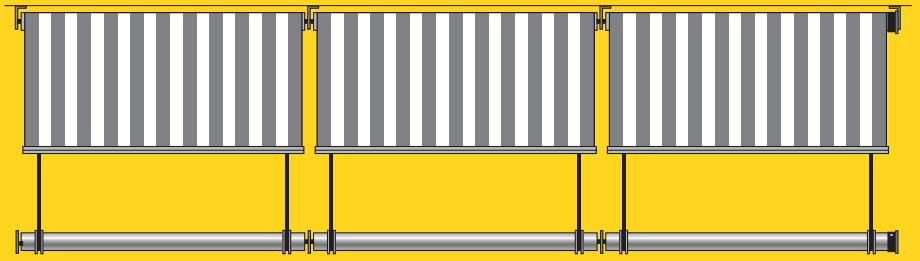
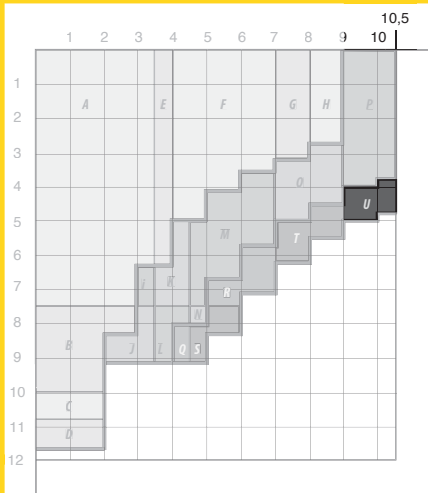
(*) see note 1

Note:

- When using different tubes, it is necessary to modify the adaptor references.
- This accessory list does not include the load bar (not supplied by Somfy).
- For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

FTS charts (230v/50hz range motors)

18. Case U (FTS LT60 70/17)



Description	Part number	Case U
FTS LT60 70/17	1185005	2
FTS Hi-Pro unit	1822009	1
Wheel Ø 63 (*)	9206019	11 (1 for strap actuator + 10 for the end pieces)
Adapter set Ø 78 (*)	9420327	1
Actuator bracket	9430601	2
End piece bracket	9430603	2
Heavy load end piece	9420674	2
Wheel Ø 78 (*)	9761001	10 (for the end pieces)
Intermediate support	9420673	4
Ratchet tensioner	9430606	6
Strip Ø 5 (3 metres)	9146040	4
Strip Ø 6 (3 metres)	9146268	4
Pulley Ø 63 / Ø 130	9146071	6
Pulley Ø 63 / Ø 160	9146072	
Black strap 15 metres	9146046	
Black strap 20 metres	9146047	
Black strap 50 metres	9132077	1
Cable guiding accessory	9430611	3
Stainless steel cable 30 metres	9430607A	1
Control system		1


(*) see note 1

- Note:**
- When using different tubes, it is necessary to modify the adaptor references.
 - This accessory list does not include the load bar (not supplied by Somfy).
 - For the control system, see the list of double push buttons or the list of automated systems compatible with the FTS system.

Notes

A large area of the page is filled with horizontal dashed lines, providing a template for writing notes.

Legal information on the FTS system

Somfy hereby declares that this product conforms to the essential requirements and other relevant provisions of Directive 1999/5/CE. A Declaration of Conformity is available at www.somfy.com/ce. Usable in the EU,  and .

Somfy Worldwide

Argentina: Somfy Argentina
Av. Sucre, 1767 - Oficina 06
San Isidro - B 1642 Aff
ARGENTINA
Tel: +55 11 (0) 4737-3700

Australia: Somfy PTY LTD
Unit 9, 38-46 South Street
Rydalmeire - NSW 2116 RYDALMERE -
AUSTRALIA
Tel: +61 (2) 8845 7200
Fax: +61 (0) 2 9638 0075

Austria: Somfy GesmbH
Johann-Herbst-Str.23
5061 Elsbethen-Glasenbach - AUSTRIA
Tel: +43 (0) 662 / 62 53 08 - 0
Fax: +43 (0) 662 / 62 53 08 - 22

Belgium: Somfy Belux
Mercuriusstraat 19 - 1930 Zaventem -
BELGIUM
Tel: +32 (0) 2 712 07 70
Fax: +32 (0) 2 725 01 77

Brasil: Somfy Brasil Ltda
Rua São Bento, 452 - galpão 4
(acesso Av. Leonil Cré Bortolosso, 88) São
Bento - 06186-140
Osasco - SP - Brasil
Tel/fax: +55 11 3695 3585

Canada: Somfy ULC
6315 Shawson Drive - Unit 1
Mississauga, Ontario L4T 1J2 - CANADA
Tel: +1 (0) 905 564 6446
Fax: +1 (0) 905 564 6448

China: Somfy China Co. Ltd
2nd floor, N°121 - Lane 1520, HuaShan
Road, Shanghai 200052, PR CHINA
Tel: +8621 (0) 6280 9660
Fax: +8621 (0) 6280 0270

Croatia : Somfy Predstavništvo
BFT Adria d.o.o.
HR - 51218 Dražice, CROATIA
Obrovac 39
Tel: +385 (0) 51 502 640

Cyprus : Somfy Middle East
Nicolau Pentadromos Centre - 6th floor,
Office 602, Pentadromos Junction - P.O
Box 56150 - 3025 Limassol - CYPRUS
Tel: +357(0) 25 34 55 40
Fax: +357(0) 25 34 19 48

Czech Republic: Somfy, spol. s.r.o.
Na Radosti 413 - 155 21 Praha 5 - Zličín
- CZECH REPUBLIC
Tel: (+420) 267 910 007
Tel: (+420) 267 913 076-8
Fax: (+420) 272 937 846

Denmark: Somfy Nordic Danmark
Grønlandsgade 3 - 5300 Kerteminde -
DENMARK
Tel: +45 65 32 57 93
Fax: +45 65 32 57 94

Export: Somfy Export
50 Avenue du nouveau monde
74307 CLUSES Cedex - FRANCE
Tel: + 33 4 50 96 70 76
Tel: + 33 4 50 96 75 53
Fax: + 33 4 50 96 70 91

Finland: Somfy Nordic AB Finland
Ruosilankuja 3B
00390 Helsinki - FINLAND
Tel: +358 (0)9 57 130 230
Fax: +358 (0)9 57 130 231

France : Somfy France
1 Place du Crêtet - BP 138
74307 Cluses Cedex - FRANCE
Pour les professionnels :
Tel.: +33 (0) 820 374 374
Fax: +33 (0) 820 002 074
Pour les particuliers :
Tel.: +33 (0) 810 055 055

Germany: Somfy GmbH
Felix-Wankel-Strasse 50 - 72108
Rottenburg - GERMANY
Postfach 186 - 72103 Rottenburg -
GERMANY
Tel: +49 (0) 7472 930 0
Fax: +49 (0) 7472 930 9 (logistic)

Greece: Somfy Hellas S.A.
47 Karamanli Avenue
13671 Menidi, Acharne area
Athens, GREECE
Tel: +30 210 6146768
Fax: +30 210 6120745

Hong Kong: Somfy Co. Ltd
Room 907, 9/F Marina House -
68 Hing Man Street - Shau kei Wan -
HONG KONG
Tel: +852 (0) 2523 6339
Fax: +852 (0) 2815 0716

Hungary : Somfy Kft
Gyömrö "i út 105, 1103 Budapest -
HUNGARY
Tel: +36 1814 5120
Fax: +36 1814 5121

India: Somfy India PVT Ltd
C-18, 2nd floor, Local Commercial
Complex-1, Paschimi Marq.
Vasant Vihar New Delhi-110057, INDIA
Tel: +(91) 11 4165 9176
Fax: +(91) 11 4166 3080

Indonesia: Somfy Jakarta Representative
Office
Kemang Pointe Suite 2.01
Jalan Kemang Raya No. 3
Jakarta 12730 - INDONESIA
Tel: +(62) 21 719 3620
Fax: +(62) 21 719 7447

Iran: Somfy Iran
Tehran - Iran
Tel: +98-217-7951036
Fax: +98-217-7951036

Israel: Sisa Home Automation Ltd
Tel: +972 (0) 3 952 55 54

Italy: Somfy Italia s.r.l
Via Copernico 38-40
20090 Trezzano Sul Naviglio ITALY
Tel: +39-024847181
Fax: +39-024455794

Japan: Somfy KK
22-1 Sanmaicho, Kanagawa-ku,
Yokohama 221-0862 JAPAN
Tel: +81 (0)45 481 6800
Fax: +81 (0)45 481 6915

Jordan: Somfy Jordan
Tel: +962-6-5821615

Kingdom of Saudi Arabia:
Somfy Saoudi
Riyadh :
Tel/Fax: +966 1 47 23 020
Tel/Fax: +966 1 47 23 203
Jeddah :
Tel: +966 2 69 83 353
Fax: +966 2 25 75 938

Kuwait: Somfy Kuwait
Tel/Fax: +965 4348906

Lebanon: Bldg, Barado Sreet - Parc Beirut
2058-7704 BEIRUT - LEBANON
Tel: +961 (0) 1 391 224
Fax: +961 (0) 1 391 228

Malaysia: Somfy Malaysia: +60 (0) 3 228
74743

Mexico: Somfy Mexico SA de CV Temazcal
19B, La Loma
Tlalnepantla, Edo. de Mex.
54130 - MEXICO
Tel: 52 (55) 4777 7770
Fax: 52 (55) 5390 5530

Morocco: Somfy Maroc
Rue Ibnou - Majid El-Bahar
20100 Casablanca - MOROCCO
Tel: +212-22443500
Fax: +212-22443523

Netherlands: Somfy BV
Diamantlaan 6 - 2132 WV
Hoofddorp - NETHERLANDS
Postbus 163 - 2130 AD
Hoofddorp - NETHERLANDS
Tel: +31 (0) 23 55 44 900
Fax: +31 (0) 23 56 15 823

Norway: Somfy Nordic Norge
Fjellhamarveien 46
NO-1472 Fjellhamar
NORWAY
Tel: +47 41 57 66 39
Fax: +47 67 97 96 21

Poland: Somfy SP Z.O.O.
ul. Burdzińskiego 5
PL 03-480 Warszawa - POLAND
Tel: +48 (22) 50 95 300
Fax: +48 (22) 50 95 301

Portugal: Somfy Portugal
Zona Industrial da Maia
Sector X, Lote 361 Barca
4475-053 Maia - PORTUGAL
Tel. +351 229 396 840
Fax. +351 229 396 849

Romania: Somfy SRL
str. Fundătura Hărmanului nr. 2 spațiul
E4 - 500240 Braşov -
ROMANIA
Tel.: +40 - (0)368 - 444 081
Fax: +40 - (0)368 - 444 082

Russia: Somfy LLC. Storozevaya 26 -
Building 1
111020 MOSCOW - RUSSIA
Tel: +7 495 781 47 72
Fax: +7 495 781 47 73

Serbia: Somfy Predstavništvo
SRB - 25211 Svetozar Miletić, Serbia
Somborska 29
Tel: +381 (0)25 841 510

Singapore: Somfy PTE Ltd
50 Ubi Ave 3
#02-17 Frontier
Singapore 408867
SINGAPORE
Tel: +65 (0) 6383 3855
Fax: +65 (0) 6383 4933

Slovak republic: Somfy, spol. s r.o.
Vrbovská cesta 19/ A -
921 01 Piešťany
Tel: +421 337 718 638
Tel: +421 905 455 259
Fax: +421 337 718 639

South Korea: Somfy JOO
IO Bldg. 4-5F
96-7 Banpo-4dong, Seocho-ku, Seoul
137-044 - KOREA
Tel: +82 (0) 2594 4331
Fax: +82 (0) 2594 4332

Spain: Somfy Espana SA
Pº Ferrocarriles Catalanes nº 290-292
08940 CORNELLA (Barcelona) - SPAIN
Tel: +34 (0) 934 800 900
Fax: +34 (0) 933 770 396

Sweden: Somfy Nordic AB
Limstensgatan 6 / Box 60038
SE-216 10 LIMHAMN - SWEDEN
Tel: +46 (0) 40 16 59 00
Fax: +46 (0) 40 16 59 27

Switzerland: Somfy A.G. -
vorbuchenstrasse 17
8303 Bassersdorf - SWITZERLAND
Tel: +41 (0) 44 838 40 30
Fax: +41 (0) 44 836 41 95

Syria: Somfy Syria
Damascus - Syria
Tel: +963-9-55580700

Taiwan: Somfy Development and Taiwan
Branch
3F, No. 160, Ching Yeh 1th,
104 Taipei, Taiwan R.O.C.
Tel: +886 (0) 2 8509 8934
Fax: +886 (0) 2 2532 4680

Thailand: Bangkok Regional Office
Tel: +66 (0) 2714 3170

Tunisia: Somfy Tunisia
Tunis - Tunisia
Tel: +216-98303603

Turkey: Somfy Turkey Mah., Fahrettin K. -
Gökay Cad N°29 Arduman Is - Merkezi, D
blok Kat2/A - 34662 USKUDAR ISTANBUL
- TURKEY
Tel: +90 (0) 216 651 30 15
Fax : +90 (0) 216 651 30 17

United Arab Emirates: Somfy Gulf Jebel
Ali Free Zone - P.O.Box:
61456 Dubai - UAE
Tel: +971 (0) 4 88 32 808
Fax: +971 (0) 4 88 32 809

United Kingdom: Somfy Limited
Moorfield Road - Yeaddon
West Yorkshire - LS19 7BN
UNITED KINGDOM
Tel: +44 (0) 113 391 3030
Fax: +44 (0) 1133913010

United States: Somfy Systems
47 Commerce Drive - CRANBURY
New Jersey 08512 - USA
Tel: +1 (0) 609 395 1300
Fax: +1 (0) 609 395 1776