

# OUTDOOR ALUMINUM VENETIAN BLINDS



## BSO

The adjustable slats allow for precise solar management, integrate into the building's façade and reduce the thermal load, contributing to energy savings.

They are made of non-rusting materials, ensuring maximum durability and outdoor resistance.



# OUTDOOR ALUMINUM VENETIAN BLINDS



	<b>Z70 / Z90</b>	<b>C80</b>	<b>F80</b>	<b>C50+</b>	<b>C50</b>
Maximum width		5000 mm	4500 mm		3000 mm
Maximum height		5000 mm		3500 mm	2500 mm
Maximum surface		20 m <sup>2</sup>		8 m <sup>2</sup>	5 m <sup>2</sup>
Installation			Ceiling / Wall		
Composition			100% AL		
Slat thickness		0,45 mm		0,28 mm	
Slat widths	70 - 90 mm	80 mm		50 mm	
Section	"Z" (Rigid and strong wind resistance)	"C" (Reinforced at the ends)		"C" (Flexible)	
Operating system		Crank / Motor			Cord
Options	U-shaped aluminum guide Self-supporting rectangular guide Circular guide Cable guide (Not available for Z70 and Z90) Cover plate Connected blinds (Max. 3 blinds)		Cable guide Cover plate Connected blinds (Max. 3 blinds)		Cable guide Cover plate

# PRODUCT PRESENTATION

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

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### Optimal light management

Thanks to the adjustable inclination of the slats, they can be adapted to all angles of sunlight. In addition, home automation systems can be used, which automatically adjust to the direction of sunlight at any time of the year, thus achieving perfect lighting comfort at all times.

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### Energy saving

We can achieve energy savings of up to 10%. This sunlight management system efficiently manages the light and heat that enters through the building's windows. BSO from Bandalux improves the energy classification of a building, as required by the CTE (Calendar GT) or LEED certification.

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### High durability and resistance

The Bandalux BSO is highly resistant to adverse weather conditions. All its components and its motor (with IP54 protection rating) are corrosion-resistant and guarantee high durability when installed outdoors, capable of resisting winds of up to 76 km/h\*.

In models Z-90 and Z-70  
(class 5, maximum according to EN 13659).

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### Versatility and aesthetics

The slats can be completely retracted under the headrail, offering total integration into the building's facade, like a second skin. Different types of slats, headrail with different cover plate options and a wide range of colours available, among other options, allow us to configure the Venetian blind according to the needs and aesthetics of the building.

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### Perfect working conditions

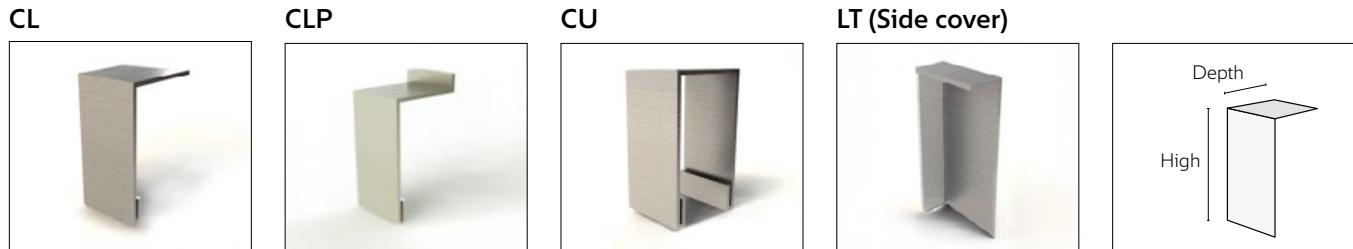
With this heating and lighting management system you can achieve perfect working conditions, allowing incoming light to be managed while also achieving good external visibility.

# PRODUCT PRESENTATION

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

### Cover plates

The headrail and slats can be covered with a lacquered aluminium cover plate. Depending on the model, the cover plate is 1,5 mm or 2 mm thick and its height varies depending on the stacking height. In the case of front installation, side covers are incorporated and fixed with rivets.



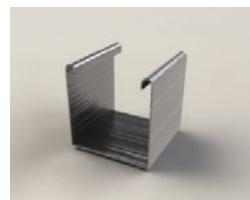
### Headrail

All models include a 0,65 mm thick galvanized steel headrail where the guiding and lifting mechanisms are installed.

56x58



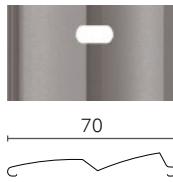
40x40



### Slats

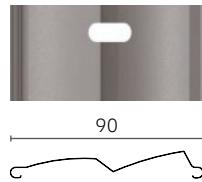
**Z70**

Rigid and strong wind resistance



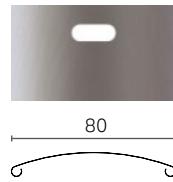
**Z90**

Rigid and strong wind resistance



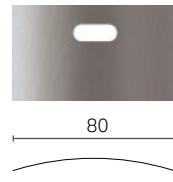
**C80**

Reinforced at the ends



**F80**

Flexible



**C50+**

Flexible



**C50**

Flexible



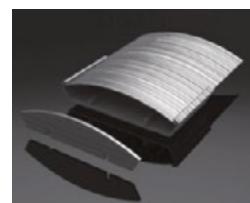
### Bottom bar

Each model includes an aluminum bottom bar adapted to the geometry of the slats.

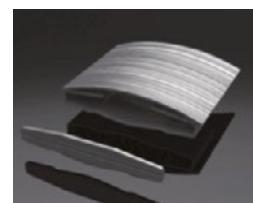
**Z70 - Z90**



**C80**



**F80**



**C50 - C50+**



# PRODUCT PRESENTATION

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

### Slat colours

More than 20 different colors available, depending on the chosen slat type. The BSO outdoor Ventoian blind sto provides the same color for the slats, guides, bottom bar and hiding cover plate, ensuring that it perfectly integrates into the design of the building.

 The headrail will not be supplied lacquered.

	Z70	Z90	C80	F80	C50+	C50
 Antracita RAL 7016	✓	✓	✓	✓	✓	✓
 Antracita Matt RAL 7016 M	-	✓	✓	-	-	-
 Basalt Grey RAL 7012	✓	✓	✓	✓	-	-
 Black Grey RAL 7021	-	✓	✓	-	-	-
 Black Matt RAL 9005 M	✓	✓	✓	✓	-	-
 Bronze Dark VSR 780 D	-	✓	✓	-	-	-
 Bronze Light VSR 780 H	✓	✓	✓	-	-	-
 Brown RAL 8028	✓	✓	✓	-	-	-
 Creamy RAL 9001	-	✓	✓	-	-	-
 Dark Green RAL 6005	-	-	-	-	✓	✓
 Dark Grey DB 703	✓	✓	✓	✓	✓	✓
 Grey RAL 7022	✓	✓	✓	✓	-	-
 Grey RAL 7038	✓	✓	✓	-	✓	✓
 Grey Silver RAL 9007	✓	✓	✓	✓	✓	✓
 Grey White RAL 9002	-	✓	✓	-	-	-
 Ivory RAL 1013	-	✓	✓	-	✓	✓
 Light Beige VSR 240	✓	✓	✓	-	-	-
 Light Grey RAL 7035	-	✓	✓	-	✓	✓
 Silver RAL 9006	✓	✓	✓	✓	✓	✓
 Silver Texture RAL 9006 (l)	✓	✓	✓	✓	-	-
 Quartz Grey RAL 7039	-	✓	✓	-	-	-
 White RAL 9003	✓	✓	✓	✓	-	-
 White RAL 9010	✓	✓	✓	✓	-	-
 White RAL 9016	-	-	-	-	✓	✓

 (l) Textured slats

# PRODUCT PRESENTATION

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

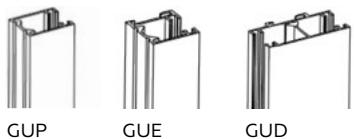
### Side guides

The BSO includes a highly resistant guiding track and a system that prevents noise and vibrations between parts.



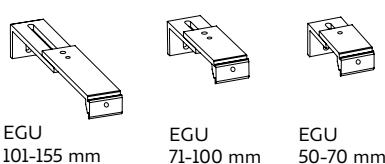
#### Side guides 'U'-shaped

Made from extruded aluminum and coated in the same color as the slats. They are installed directly to the wall and allows side installation.



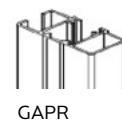
#### Spacer brackets

The U-shaped guides allow you to use spacer brackets for wall installations and spacing.



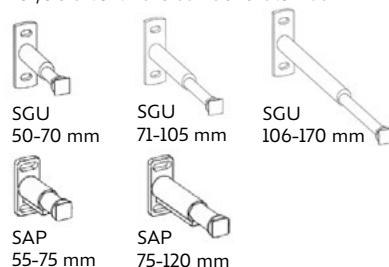
#### Rectangular section self-supporting guides

Self-supporting system with 40x20 mm rectangular section guides, with its own telescopic spacers.



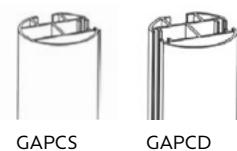
#### Telescopic spacers

They are included in both the self-supporting guide systems and allow you to space the guides from the façade to the desired distance.



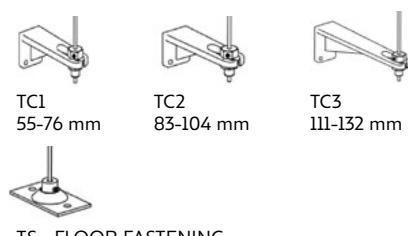
#### Circular section guides

Circular section self-supporting systems with guides; can be standard or double ( $\phi = 41$  mm).



#### Cable guides and tensioners

All systems, except Z70 and Z90, offer the option of being guided by a  $\phi 2.2$  mm diameter galvanised braided steel cable covered with PVC.



### Number of guide supports (brackets, telescopic spacers and cable tensioners)

Height BSO (mm)	Z70	Z90	C80	F80	C50+	C50
Up to 1600		<b>2</b>			<b>2</b>	<b>2</b>
From 1610 to 2600		<b>3</b>			<b>3</b>	<b>3</b>
From 2610 to 4000		<b>4</b>			<b>4</b>	-
From 4000 to 5000		<b>5</b>			-	-

### Number of headrail supports

Width BSO (mm)	Z70	Z90	C80	F80	Width BSO (mm)	C50+	Width BSO (mm)	C50
Up to 1400		<b>2</b>			Up to 1400	<b>2</b>	Up to 1100	<b>2</b>
From 1410 to 2400		<b>3</b>			From 1410 to 1900	<b>3</b>	From 1110 to 2200	<b>3</b>
From 2410 to 3400		<b>4</b>			From 1910 to 2900	<b>4</b>	From 2210 to 2500	<b>4</b>
From 3410 to 5000		<b>5</b>			From 2910 to 3000	<b>5</b>		

# TECHNICAL DATA

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

### Maximum dimensions

		Z70	Z90	C80	F80	C50+	C50
Blinds in standard configuration (cable guide, aluminium guide)	Maximum width	Cord		-			<b>2500 mm</b>
		Crank					
			<b>5000 mm</b>	<b>4500 mm</b>	<b>3000 mm</b>		-
		Motor					
	Maximum height	Cord		-			<b>2500 mm</b>
		Crank					
			<b>5000 mm</b>		<b>3500 mm</b>		-
		Motor					
	Maximum surface	Cord		-			<b>5 m<sup>2</sup></b>
With self-supporting guides		Crank					
	Maximum width		<b>2500 mm</b>				
		Motor					
	Maximum height	Crank			<b>4000 mm</b>		-
					Motor		
	Maximum surface	Crank		<b>8 m<sup>2</sup></b>			
Connected blinds <sup>(1)</sup> (Side operation)							
	Maximum width	Crank			<b>6000 mm</b>		
					Motor		
	Maximum surface	Crank		<b>8 m<sup>2</sup></b>			
Connected blinds <sup>(1)</sup> (Central operation)						<b>34 m<sup>2</sup></b>	<b>27 m<sup>2</sup></b>
	Maximum width	Motor					
	Maximum width	Crank			<b>12000 mm</b>		
					Motor		
Connected blinds <sup>(1)</sup> (Central operation)	Maximum surface	Crank		<b>8 m<sup>2</sup></b>			
				Motor	<b>34 m<sup>2</sup></b>	<b>27 m<sup>2</sup></b>	

(1) Maximum 3 connections.

# TECHNICAL DATA

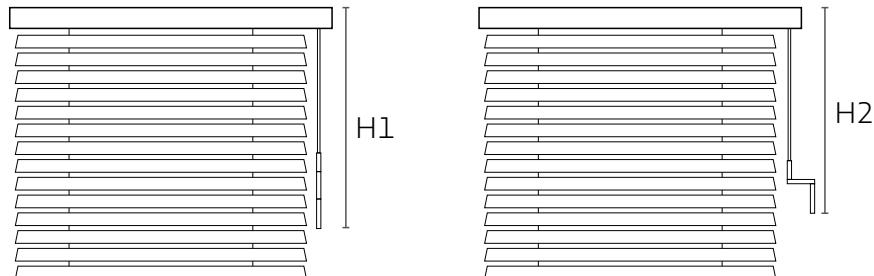
## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

### Operating systems

	Z70	Z90	C80	F80	C50+	C50
<b>Cord</b>			-			✓
<b>Crank</b> (Fixed or removable)	With 45° return		✓			-
	With 90° return		✓			-
	Outdoor without return		✓			-
<b>Motor</b>	Somfy® Hardwired		✓			-
	Somfy® IO		✓			-

### Controls height (crank)

The requested hand crank height will be considered with the hand crank extended (H1). The hand crank height in operating position is H2 = H1-24cm



### Motorization

Motors with Hirshmann connection. Supplied with 50 cm of cable as standard.

	6 Nm	10 Nm	18 Nm
<b>Voltage</b>	230 V / 50 Hz		
<b>Protection</b>	IP54		
<b>Operational temperature</b>	-10 °C a +85 °C		
<b>Speed</b>	24 rpm		
<b>Maximum operational time</b>	Maximum 6 minutes		
<b>Intensity (A)</b>	0,41	0,51	0,70
<b>Length (mm)</b>	254	269	289

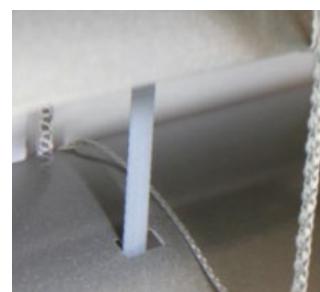
● The configuration can be completed with sensors and automated components from Bandalux.

# TECHNICAL DATA

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

### Lifting straps

The lift and descent is performed using Texband® strap (high-tenacity PES) 8 mm thick (6 mm for C50+ and C50).



### Number of tapes and string adders

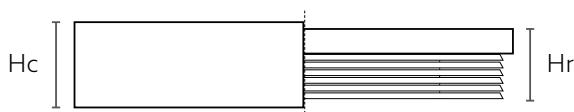
Height BSO (mm)	Up to 2500	From 2510 to 3000	From 3010 to 4000	Number of tapes and string adders Z70 / Z90 / C80 / F80 / C50+ / C50
Width BSO (mm)	Up to 1400	Up to 1300	Up to 1200	2
From 1410 to 2400	From 1310 to 2200	From 1210 to 2000	3	
From 2410 to 3400	From 2210 to 3100	From 2010 to 2800	4	
From 3410 to 4000	From 3110 to 4000	From 2810 to 4000	5	

### Stacking height (Hr)

	Z70	Z90	C80	F80		
Height BSO (mm)	150 170	120 140	140 160	115 135		
Up to 750	150 170	120 140	140 160	115 135		
From 750 to 1000	160 180	140 160	160 180	125 145		
From 1010 to 1250	170 190	150 170	180 200	130 150		
From 1260 to 1500	190 210	160 180	200 220	140 160		
From 1510 to 1750	210 230	180 200	220 240	145 165		
From 1760 to 2000	230 250	190 210	240 260	155 175		
From 2010 to 2250	250 270	200 220	260 280	160 180		
From 2260 to 2500	270 290	220 240	280 300	170 190		
From 2510 to 2750	280 300	230 250	300 320	175 195		
From 2760 to 3000	290 310	240 260	320 340	185 205		
From 3010 to 3250	310 330	250 270	340 360	190 210		
From 3260 to 3500	330 350	270 280	360 380	200 220		
From 3510 to 3750	350 370	280 300	380 400	205 225		
From 3760 to 4000	370 390	290 310	400 420	210 230		
From 4010 to 4250	380 400	300 320	420 440	220 240		
From 4260 to 4500	400 420	310 330	440 460	230 250		
From 4510 to 4750	410 430	330 350	460 480	235 255		
From 4760 to 5000	430 450	340 360	480 500	245 265		

	C50+	C50
Height BSO (mm)	135	95
Up to 1000	135	95
From 1010 to 1500	150	110
From 1510 to 2000	160	120
From 2010 to 2500	175	135
From 2510 to 3000	190	-
From 3010 to 3500	205	-

### Cover plate height (Hc)



• The cover plate height (Hc) shall be 10 mm upper than the stacking height (Hr).

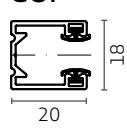
# TECHNICAL DATA

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

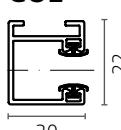
### Side guide dimensions (mm)

**U**

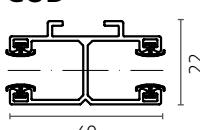
GUP<sup>(1)</sup>



GUE

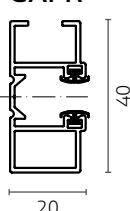


GUD



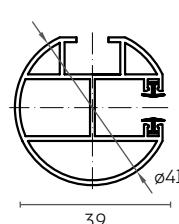
**Self-supporting**

GAPR

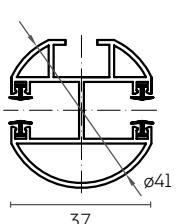


**Circulars**

GAPCS



GAPCD

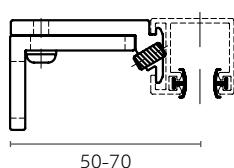


(1) Not compatible with spacer brackets.

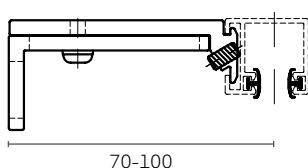
### Dimensions of spacer brackets and telescopic spacers (mm)

#### With side guides GUE and GUD

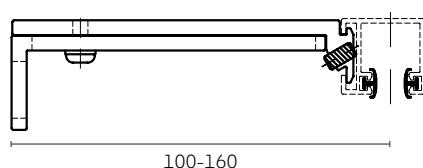
EGU 50-70 mm



EGU 71-100 mm

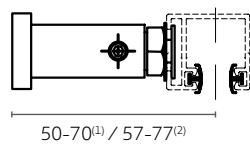


EGU 101-155 mm

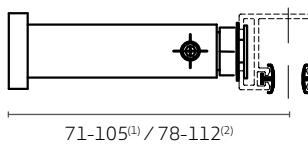


#### With side guides GUE, GUD, GAPCS and GAPCD

SGU 50-70 mm



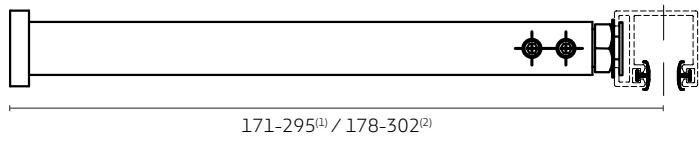
SGU 71-105 mm



SGU 106-170 mm



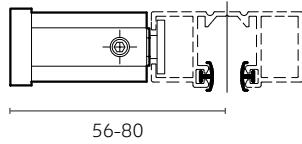
SGU 171-295 mm



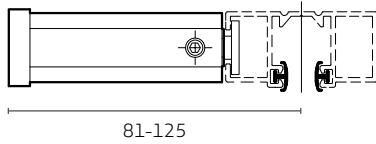
(1) Measures for guides GUE and GUD. / (2) Measures for guides GAPCS and GAPCD.

#### With self-supporting guide GAPR

SAP 55-75 mm



SAP 75-120 mm

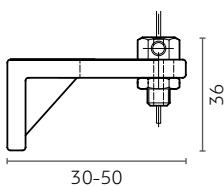


# TECHNICAL DATA

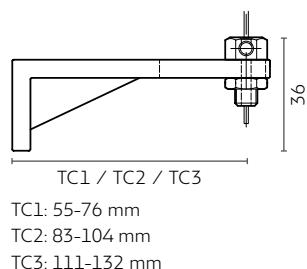
## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

### Cable tensioner dimensions (mm)

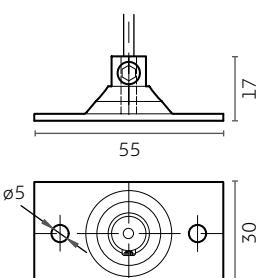
TC0 mm wall



TC1 - TC2 - TC3 wall



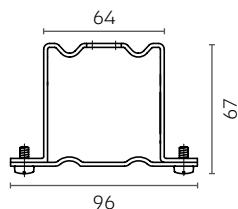
TS SFloor fastening



### Dimensions of ceiling bracket for headrail (mm)

Headrail 56x58 mm

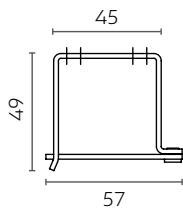
ST 56x58



⚠ Not available for C50.

Headrail 40x40 mm

ST 40x40

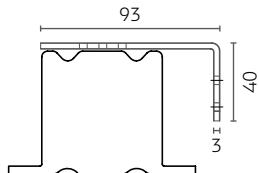


⚠ Only available for C50.

### Dimensions of wall bracket for headrail (mm)

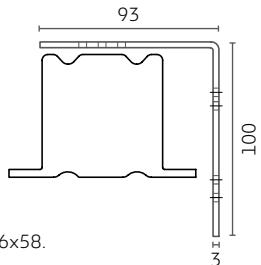
Headrail 56x58 mm

EL 40 mm



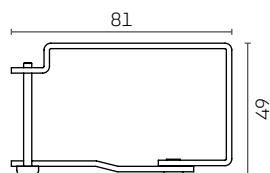
⚠ Not available for C50. /  
Both include ceiling bracket ST 56x58.

EL 100 mm



Headrail 40x40 mm

EL 49 mm



⚠ Only available for C50.

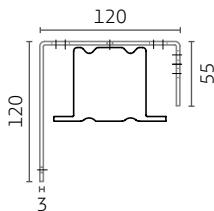
# TECHNICAL DATA

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

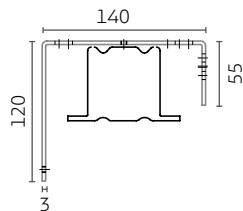
### Dimensions of ceiling/wall bracket + cover plate (mm)

#### Headrail 56x58 mm

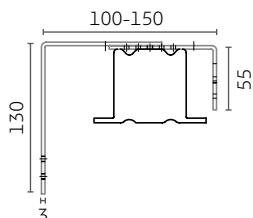
ELC 120 mm



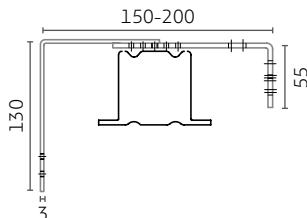
ELC 140 mm



ELCT 100-150 mm



ELCT 150-200 mm

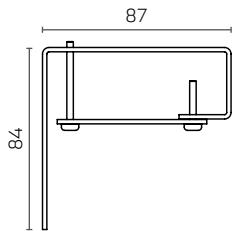


Only available for Z70, C80 and F80.

Only available for Z90.

#### Headrail 40x40 mm

ELC 87 mm



Only available for C50.

# OPTIONS

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

### Operating systems

	Z70	Z90	C80	F80	C50+	C50
Cord		-				✓
Fixed crank with 45° return		✓				-
Fixed crank with 90° return		✓				-
Removable crank with 45° return		✓				-
Removable crank with 90° return		✓				-
Fixed crank without return		✓				-
Removable crank without return		✓				-
Motor operating system	Somfy® Hardwired	✓		✓		-
	Somfy® IO	✓		✓		-

⚠ (1) Provided by default.

### Connected blinds<sup>(1)</sup>

	Z70	Z90	C80	F80	C50+	C50
Connected blinds				✓		

⚠ (1) Maximum 3 connections.

### Cover plates<sup>(1)</sup>

	Z70	Z90	C80	F80	C50+	C50
Cover plates	CL			✓		
	CLP		✓			-
	CU		✓			-

Side cover for cover plate (LT) ✓

⚠ (1) Cover plate longer than 3500 mm will be provided in two parts.

# OPTIONS

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

### Aluminium side guides

	Z70	Z90	C80	F80	C50+	C50
Guides "U"	GUE		✓			-
	GUP		✓			-
	GUD		✓			-
Self-supporting rectangular guide	GAPR		✓			-
	GAPCD		✓			-
Circular guide	GAPCS		✓			-

① (l) Provided by default.

Spacer brackets and telescopic spacers  
Z70 / Z90 / C80 / F80

	4 brackets	6 brackets	8 brackets	
Blind height measurement	Up to 1600 mm	1610-2600 mm	2610-5000 mm	
Spacer brackets for guides GUE and GUD	EGU 50-70	✓	✓	✓
	EGU 71-100	✓	✓	✓
	EGU 101-150	✓	✓	✓
Telescopic spacers for guides GUE, GUD, GAPCS and GAPCD	SGU 50-70	✓	✓	✓
	SGU 71-105	✓	✓	✓
	SGU 106-170	✓	✓	✓
	SGU 175-295	✓	✓	✓
Telescopic spacers for guides GAPR	SAP 55-75	✓	✓	✓
	SAP 75-120	✓	✓	✓

① (l) Provided by default.

### Cable guide

	Z70	Z90	C80	F80	C50+	C50
Cable tensioner (2 brackets)	Guide	Cable 2,2 mm	-	✓	✓	✓
		TC0 30-50	-	✓	✓	✓
		TC1 55-76	-	✓	✓	✓
		TC2 83-104	-	✓	✓	✓
		TC3 111-132	-	✓	✓	✓
		TS Floor fastening	-	✓	✓	✓

① (l) Provided by default.

# OPTIONS

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

### Headrail and cover plate brackets Z70 / Z90 / C80 / F80

	2 brackets	3 brackets	4 brackets	5 brackets
Blind width measurement >	Up to 1400 mm	1410-2400 mm	2410-3400 mm	3410-5000 mm
Ceiling bracket ST 56 x 58 mm	✓	✓	✓	✓
Wall bracket EL 40 mm	✓	✓	✓	✓
Wall bracket EL 100 mm	✓	✓	✓	✓
Cover plate bracket ELC 120 mm	✓	✓	✓	✓
Cover plate bracket ELC 140 mm	✓	✓	✓	✓
Cover plate bracket ELCT 100-150	✓	✓	✓	✓
Cover plate bracket ELCT 150-200	✓	✓	✓	✓

### Headrail and cover plate brackets C50+

	2 brackets	3 brackets	4 brackets	5 brackets
Blind width measurement >	Up to 1400 mm	1410-1900 mm	1910-2900 mm	2910-3000 mm
Ceiling bracket ST 56 x 58 mm	✓	✓	✓	✓
Wall bracket EL 40 mm	✓	✓	✓	✓
Wall bracket EL 100 mm	✓	✓	✓	✓
Cover plate bracket ELC 120 mm	✓	✓	✓	✓
Cover plate bracket ELC 140 mm	✓	✓	✓	✓
Cover plate bracket ELCT 100-150	✓	✓	✓	✓
Cover plate bracket ELCT 150-200	✓	✓	✓	✓

### Headrail and cover plate brackets C50

	2 brackets	3 brackets	4 brackets
Blind width measurement >	Up to 1100 mm	1110-2200 mm	2210-2500 mm
Ceiling bracket ST 40 x 40 mm	✓	✓	✓
Wall bracket EL 49 mm	✓	✓	✓
Cover plate bracket ELC 87	✓	✓	✓

⚠ (1) Provided by default.

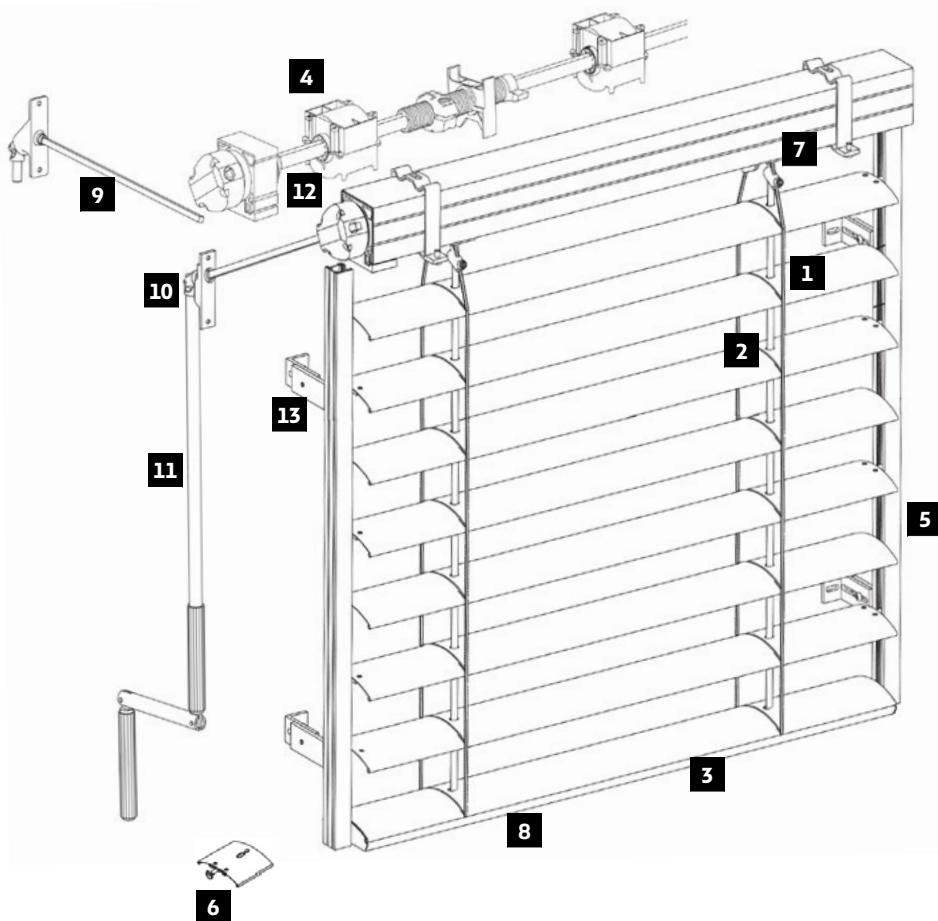
# SPARE PARTS

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

### MODELS

**Z70 | Z90 | C80 | F80**

WITH CRANK AND 'U' GUIDE



<b>1</b>	Ladder
<b>2</b>	Lifting strap
<b>3</b>	Bottom bar
<b>4</b>	Drum
<b>5</b>	Side guide
<b>6</b>	Guiding track
<b>7</b>	Ladder clip

<b>8</b>	End cap bottom bar
<b>9</b>	90° crank return
<b>10</b>	45° crank return
<b>11</b>	Crank
<b>12</b>	Crank device
<b>13</b>	Bracket spacer

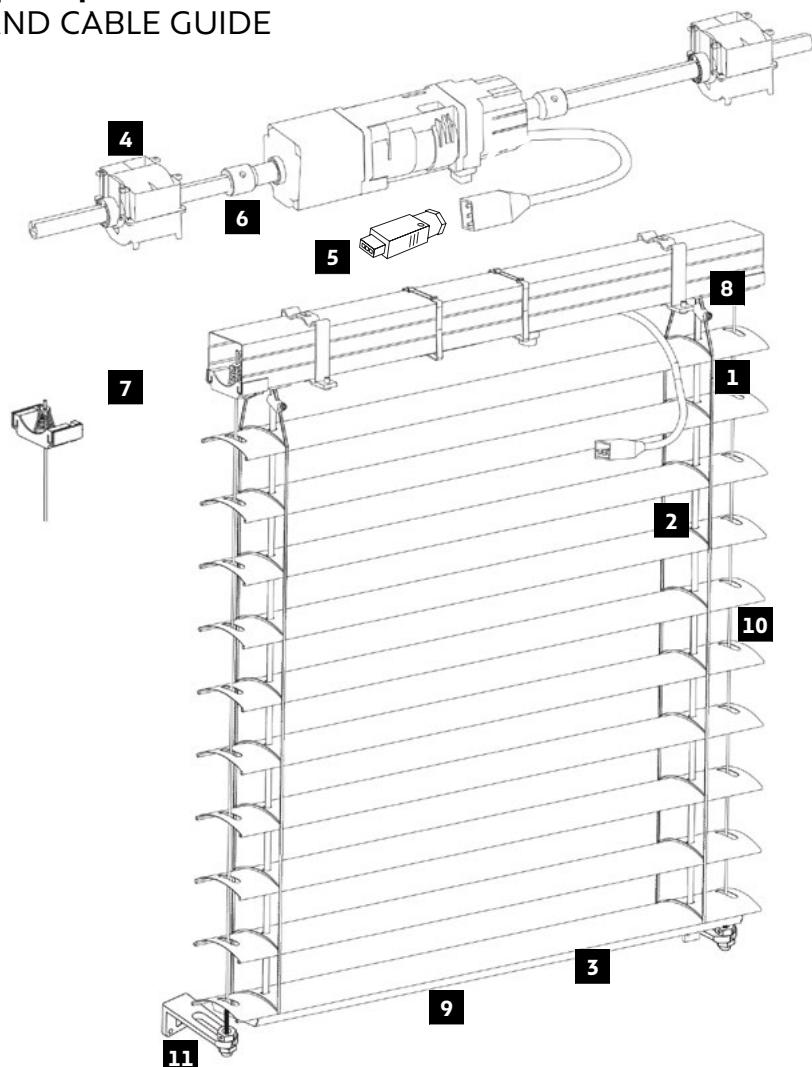
# SPARE PARTS

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

### MODELS

**Z70 | Z90 | C80 | F80 | C50+**

WITH MOTOR AND CABLE GUIDE



<b>1</b>	Ladder
<b>2</b>	Lifting strap
<b>3</b>	Bottom bar
<b>4</b>	Drum
<b>5</b>	Hirschmann connector
<b>6</b>	Motor to shaft adapter

<b>7</b>	Guided cable headrail bracket
<b>8</b>	Ladder clip
<b>9</b>	End cap bottom bar
<b>10</b>	Guided cable
<b>11</b>	Cable tensioner

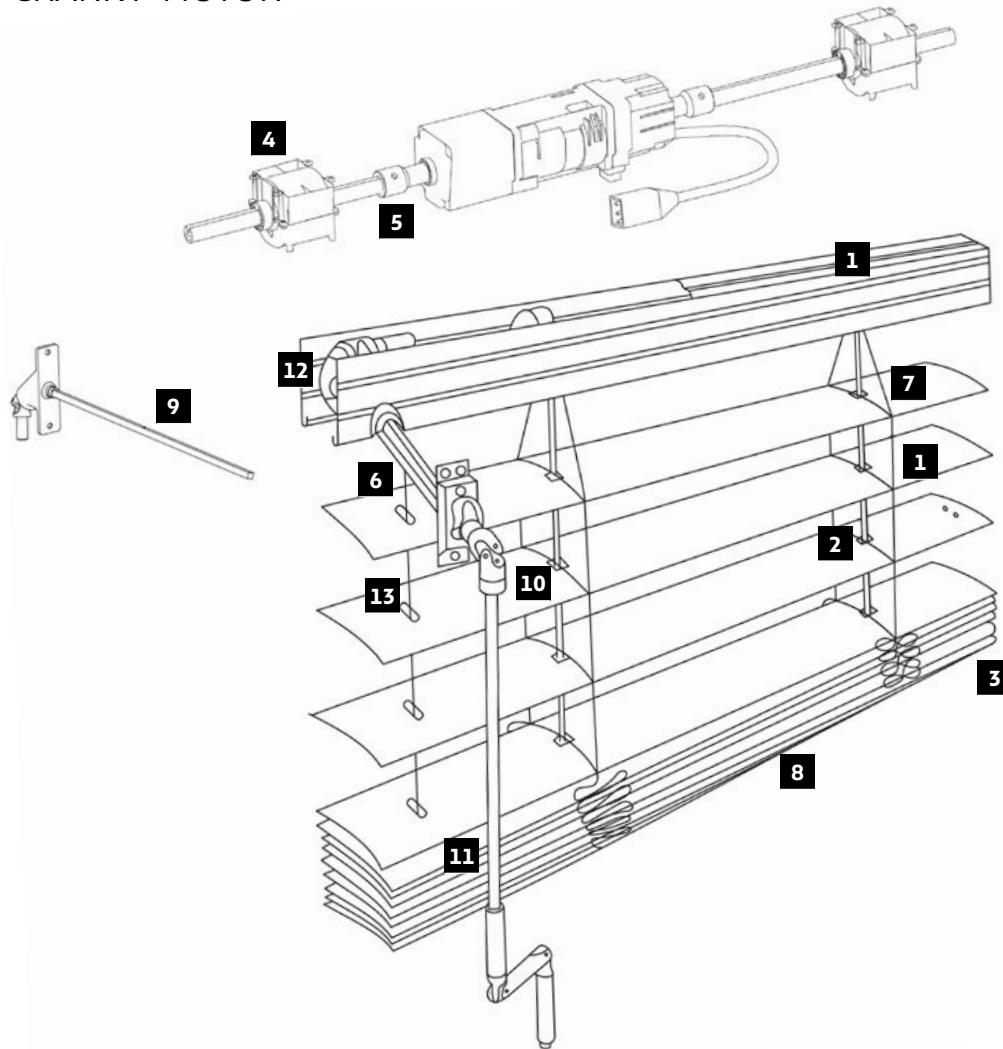
# SPARE PARTS

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

MODEL

**C50+**

WITH CRANK / MOTOR



<b>1</b>	Ladder
<b>2</b>	Lifting strap
<b>3</b>	Bottom bar
<b>4</b>	Drum
<b>5</b>	Adaptateur moteur-arbre
<b>6</b>	Guided cable headrail bracket
<b>7</b>	Ladder clip

<b>8</b>	End cap bottom bar
<b>9</b>	90° crank return
<b>10</b>	45° crank return
<b>11</b>	Crank
<b>12</b>	Crank device
<b>13</b>	Câble de guidage

# TYPES OF INSTALLATION

## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

### Screws included

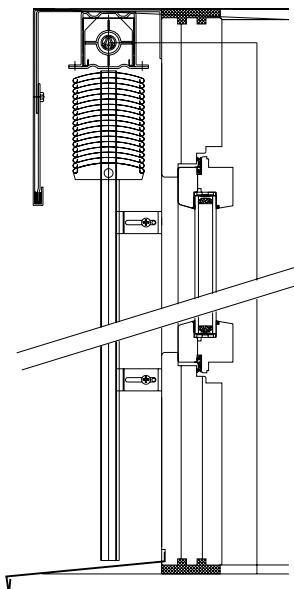
	Wood / Plastic	Aluminium	Concrete / Brick
<b>Ceiling bracket for headrail</b> ST 56x58			
<b>Wall bracket for headrail</b> EL 40 EL 100	Semi-circular head screw 5x30 galvanized		Semi-circular head screw 5x50 galvanized + peg ø8
<b>Ceiling bracket for headrail</b> ST 40x40		Semi-circular head screw 4x25 galvanized	Semi-circular head screw 5x40 galvanized + peg ø8
<b>Wall bracket for headrail</b> EL 49			
<b>Ceiling bracket/wall</b> ELC 120 ELC 140 ELC 87 ELCT 100-150 ELCT 150-120	Semi-circular head screw 5x30 galvanized		Semi-circular head screw 5x50 galvanized + peg ø8
<b>Side guides</b> GUP	Flat head screw 3,5x40 stainless steel		Flat head screw 3,5x40 stainless steel + peg ø5
<b>Side guides</b> GUE GUD GAPR GAPCS GAPCD Cable tensioner	Semi-circular head screw 5x25 stainless steel	Screw 4,8x19 stainless steel	Semi-circular head screw 5x40 stainless steel + peg ø10
<b>Crank return</b>		Flat head screw 3,9x22 galvanized	

# **TYPES OF INSTALLATION**

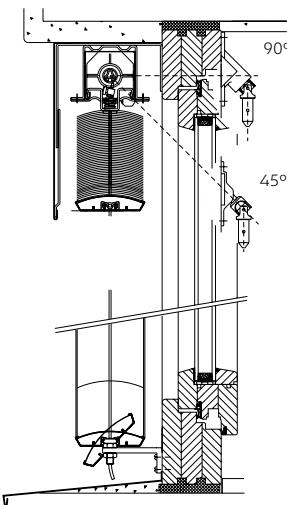
## OUTDOOR ALUMINUM VENETIAN BLINDS BSO

### **Types of installation**

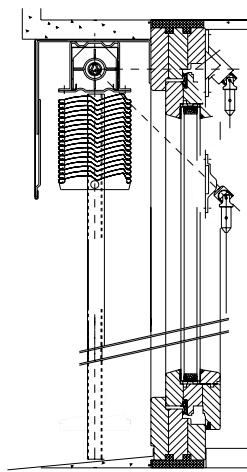
#### **In lintel**



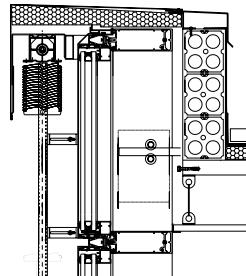
#### **In jambs**



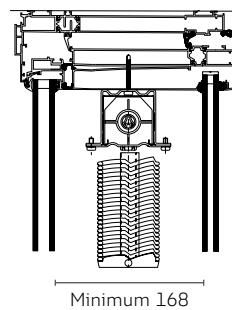
#### **Recessed**



#### **Aligned with the façade**



#### **In chamber**



# **BANDALUX**