

# **Roller Blinds**

HunterDouglas® EOS® 500 Roller Blind systems offer superior control with uncompromising installation comfort, quality and durability. From manual shades to fully automated systems, we offer superior hardware and an unmatched range of fabrics that provide an excellent solution for controlling light and glare.



**HunterDouglas** 

WINDOW COVERINGS

### **HunterDouglas**

**Technical Information Catalogue** 

**EOS**®500 Roller Blind Systems

English Version 2.0 - 2012



### **DESIGN FLEXIBILITY**

HunterDouglas® EOS® 500 Roller Blinds help establish the look and feel of a building. From single offices to the largest public areas, roller blinds will enhance the performance and appearance of any space. Recent advances in textile development have greatly increased the range of choices for high-performance shading fabrics.

The Hunter Douglas fabric line allows architects and designers to take a no-compromise approach to specifying roller blinds.

### **FUNCTIONALITY & COMFORT**

HunterDouglas® Roller Blinds feature a comprehensive range of systems to meet the design, functionality and performance specifications of any window. Exclusive patented components make them simple to install, connect and operate with an uncompromising quality; durable and trouble-free operation.

### **EASY INSTALLATION**

Easy installation with universal brackets that allow side, top, or end mounting without additional parts. Built-in self-leveling further streamlines installation and adjustment and easy change of operation side. Easy coupling of blinds for simultaneous operation of more than one blind.



### **ENERGY & LIGHT**

HunterDouglas® Roller Blinds are designed to improve indoor environmental quality and conserve energy. These systems help create built environments that are comfortable, healthy, productive and sustainable. Our engineering and production processes minimize embodied environmental impact while meeting the highest standards for commercial, hospitality, industrial, institutional and commercial applications. In order to obtain the optimal shading performance for a building and its occupants we developed compute simulation and calculation tools. Our project support team can analyze, visualize and optimize Window Covering Solutions with the HunterDouglas® Energy and Light Tool.

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## **Innovative Products Make Innovative Projects**





## Roller Blind EOS®500

### INNER STRENGTH, OUTER BEAUTY

Featuring a sleek architectural design with smooth operation and unrivaled inner strength, the EOS® 500 roller blind operating system spans even the largest window expanses beautifully. Well-designed large blinds make a dramatic statement, defining and controlling heat, light, and views. Highly durable hardware and operating systems deliver smooth and reliable operation.

- The new **modular** EOS® 500 roller blind system offers a wide variety of components to build **a custom roller blind** based on the project specification.
- Heavy-duty systems for large windows down to the smallest windows, with integrated levelers to reduce skewing roll.
- Large **collection** of dimensionaly stable fire retardant fabrics that will not sag or stretch.
- **Screen** fabrics available in **different openness** factors and colours.
- Universal spring-loaded end plug mounts blinds securely and provides for smooth and easy installation.
- Durable roller tubes are engineered to **span large expanses**.
- Modular operating system accommodates chain, crank and motorized applications.
- Heavy-duty universal (left or right) metal or plastic clutch for chain operated blinds provides smooth and easy lift capabilities.
- Utilization of counter balance weight system provides for ease of manual lifting roller blinds over large expanses.
- **Strong metal chain** with high breaking strength provides worry-free and smooth operation of blinds.
- Aluminium designer installation bracketing system provides unique architectural aesthetic possibilities and strong mounting platform.
- Easy to connect multiple roller blinds next to each other
- Duo blind fascia system provides nicely concealed dual roller blinds with black-out and translucent fabric.
- Z-brackets allow overlapping of fabrics for installation of multiple blinds next to each other in large façades without intermediate light gaps.





## **Sustainable Comfort**

HunterDouglas® Roller Blinds contribute to sustainable comfort in many ways:

### **FABRIC:**

Hunter Douglas offers a comprehensive line of high performance fabrics to meet any specification, including PVC-free GreenScreen® fabrics, Enduris™ glass core technology, and metallised Platinum coated fabrics. Fabric features include: PVC-free with low VOC emission, recyclable, dimensionally stable, outstanding shading coefficients, a wide range of colors and openness factors. Designers can choose from our wide selection of fabrics for superior light and energy control.

We are committed to environmentally friendly production processes through careful selection of materials, recycling practices and eliminating emission of harmful substances.

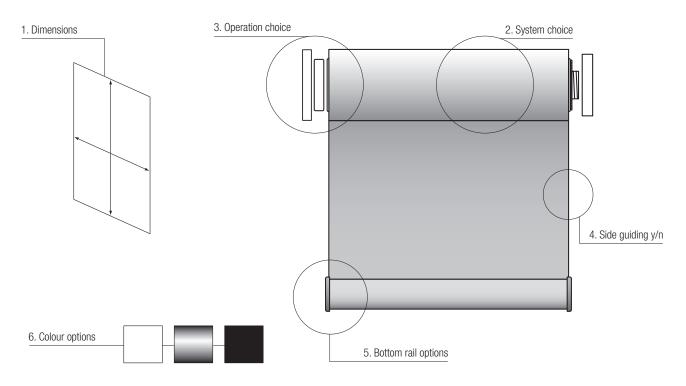
### **ROLLER BLIND EOS® 500 SYSTEM:**

Our roller blind systems are designed in a modular way. The advantage of this method is that at the end of its life it can easily be taken apart into separate components, making recycling of the basic materials easy.





### **ROLLER BLIND EOS® 500 PRODUCT SELECTOR**



# System Design

Designing the right system for the application needs to follow some logical steps. As with all design pocesses this may be a iterative proces to come to the final choice:

### **FABRIC CHOICE**

Fabrics are selected based on location, facade orientation, use of building, and aesthetics. The Hunter Douglas Light and Energy tool can help in making the right choice. Fabric width, thickness and weight are important to the system's design.

### **DIMENSIONING**

Looking at all the various positions in a facade where the blinds are located, a homogeneous looks is often required. The largest blind will determine the required system for all. Look up this size in the appropriate table for the chosen fabric based on its weight and determine if the Medium system or Large system is required for your project.

### **INSTALLATION AND DESIGN**

Both the Medium and Large systems are available in many installation and design versions. We therefore made a simple and easy to use overview which will guide your choice.

### **OPERATION**

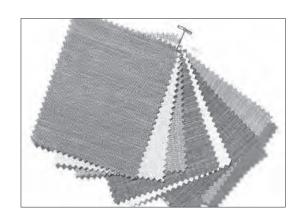
All systems can be operated with chain, crank or motor. Without compromising functionality or estetics per system a choice can be made or, for a more homogeneous look, the same for all. Motorized versions in combination with building automations offer the best control over light and energy performance. The system overview will now indicate the right page for the selected system.

### **OPTIONS**

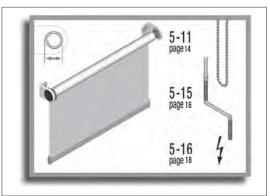
On the page of the selected system a detailed description can be found with its main dimensions and reservations. On the right page all options which can be chosen with this system are mentioned, allowing the final tweaking to optimise your solution.

### PROJECT SUPPORT

Although that we went through a considerable effort to detail our solutions as much as possible in this guide to enable you the best possible specification, we also have organised a project support department to help making the right choices. We have CAD drawings, digital specifications texts and advise available. Our solutions have already been used on state of the art sustainable buildings contributing to BREEAM excellent or LEED Platinum rating.







# Roller blind EOS<sup>®</sup>500 Family

The many models of the Roller blind EOS® 500 system can be divided over 4 families of systems:

### **Bracket Systems**

Bracket systems are easy to install functional roller blind mechanisms with design brackets or optional steel brackets with covers.



### **Mounting Profile Systems**

Mounting profile systems are clicked on hidden mounting clips, allowing faster installation and installation on a weaker support such as plaster board.



### Valance Systems

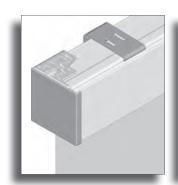
Valance systems protect and hide the front (and bottom) of the fabric on the tube, creating a more sleek look.





### **Cassette Systems**

Cassette systems protect the fabric against dust, dirt and harmfull UV-rays and are easy to install on hidden mounting clips.





On all systems options such as guiding and coupling are available. See the detailed description of each model for available options.

# **Operation systems**

The EOS® 500 modular operating system accommodates chain, crank and motorized applications.

### Easy Chain

Operation with a stainless steel chain and the patented universal clutch is most convenient for medium sized individually controlled blinds. Universal for left or right hand chain operation, easy to change operation side. Locking device for easy installation and safe use. Standard 1:1 gear ratio and 1:1.75 or 1:3 for reduced operating force on larger blinds.



### **Powerful Crank**

With the 3:1 geared crank operation, individually controlled blinds are best operated with reduced operating force on larger blinds. This option is also most convenient for blinds in public places where increased child safety is a concern. A detachable crank is a practical option for large blinds in public spaces.



#### **Quiet Motors**

Offering powerful, quiet operation, Hunter Douglas' motorized blinds bring the ease of use and reliability that has garnered international brand respect. The operating system uses quiet motors for blinds up to 16 m². The motors allow for intermediate stops, group control and timer controls that can send status reports to update blind positioning for ultimate precision. A versatile, new control allows the blinds to integrate with any other automated and/or building management systems, making it ideal for both new construction and retrofits.

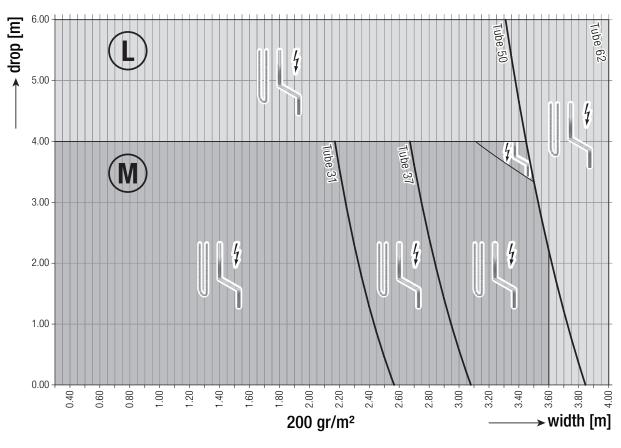
Also very suitable as a child safe solution for public areas.

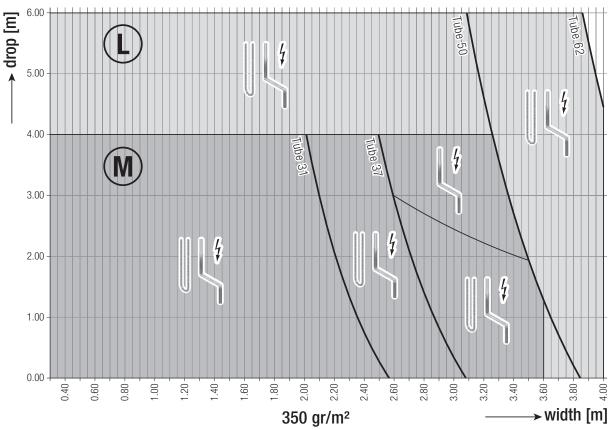
- Quiet operation: The motors are tested to operate below the level of quiet office conversation.
- Power: Standard motors can operate blinds up to 400 cm wide and 600 cm in height.
- Versatility: The motors were designed with best-in-class control boards that integrate with a wide range of other systems via dry contact, serial, or other protocols.
- Convenience: Motorized blinds are easy to operate. It is
  possible to open or close multiple blinds with the touch of a
  switch, or the click of a mouse.
- Automation: Research shows that automated sun-tracking blinds enable energy savings from lighting and HVAC systems by maximizing control of glare and solar heat gain.
- Oversize blinds: Motorized systems are a good option for shading large windows, as the weight of an oversized blind can make it hard to operate.

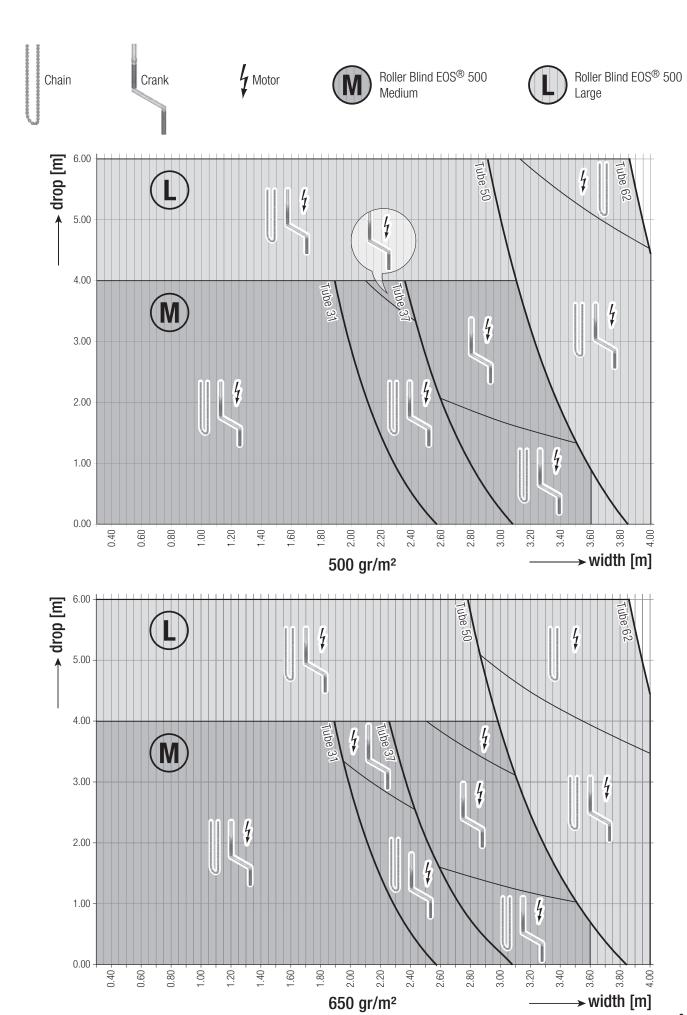


# **System and Control Selector**

Find the system (M or L) and control that is suitable for your specific measurements. Select below the graph for selected fabric weight (200, 350, 500 and 650 gr/m²). In this graph the appropriate system can be read based on required width and drop. When the reading is in the 'M' zone go to page 10 for further selection. When the reading is in the 'L' zone go to page 12 for further selection of the right model.



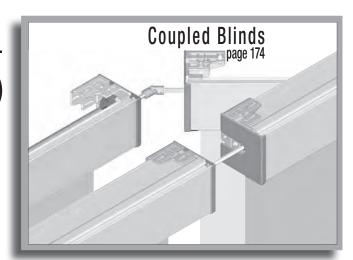


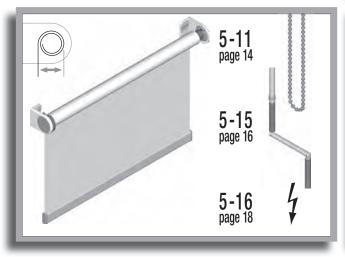


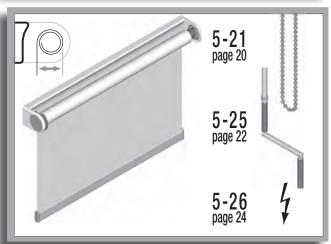
# **Roller Blind EOS**\*500

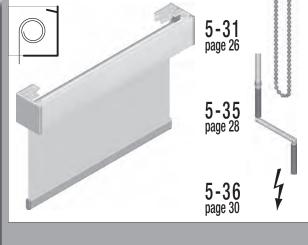
# **Type Overview**

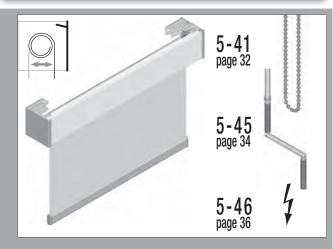


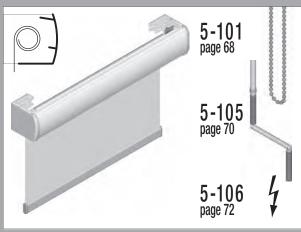


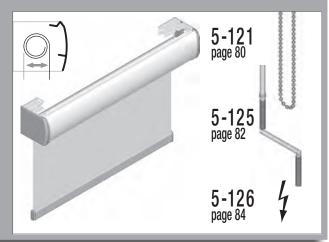


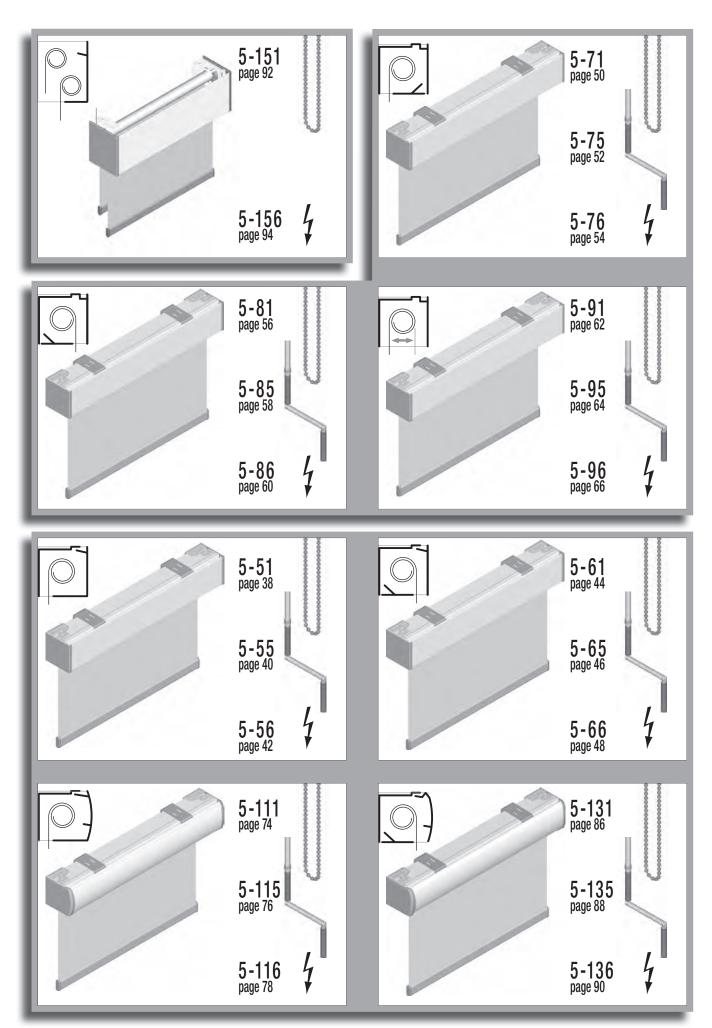








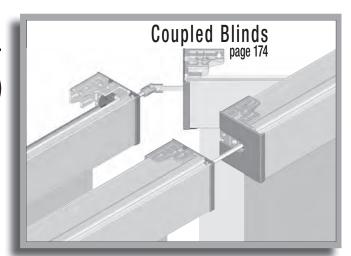


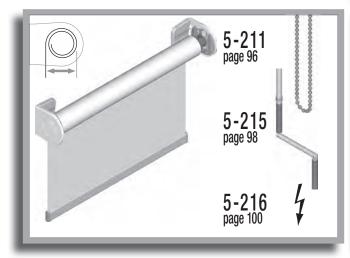


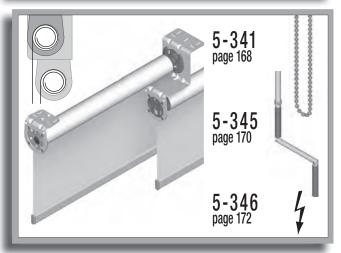
# **Roller Blind EOS**® 500

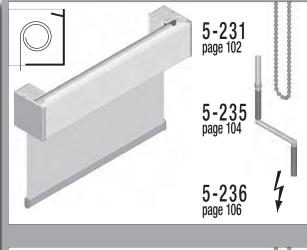
# **Type Overview**

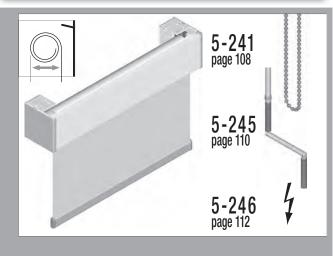


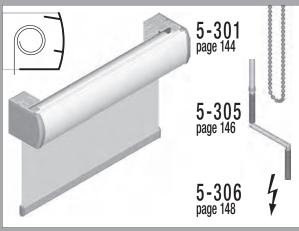


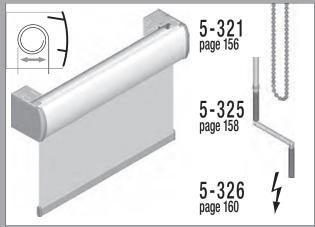








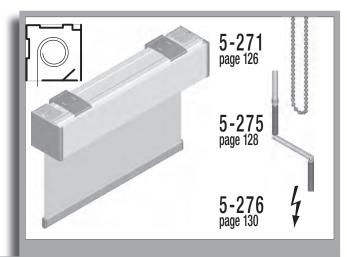


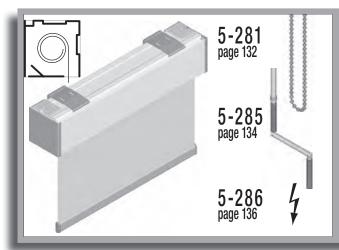


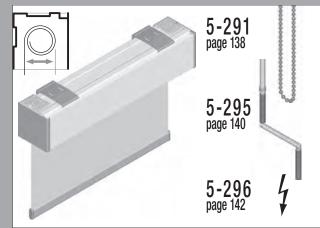
# Roller Blind EOS® 500

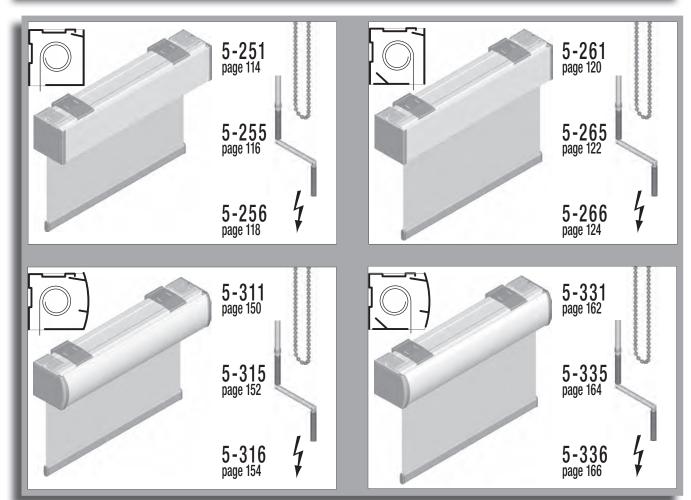
# **Type Overview**





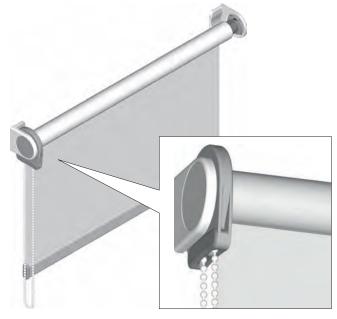




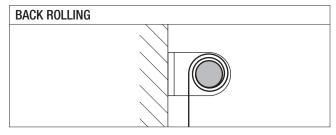


### CHAIN OPERATED ROLLER BLIND INSTALLED ON END BRACKETS M

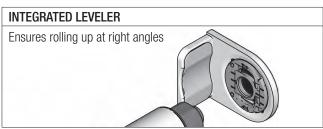
- Pearl chrome finished die cast design brackets
  - Optional powder coated steel brackets in grey, black or white
- Integrated leveling function to limit skewing
  - Optional add-on leveler or no leveler
- Patented plastic clutch for quick, easy and safe installation in grey, black or white
- Alternatively a patented, silent, award winning metal designed clutch in pearl chrome finish
- Universal clutch for left and righ hand operation
- · High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back or front rolling
- UV stable parts
- High quality fabric according to technical specifications



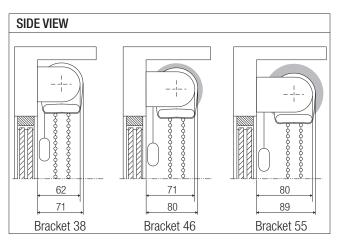
LIGHT GAPS (mm)			width —	
Operation side	20	a		7
Bearing side	16	b		
				height -
				- hei
			'a' 'b'	

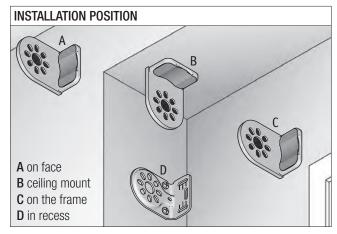


SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>

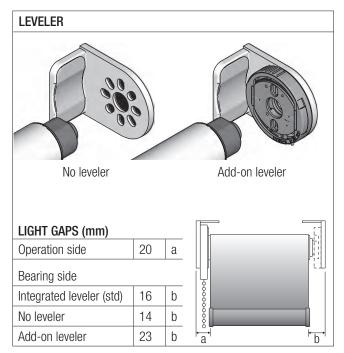


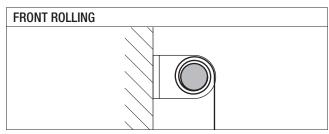
MAXIMUM LOAD (KG)* (bottom rail + fabric)						
WANIMOW LOAD (NO) (DULLOITI TAIL + TADITIC)						
Type clutch	Tube 31	Tube 37	Tube 50			
Plastic, gear 1:1 x 1	2.5	-	-			
Plastic, gear 1:1 x 2	4.7	4.0	3.0			
Plastic, gear 1.75:1	5.8	5.0	3.7			
Metal, gear 1:1	5.8	5.0	3.7			

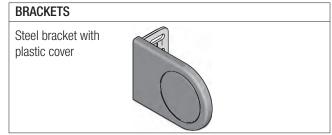


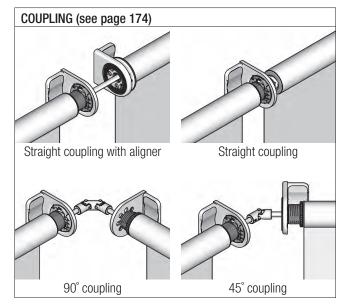


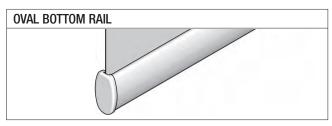
The technical terms on this page are clarified in the glossary in the back.

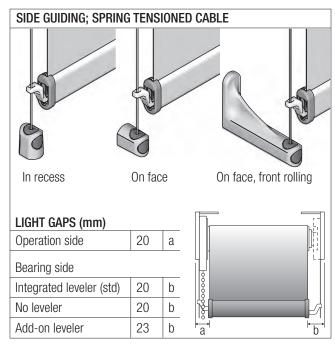






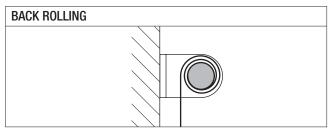


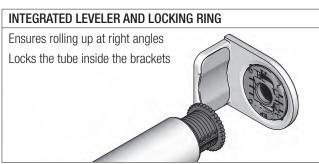


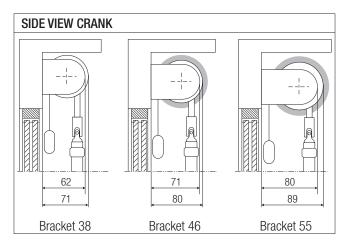


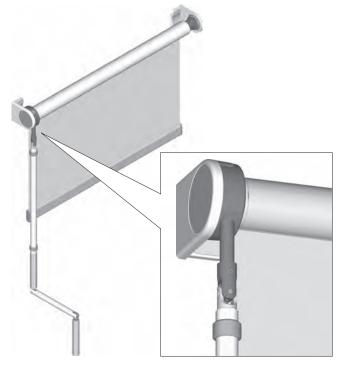
### CRANK OPERATED ROLLER BLINDS INSTALLED ON END BRACKETS M

- Pearl chrome finished die cast design brackets
  - Optional powder coated steel brackets in grey, black or white
- Integrated leveling function to limit skewing
  - Optional add-on leveler or no leveler
- 3:1 Geared crank for quick, easy and safe operation in grey, black or white
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring-loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back or front rolling
- UV stable parts
- High quality fabric according to technical specifications





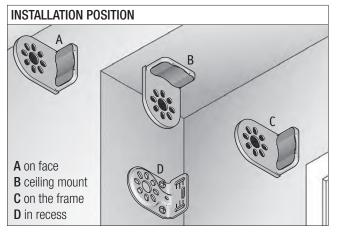




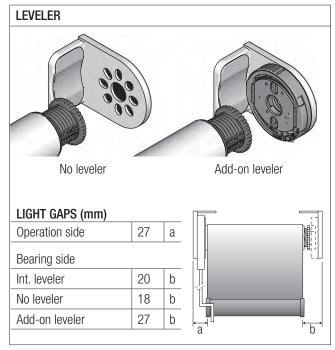
LIGHT GAPS (mm)			width
Operation side	27	a	
Bearing side	20	b	
			a b

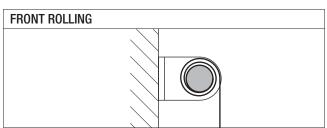
SIZE LIMITATIONS*				
Min. width	300 mm			
Max. width	3600 mm			
Min. height	500 mm			
Max. height	4000 mm			
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 26 m <sup>2</sup>			

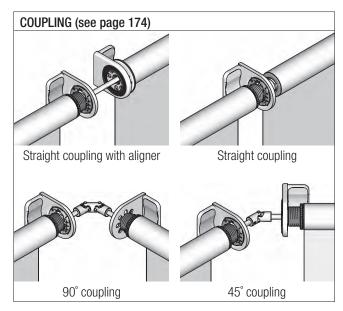
MAXIMUM LOAD (KG)*				
Туре	Tube 31	Tube 37	Tube 50	
Gear 3:1 11.5 10.0 7.5				
Maximum load = bottom rail	+ (optional) additio	nal weight + fabri	ic	

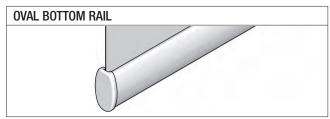


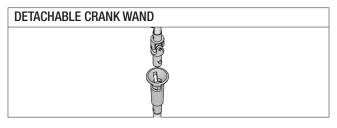
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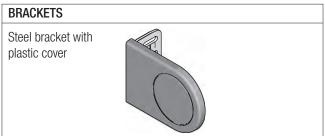


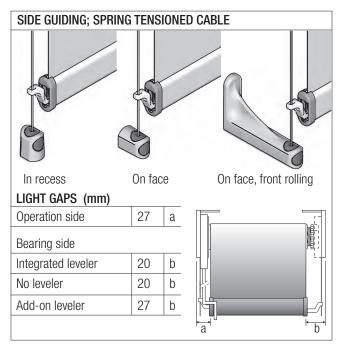






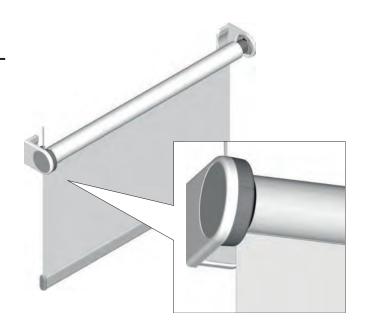




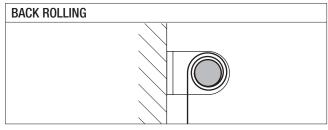


### MOTOR OPERATED ROLLER BLIND INSTALLED ON END BRACKETS M

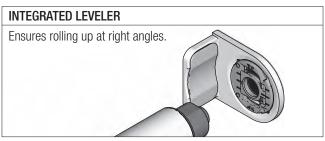
- Pearl chrome finished die cast design brackets
  - Optional powder coated steel brackets in grey, black or white
- Integrated leveling function to limit skewing
  - Optional add-on leveler or no leveler
- Range of motors available depending on requirements
  - Current: 24V or 230V
  - Force from 3.5 kg to 15 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back or front rolling
- UV stable parts
- High quality fabric according to technical specifications



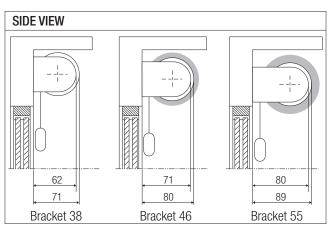
LIGHT GAPS (mm)			<b>+</b>	— width —	<b>——</b>
Drive side			Π_		
Motor LT 28	22	а			
Motor LS 40	23	а			height .
Motor M 40	23	а			- heig
Decring olds	10	T h			
Bearing side	16	þ	<b>—</b>	_	
			'a'		D

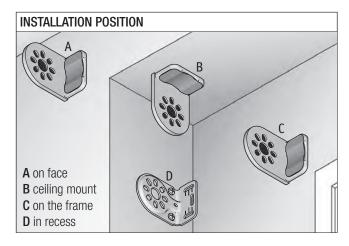


SIZE LIMITATIONS*	
Min. width	380 - 645 mm (depending on motor size)
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>

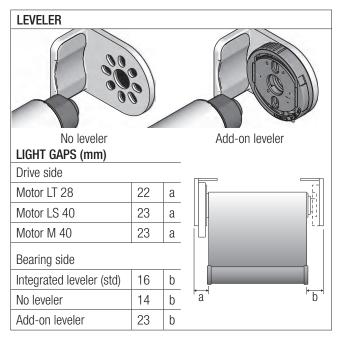


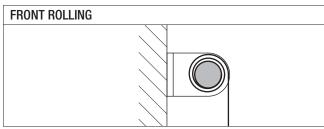
MAXIMUM LOAD (KG)*					
Туре	U	Tube 31	Tube 37	Tube 50	
Motor LT 28	24V	4.0	3.5	-	
Motor LS 40	230V	-	-	15.0	
Motor M 40	230V	-	-	15.0	
Maximum load = bottom rail + (optional) additional weight + fabric					

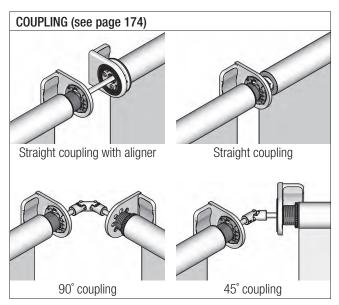


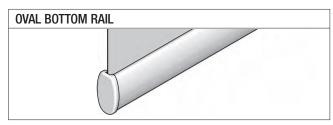


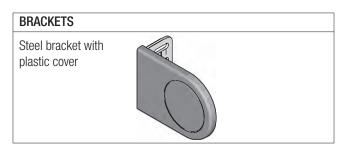
The technical terms on this page are clarified in the glossary in the back.

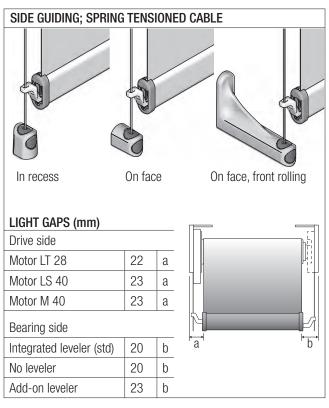












### CHAIN OPERATED ROLLER BLIND INSTALLED ON MOUNTING PROFILE M

### Description

- Pearl chrome finished die cast design brackets fixed on mounting profile
  - Optional powder coated steel brackets in grey, black or white
- Easy installation on mounting clips allowing a more flexible positioning
- Integrated leveling function to limit skewing
  - Optional add-on leveler or no leveler
- Patented plastic clutch for quick, easy and safe installation in grey, black or white
- Alternatively a patented, silent, award winning metal designed clutch in pearl chrome finish
- Universal clutch for left or right hand operation
- High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Spring-loaded end plug for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back or front rolling
- UV stable parts

**BACK ROLLING** 

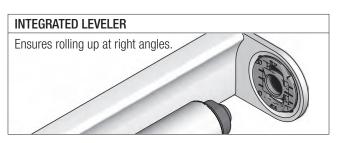
• High quality fabric according to technical specifications



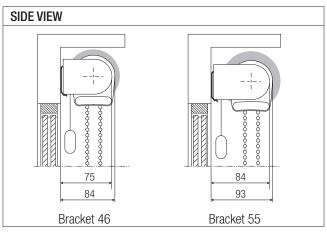
LIGHT GAPS (mm)			├── width ──
Operation side	20	a	<b>□</b>
Bearing side	16	b	
			tugien theight

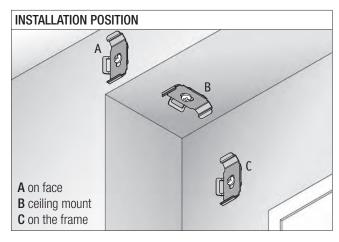
	SIZE LIMITA
	Min. width
	Max. width
	Min. height
	Max. height
\ \ \	N.4. C

SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>

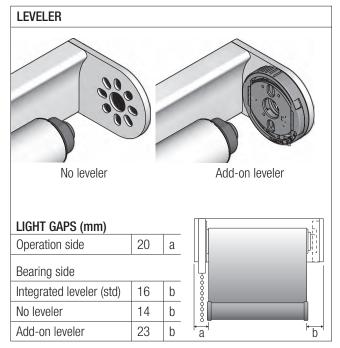


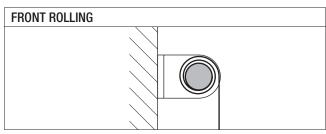
MAXIMUM LOAD (KG)* (bottom rail + fabric)				
Type clutch	Tube 31	Tube 37	Tube 50	
Plastic, gear 1:1 x 1	2.5	-	-	
Plastic, gear 1:1 x 2	4.7	4.0	3.0	
Plastic, gear 1.75:1	5.8	5.0	3.7	
Metal, gear 1:1	5.8	5.0	3.7	

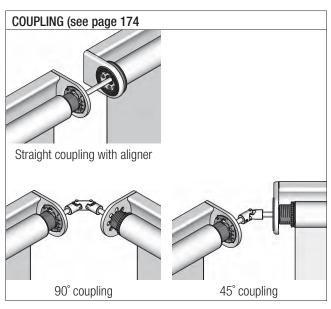


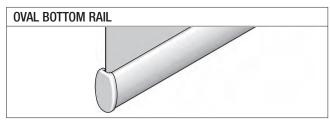


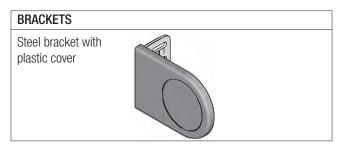
The technical terms on this page are clarified in the glossary in the back.

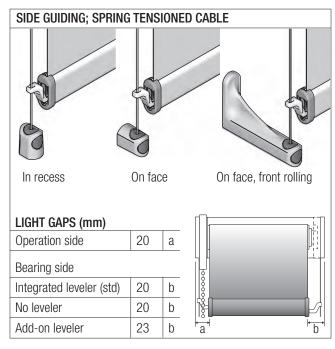






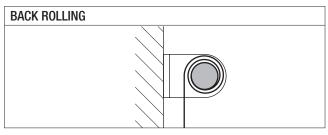


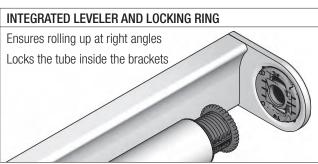


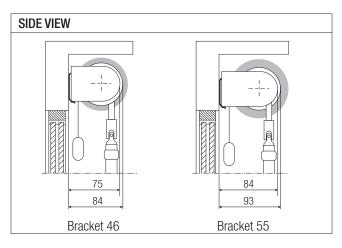


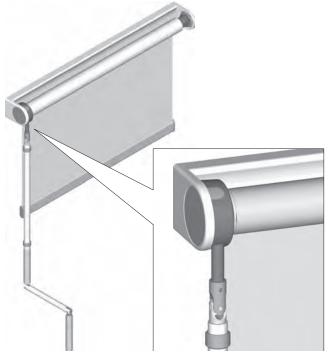
### CRANK OPERATED ROLLER BLIND INSTALLED ON MOUNTING PROFILE M

- Pearl chrome finished die cast design brackets fixed on mounting profile
  - Optional powder coated steel brackets in grey, black or white
- Easy installation on mounting clips allowing a more flexible positioning
- Integrated leveling function to limit skewing
  - Optional add-on leveler or no leveler
- 3:1 Geared crank for quick, easy and safe operation in grey, black or white
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring-loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back or front rolling
- UV stable parts
- High quality fabric according to technical specifications





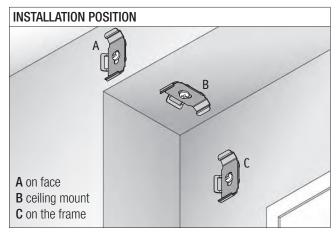




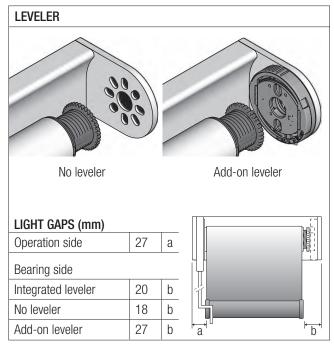
LIGHT GAPS (mm)			→ width — →
Operation side	27	a	T
Bearing side	20	b	
			a beight

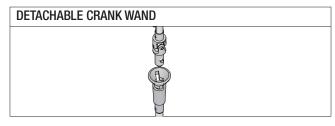
SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 26 m <sup>2</sup>

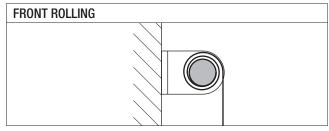
MAXIMUM LOAD (KG)*	•		
Туре	Tube 31	Tube 37	Tube 50
Gear 3:1	11.5	10.0	7.5
Maximum load = bottom rail + (optional) additional weight + fabric			

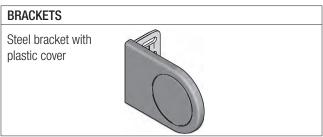


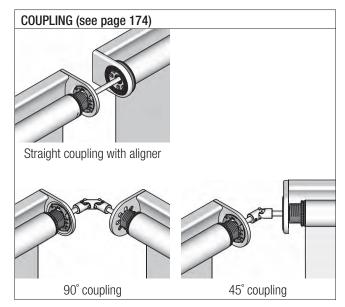
The technical terms on this page are clarified in the glossary in the back.

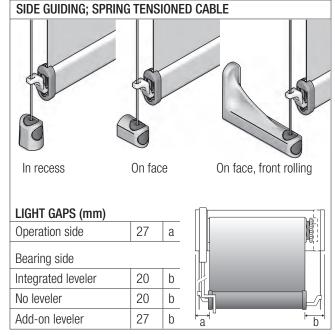


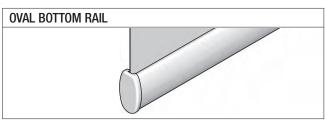






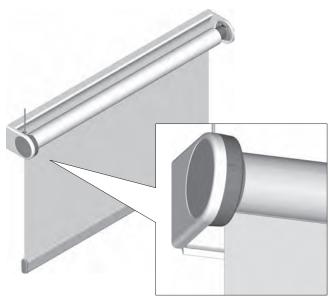




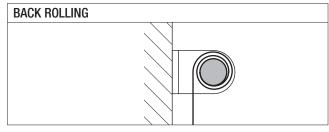


### MOTOR OPERATED ROLLER BLIND INSTALLED ON MOUNTING PROFILE $\ensuremath{\mathsf{M}}$

- Pearl chrome finished die cast design brackets fixed on mounting profile
  - Optional powder coated steel brackets in grey, black or white
- Easy installation on mounting clips allowing a more flexible positioning
- Integrated leveling function to limit skewing
  - Optional add-on leveler or no leveler
- · Range of motors available depending on requirements
  - Current: 24V or 230V
  - Force from 3.5 kg to 15 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring-loaded end plug for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back or front rolling
- UV stable parts
- High quality fabric according to technical specifications



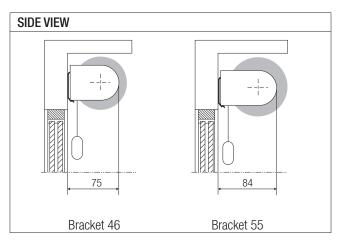
LIGHT GAPS (mm)			width —	
Drive side				
Motor LT 28	22	а		
Motor LS 40	23	а		height
Motor M 40	23	а		4
Bearing side	20	b		
Dearing side	20	D	t a	<b>-</b>

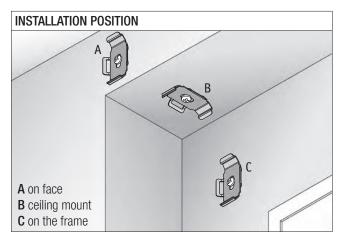


SIZE LIMITATIONS*	
Min. width	380 - 645 mm (depending on motor size)
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>

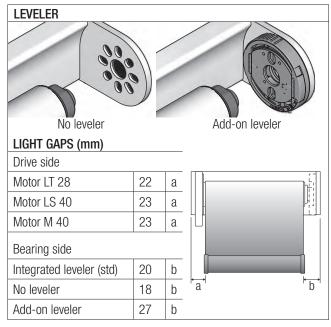


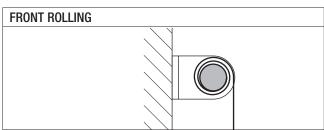
MAXIMUM LOAD (KG)*				
Туре	U	Tube 31	Tube 37	Tube 50
Motor LT 28	24V	4.0	3.5	-
Motor LS 40	230V	-	-	15.0
Motor M 40	230V	-	-	15.0
Maximum load = bottom rail + (optional) additional weight + fabric				

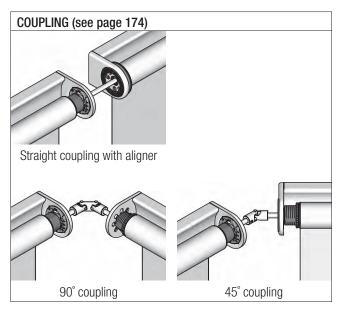


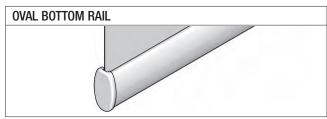


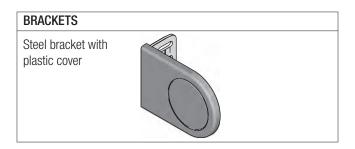
The technical terms on this page are clarified in the glossary in the back.

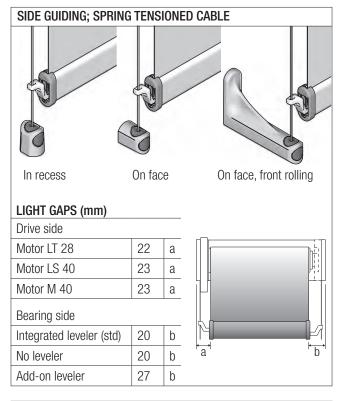






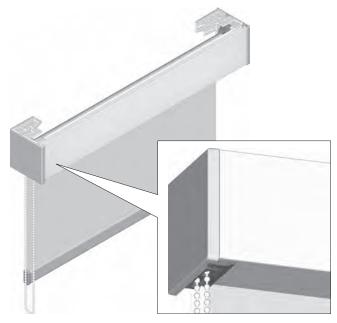




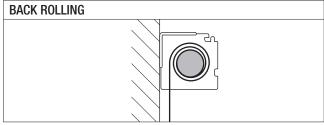


### CHAIN OPERATED ROLLER BLIND BACK ROLLING WITH VALANCE M

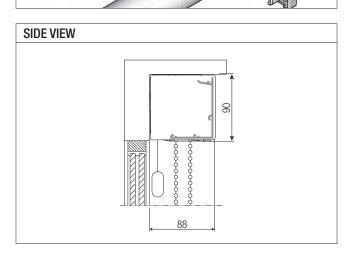
- Die cast brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- L shaped extruded valance
  - In natural anodised, or powder coated black or white finish
- Leveling function to limit skewing
  - Optional no leveler
- Patented clutch for quick, easy and safe installation in grey, black or white
- Universal clutch for left and right hand operation
- · High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications



LIGHT GAPS (mm)			← width — →
Operation side	20	a	1
Bearing side	24	b	
			Tubieu b

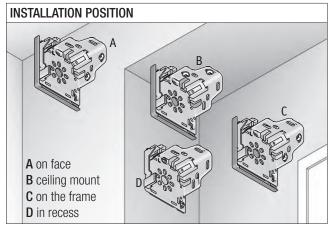


ADD-ON LEVELER	
Ensures rolling up at right angles	

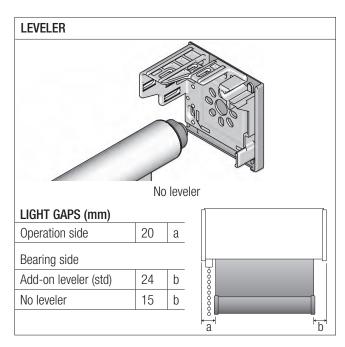


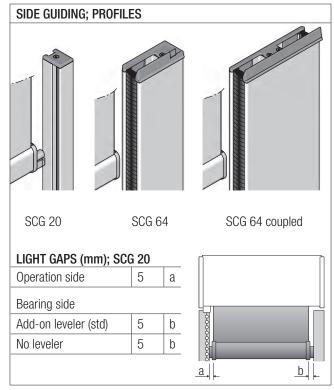
SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>

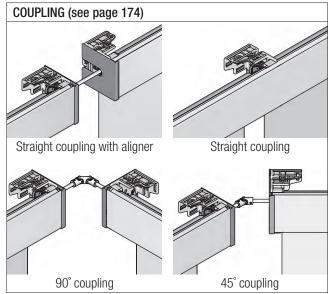
MAXIMUM LOAD (KG)*				
Туре	Tube 31	Tube 37	Tube 50	
Gear 1:1 x 1	2.5	-	-	
Gear 1:1 x 2	4.7	4.0	3.0	
Gear 1.75:1	5.8	5.0	3.7	
Maximum load = bottom rail + (optional) additional weight + fabric				

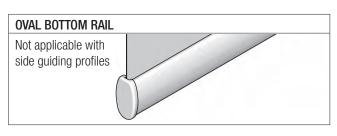


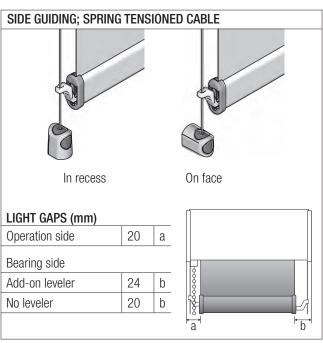
The technical terms on this page are clarified in the glossary in the back.





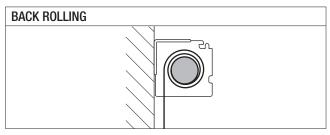


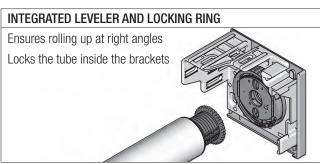


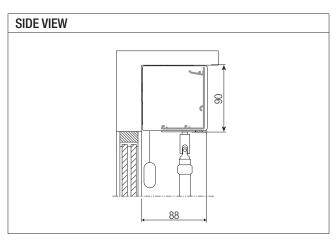


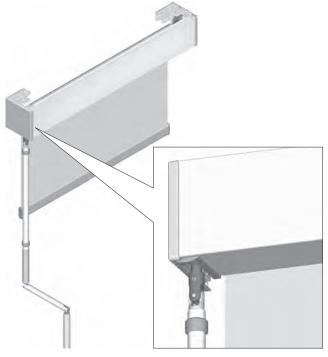
### CRANK OPERATED ROLLER BLIND BACK ROLLING WITH VALANCE M

- Die cast brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- L shaped extruded valance
  - In natural anodised, or powder coated black or white finish
- Leveling function to limit skewing
  - Optional no leveler
- 3:1 Geared crank for quick, easy and safe operation in grey, black or white
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring-loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





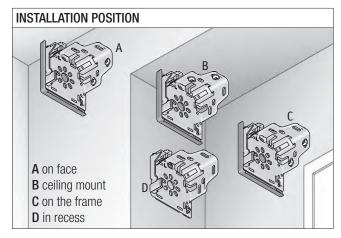




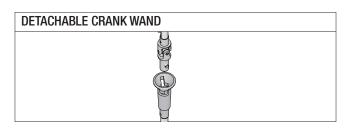
LIGHT GAPS (mm)			⊬ width — →
Operation side	28	a	1
Bearing side	28	b	
			tudien to the total training

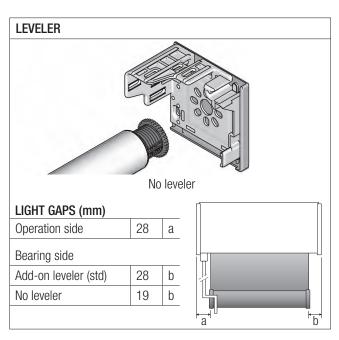
SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 26 m <sup>2</sup>

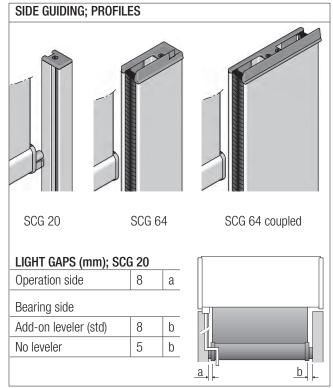
MAXIMUM LOAD (KG)*				
Туре	Tube 31	Tube 37	Tube 50	
Gear 3:1	11.5	10.0	7.5	
Maximum load = bottom rail + (optional) additional weight + fabric				

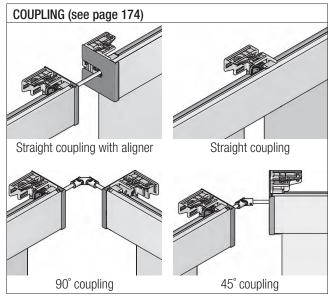


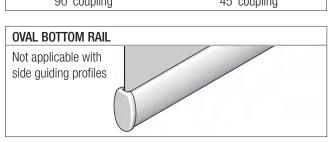
The technical terms on this page are clarified in the glossary in the back.

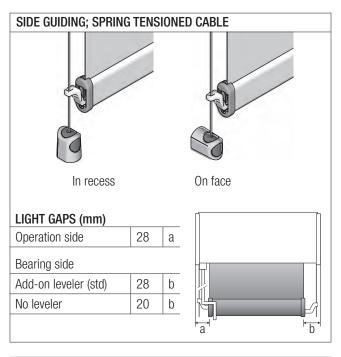






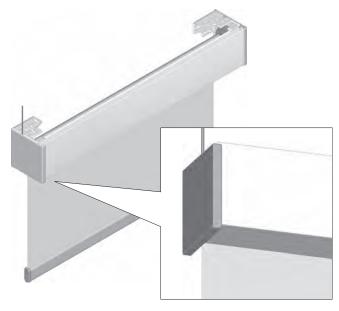




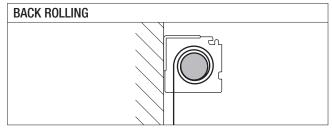


### MOTOR OPERATED ROLLER BLIND BACK ROLLING WITH VALANCE M

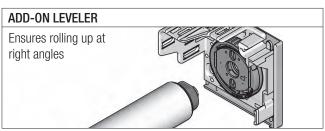
- Die cast brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- L shaped extruded valance
  - In natural anodised, or powder coated black or white finish
- Leveling function to limit skewing
  - Optional no leveler
- · Range of motors available depending on requirements
  - Current: 24V or 230V
  - Force from 3.5 kg to 15 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications



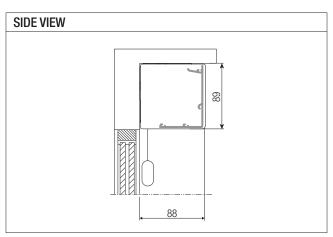
LIGHT GAPS (mm)			⊬ width — →
Drive side			
Motor LT 28	22	а	
Motor LS 40	24	а	
Motor M 40	24	а	2
Bearing side	24	b	
Dodning Side	4	D	h h

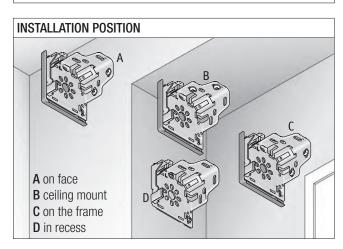


SIZE LIMITATIONS*	
Min. width	380 - 645 mm (depending on motor size)
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>

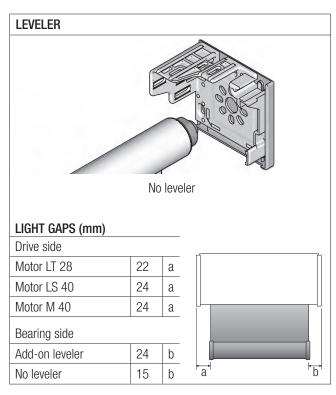


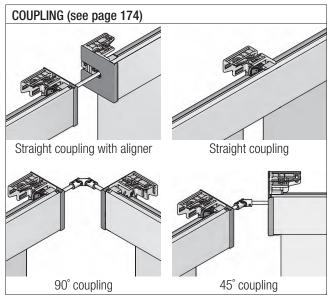
MAXIMUM LOAD (KG)*				
Туре	U	Tube 31	Tube 37	Tube 50
Motor LT 28	24V	4.0	3.5	-
Motor LS 40	230V	-	-	15.0
Motor M 40	230V	-	-	15.0
Maximum load = bottom rail + (optional) additional weight + fabric				



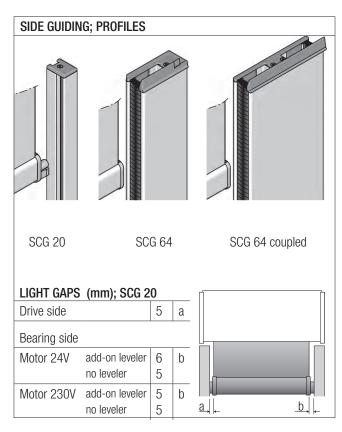


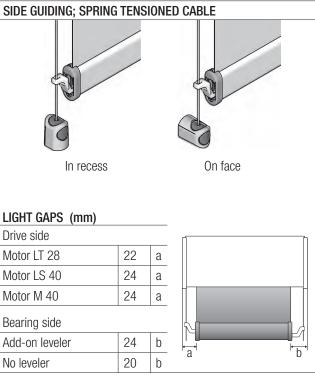
The technical terms on this page are clarified in the glossary in the back.





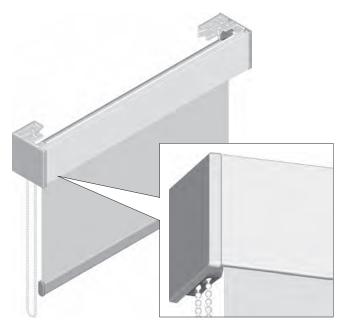


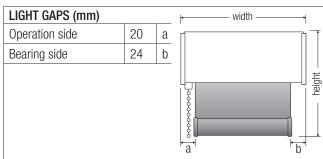


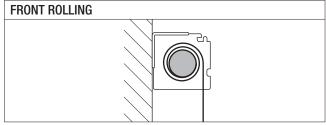


### CHAIN OPERATED ROLLER BLIND FRONT ROLLING WITH VALANCE M

- Die cast brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- Flat extruded valance
  - In natural anodised, or powder coated black or white finish
- Leveling function to limit skewing
  - Optional leveler
- Patented clutch for quick, easy and safe installation in grey, black or white
- Universal clutch for left or right hand operation
- High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front (standard) or back rolling
- UV stable parts
- High quality fabric according to technical specifications





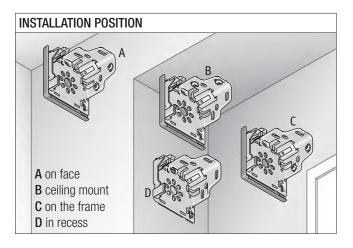


ADD-ON LEVELER	
Ensures rolling up at right angles	

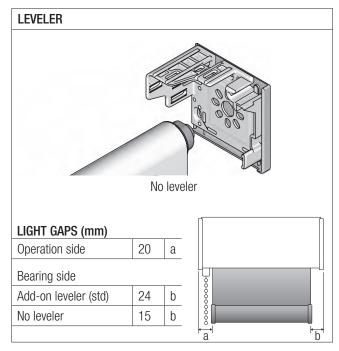
06	

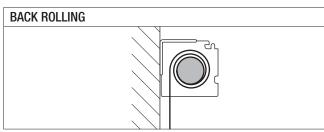
SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>

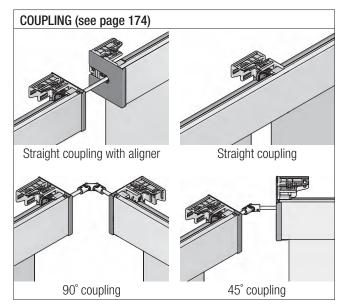
MAXIMUM LOAD (KG)*				
Туре	Tube 31	Tube 37	Tube 50	
Gear 1:1 x 1	2.5	-	-	
Gear 1:1 x 2	4.7	4.0	3.0	
Gear 1.75:1	5.8	5.0	3.7	
Maximum load = bottom rail + (optional) additional weight + fabric				

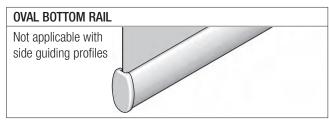


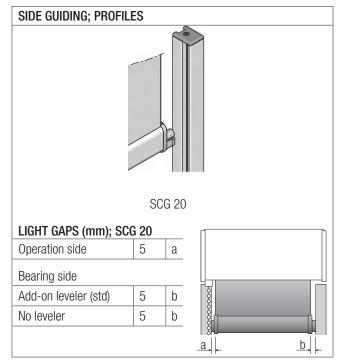
The technical terms on this page are clarified in the glossary in the back.

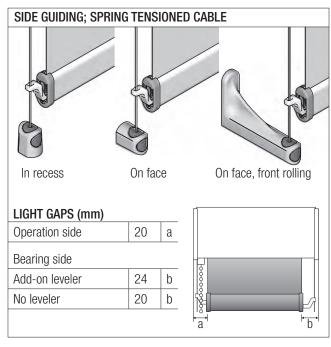






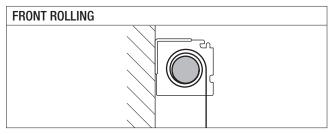


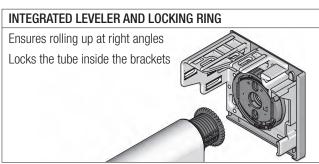


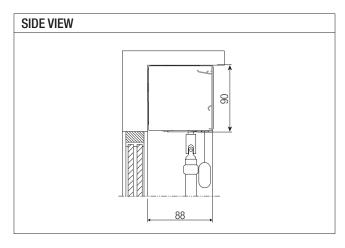


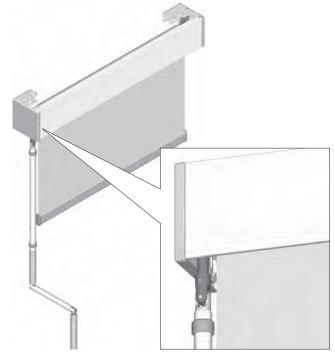
### CRANK OPERATED ROLLER BLIND FRONT ROLLING WITH VALANCE M

- Die cast brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- Flat extruded valance
  - In natural anodised, or powder coated black or white finish
- Leveling function to limit skewing
  - Optional no leveler
- 3:1 Geared crank for quick, easy and safe operation in grey, black or white
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring-loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front (standard) or back rolling
- UV stable parts
- High quality fabric according to technical specifications





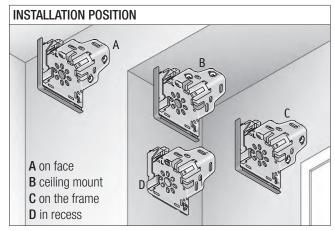




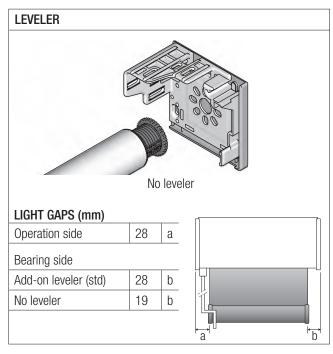
LIGHT GAPS (mm)			width ——→
LIGHT GAPS (IIIII)	1	_	← widiii →
Operation side	28	a	ſ <u> </u>
Bearing side	28	b	
			a

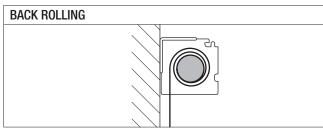
SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 26 m <sup>2</sup>

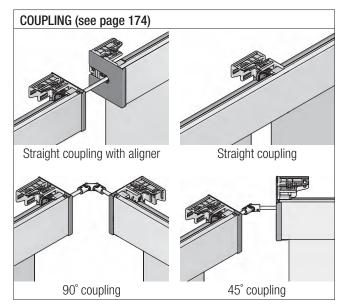
MAXIMUM LOAD (KG)*						
Туре	Tube 31	Tube 37	Tube 50			
Gear 3:1 11.5 10.0 7.5						
Maximum load = bottom rail + (optional) additional weight + fabric						

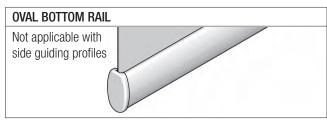


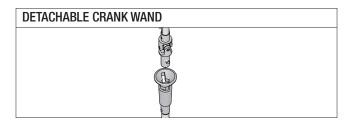
The technical terms on this page are clarified in the glossary in the back.

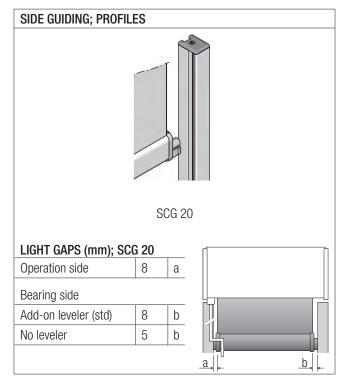


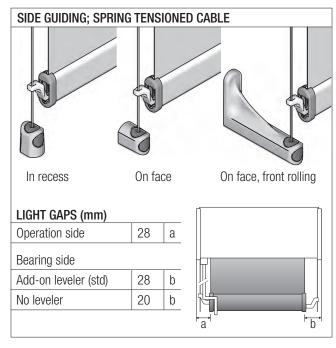






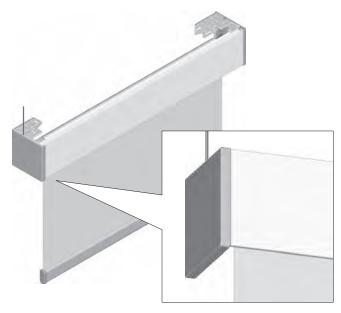




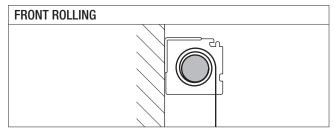


### MOTOR OPERATED ROLLER BLIND FRONT ROLLING WITH VALANCE $\boldsymbol{\mathsf{M}}$

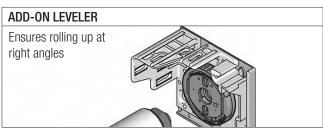
- Die cast brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- Flat extruded valance
  - In natural anodised, or powder coated black or white finish
- Leveling function to limit skewing
  - Optional no leveler
- · Range of motors available depending on requirements
  - Current: 24V or 230V
  - Force from 3.5 kg to 15 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front (standard) or back rolling
- UV stable parts
- High quality fabric according to technical specifications



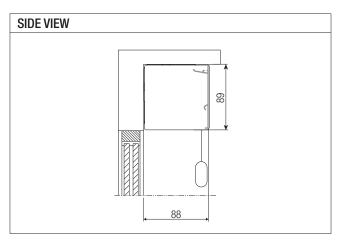
LIGHT GAPS (mm)			width —	<b>—</b>
Drive side				$\overline{}$
Motor LT 28	22	а		
Motor LS 40	24	а		height
Motor M 40	24	а		- he
Bearing side	24	b		

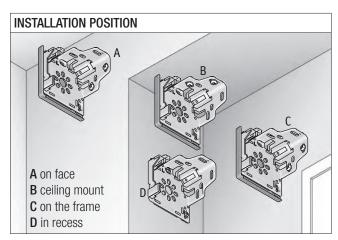


SIZE LIMITATIONS*	
Min. width	380 - 645 mm (depending on motor size)
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>

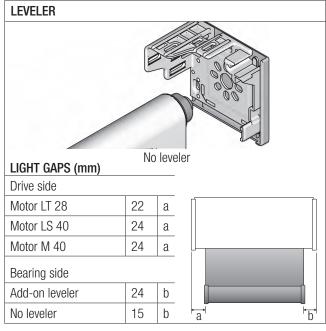


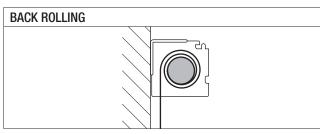
MAXIMUM LOAD (KG)*					
Туре	U	Tube 31	Tube 37	Tube 50	
Motor LT 28	24V	4.0	3.5	-	
Motor LS 40	230V	-	-	15.0	
Motor M 40	230V	-	-	15.0	
Maximum load = bottom rail + (optional) additional weight + fabric					

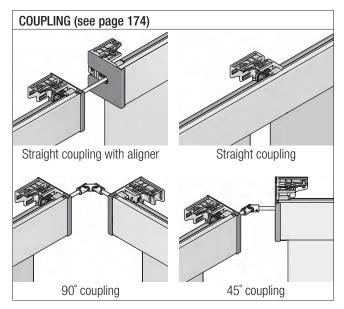


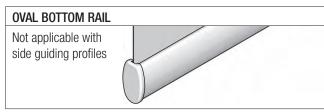


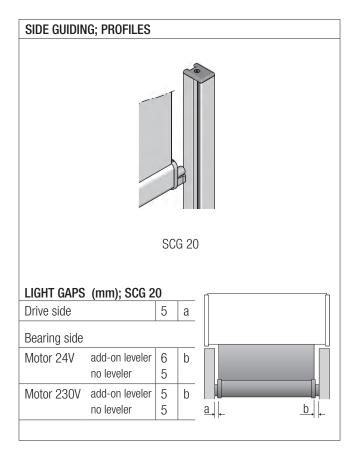
The technical terms on this page are clarified in the glossary in the back.

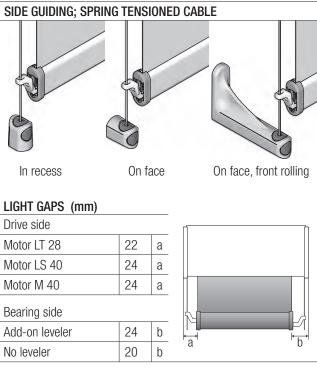






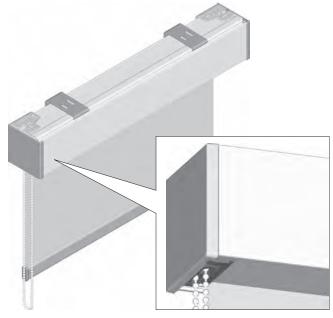


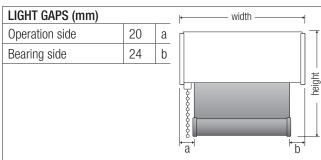




### CHAIN OPERATED ROLLER BLIND BACK ROLLING WITH CASSETTE $\ensuremath{\mathsf{M}}$

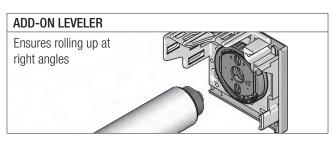
- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of cassette
- 2-part extruded cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- · Patented clutch for safe operation in grey, black or white
- Universal clutch for left and right hand operation
- High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications



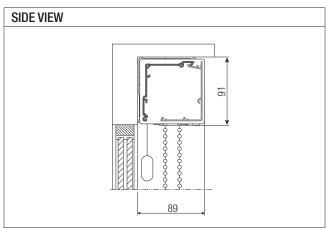


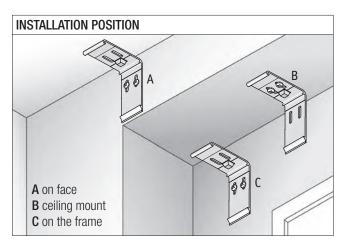
BACK ROLLING	

SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>

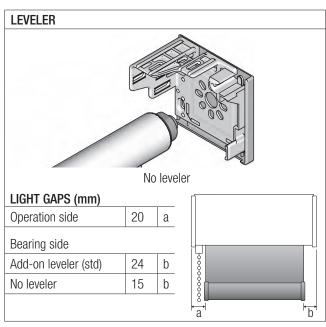


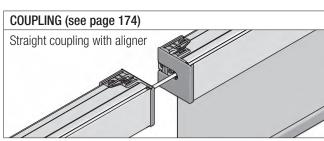
MAXIMUM LOAD (KG)*					
Туре	Tube 31	Tube 37	Tube 50		
Gear 1:1 x 1	2.5	-	-		
Gear 1:1 x 2	4.7	4.0	3.0		
Gear 1.75:1 5.8 5.0 3.7					
Maximum load = bottom rail + (optional) additional weight + fabric					

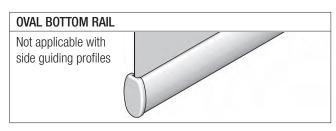


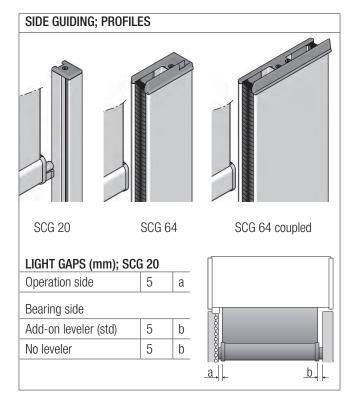


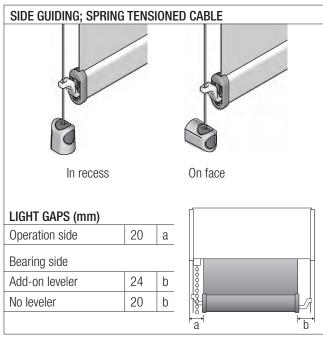
The technical terms on this page are clarified in the glossary in the back.





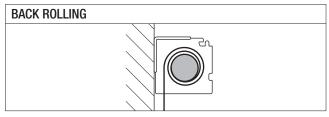


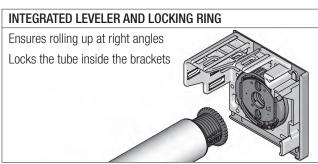


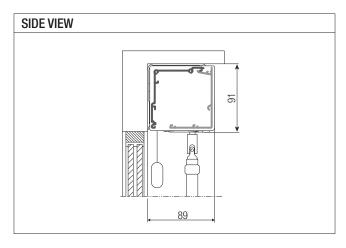


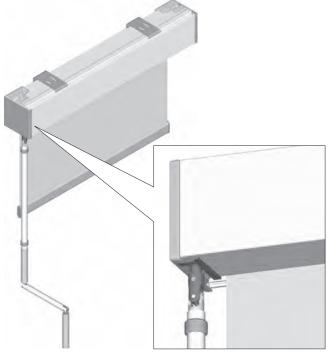
### CRANK OPERATED ROLLER BLIND BACK ROLLING WITH CASSETTE M

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of cassette
- 2-part extruded cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- 3:1 Geared crank for quick, easy and safe operation in grey, black or white
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring-loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- · High quality fabric according to technical specifications





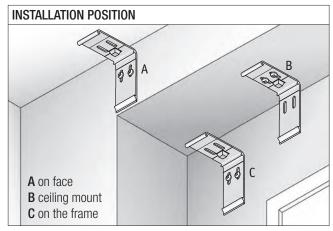




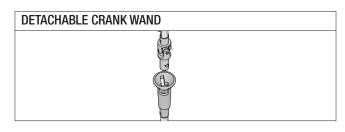
LIGHT GAPS (mm)			width —
Operation side	28	а	1
Bearing side	28	b	
			tubieu tu

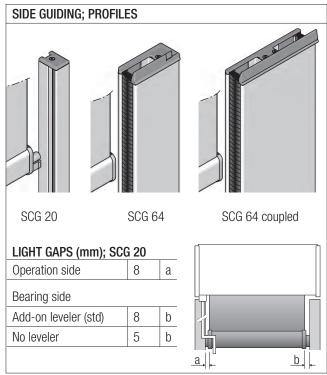
SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 26 m <sup>2</sup>

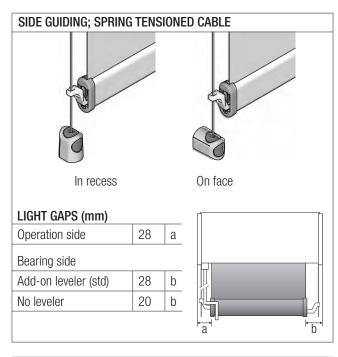
MAXIMUM LOAD (KG)*						
Туре	Tube 31	Tube 37	Tube 50			
Gear 3:1 11.5 10.0 7.5						
Maximum load = bottom rail + (optional) additional weight + fabric						

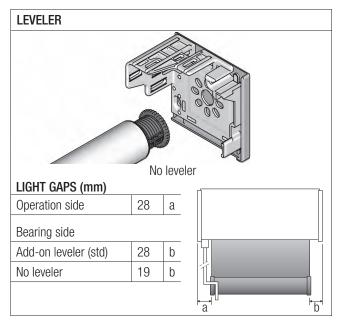


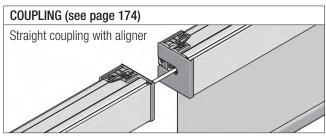
The technical terms on this page are clarified in the glossary in the back.

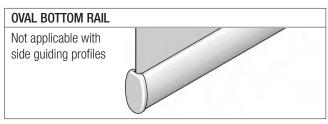






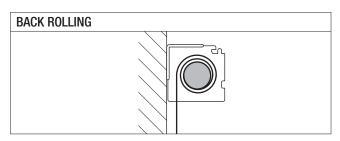


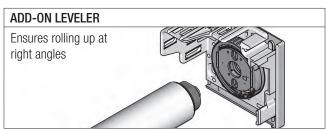


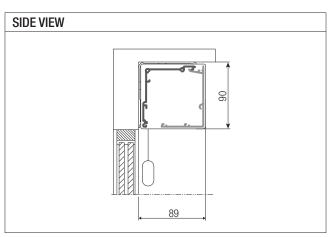


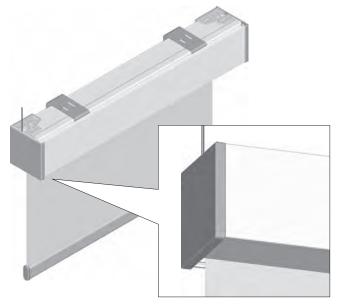
### MOTOR OPERATED ROLLER BLIND BACK ROLLING WITH CASSETTE $\ensuremath{\mathsf{M}}$

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of cassette
- 2-part extruded cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- · Range of motors available depending on requirements
  - Current: 24V or 230V
  - Force from 3.5 kg to 15 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- · High quality fabric according to technical specifications





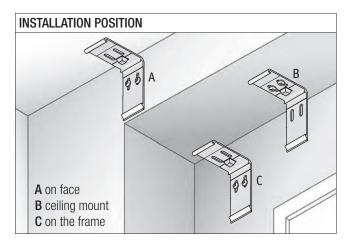




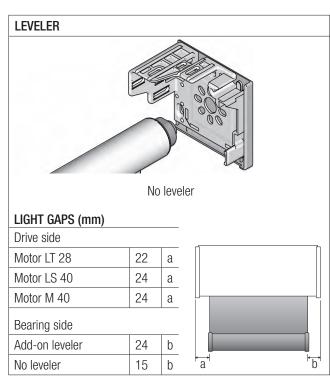
LIGHT GAPS (mm)			←─── width ────
Drive side			
Motor LT 28	22	а	
Motor LS 40	24	a	
Motor M 40	24	a	
Dooring olds	0.4		
Bearing side	24	b	
			'a' 'b'

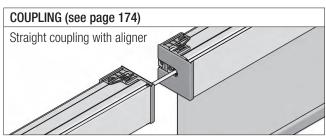
SIZE LIMITATIONS*				
Min. width	380 - 645 mm (depending on motor size)			
Max. width	3600 mm			
Min. height	500 mm			
Max. height	4000 mm			
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>			

MAXIMUM LOAD (KG)*					
Туре	U	Tube 31	Tube 37	Tube 50	
Motor LT 28	24V	4.0	3.5	-	
Motor LS 40	230V	-	-	15.0	
Motor M 40	230V	-	-	15.0	
Maximum load = bottom rail + (optional) additional weight + fabric					

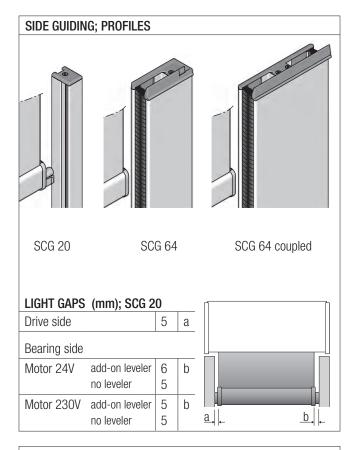


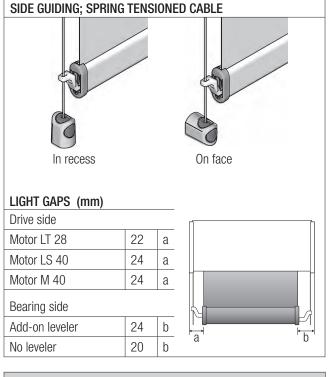
The technical terms on this page are clarified in the glossary in the back.





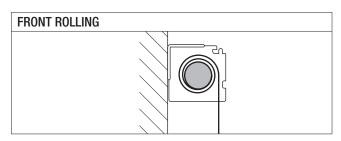


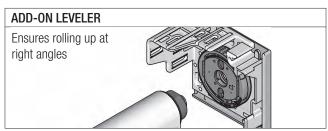


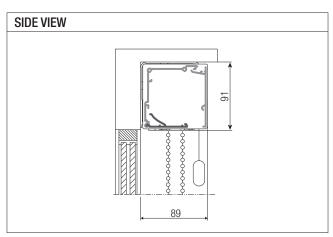


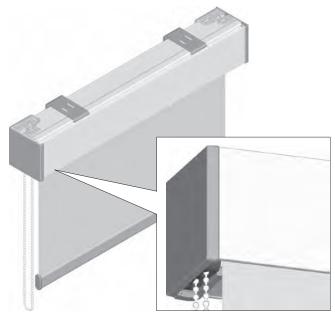
### CHAIN OPERATED ROLLER BLIND FRONT ROLLING WITH CASSETTE $\ensuremath{\mathsf{M}}$

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of cassette
- 3-part extruded cassette with closed bottom and complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- · Patented clutch for safe operation in grey, black or white
- Universal clutch for left or right hand operation
- High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Spring-loaded end plug and removable closing profile for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- · High quality fabric according to technical specifications





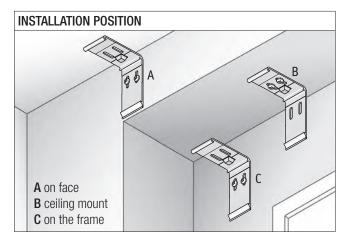




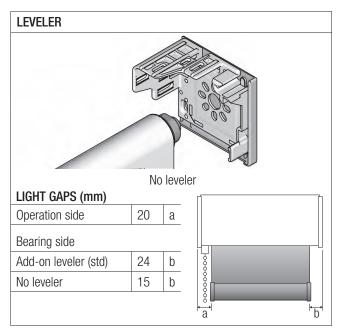
LIGHT GAPS (mm)			width —
Operation side	20	a	
Bearing side	24	b	
			a b leight

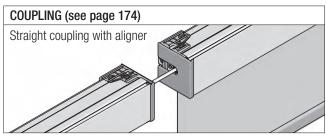
SIZE LIMITATIONS*				
Min. width	300 mm			
Max. width	3600 mm			
Min. height	500 mm			
Max. height	4000 mm			
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>			

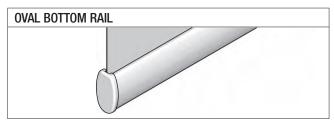
MAXIMUM LOAD (KG)*							
Туре	Tube 31	Tube 37	Tube 50				
Gear 1:1 x 1	2.5	-	-				
Gear 1:1 x 2	4.7	4.0	3.0				
Gear 1.75:1 5.8 5.0 3.7							
Maximum load = bottom rail + (optional) additional weight + fabric							

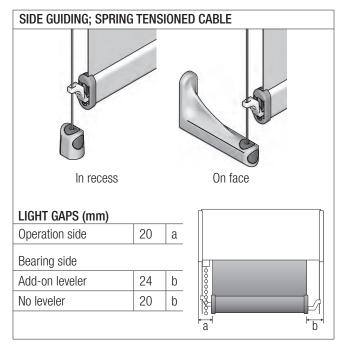


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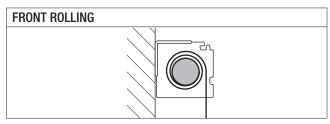


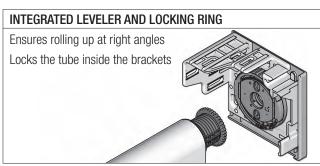


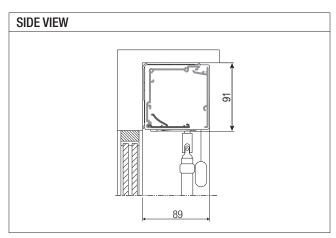


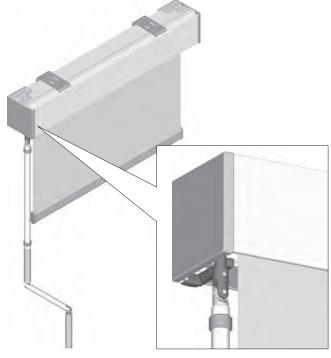
### CRANK OPERATED ROLLER BLIND FRONT ROLLING WITH CASSETTE M

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of cassette
- 3-part extruded cassette with closed bottom and complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- 3:1 Geared crank for quick, easy and safe operation in grey, black or white
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring-loaded end plug with locking ring for safe use and removable closing profile for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- · High quality fabric according to technical specifications





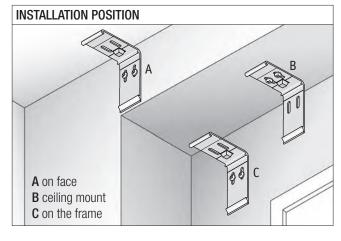




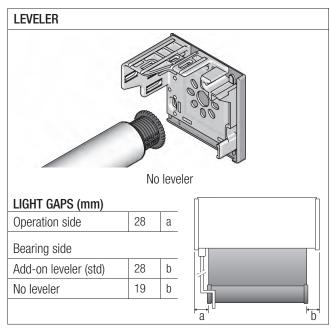
LIGHT GAPS (mm)			⊬——width ———	
Operation side	28	a		$\overline{}$
Bearing side	28	b		
			a	height -

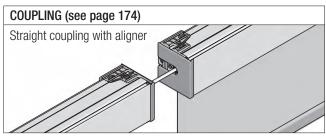
SIZE LIMITATIONS*	,
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 26 m <sup>2</sup>

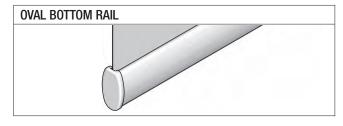
MAXIMUM LOAD (KG)*							
Туре	Tube 31	Tube 37	Tube 50				
Gear 3:1 11.5 10.0 7.5							
Maximum load = bottom rail + (optional) additional weight + fabric							



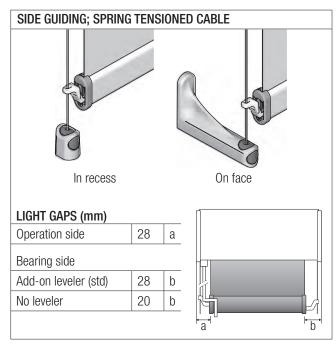
The technical terms on this page are clarified in the glossary in the back.





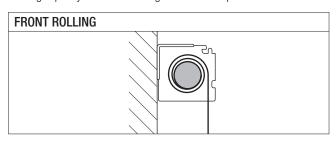


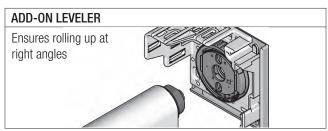


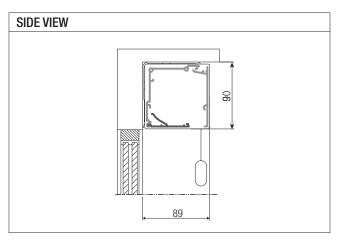


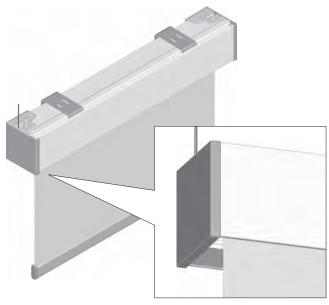
### MOTOR OPERATED ROLLER BLIND FRONT ROLLING WITH CASSETTE $\ensuremath{\mathsf{M}}$

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of cassette
- 3-part extruded cassette with closed bottom and complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- · Range of motors available depending on requirements
  - Current: 24V or 230V
  - Force from 3.5 kg to 15 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring-loaded end plug and removable closing profile for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- High quality fabric according to technical specifications





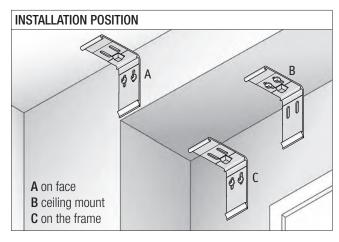




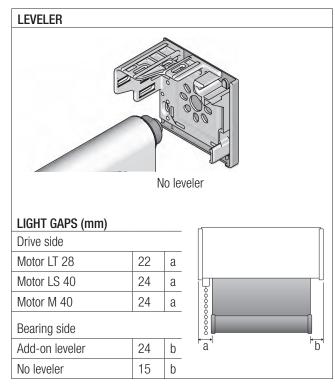
LIGHT GAPS (mm)			width —	<b>—</b>
Drive side				$\prod$
Motor LT 28	22	a		height
Motor LS 40	24	a		
Motor M 40	24	a		
Bearing side	24	b	***	h

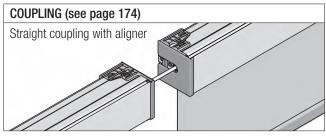
SIZE LIMITATIONS*	
Min. width	380 - 645 mm (depending on motor size)
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>

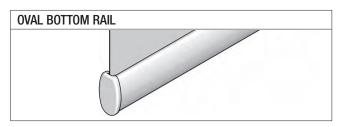
MAXIMUM LOAD (KG)*					
Туре	U	Tube 31	Tube 37	Tube 50	
Motor LT 28	24V	4.0	3.5	-	
Motor LS 40	230V	-	-	15.0	
Motor M 40	230V	-	-	15.0	
Maximum load = bottom rail + (optional) additional weight + fabric					

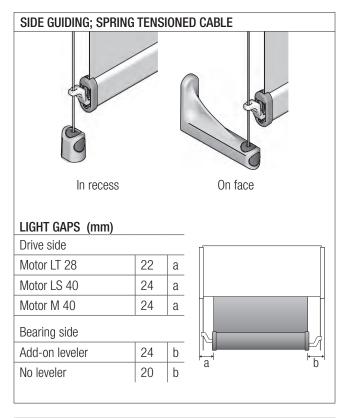


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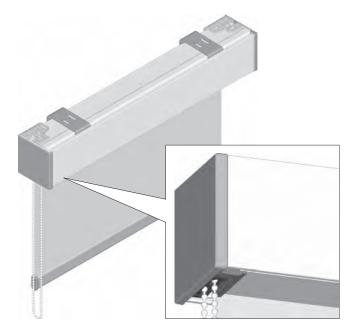




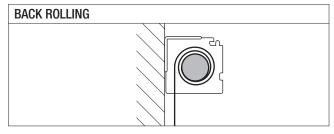


### CHAIN OPERATED ROLLER BLIND BACK ROLLING WITH POCKET M

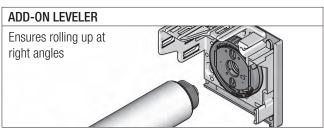
- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- U-shaped extruded pocket with accessible closed bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- · Patented clutch for safe operation in grey, black or white
- Universal clutch for left and right hand operation
- · High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Spring-loaded end plug and removable closing profile for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications



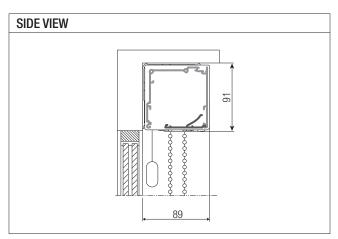
LIGHT GAPS (mm)			· width -	
Operation side	20	a		┰
Bearing side	24	b		
				height -
			a b	

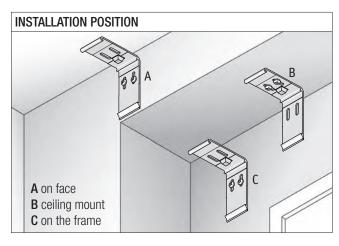


SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>

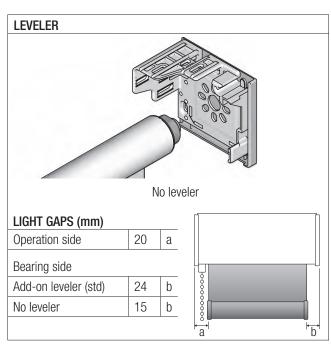


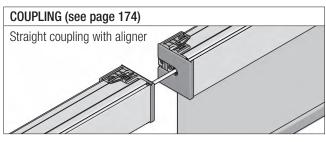
MAXIMUM LOAD (KG)*					
Туре	Tube 31 Tube 37 Tube 50				
Gear 1:1 x 1	2.5				
Gear 1:1 x 2	4.7 4.0 3.0				
Gear 1.75:1 5.8 5.0 3.7					
Maximum load = bottom rail + (optional) additional weight + fabric					

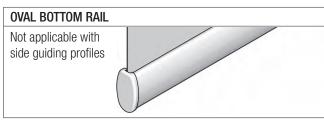


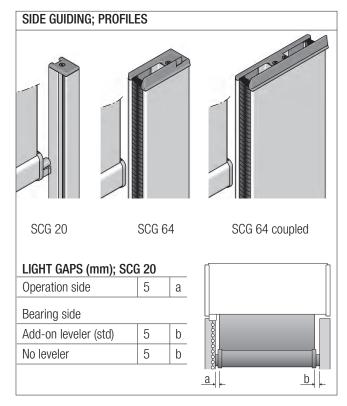


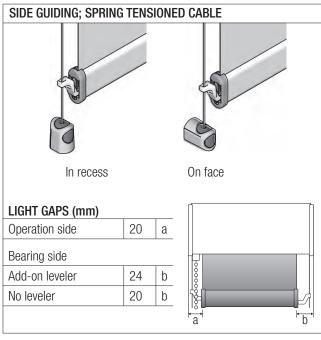
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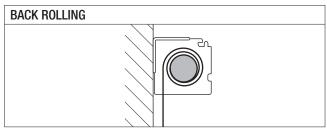


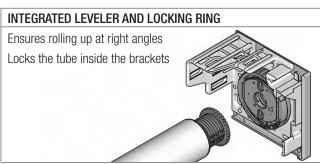


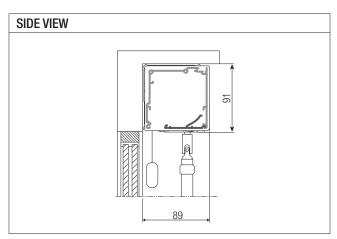


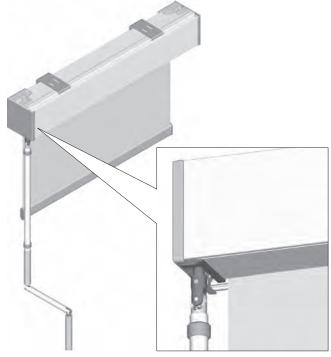
### CRANK OPERATED ROLLER BLIND BACK ROLLING WITH POCKET M

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- U-shaped extruded pocket with accessible closed bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- 3:1 Geared crank for quick, easy and safe operation in grey, black or white
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring-loaded end plug with locking ring for safe use and removable closing profile for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





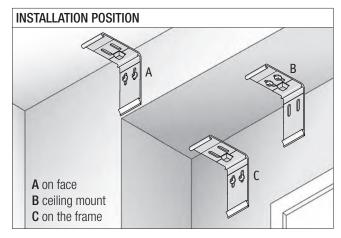




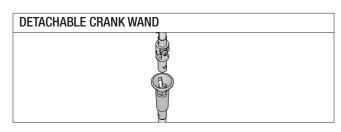
LIGHT GAPS (mm)			⊬ width — →
Operation side	28	a	1
Bearing side	28	b	
			tueight theight

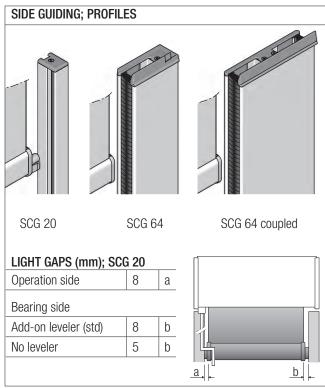
SIZE LIMITATIONS*		
Min. width	300 mm	
Max. width	3600 mm	
Min. height	500 mm	
Max. height	4000 mm	
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 26 m <sup>2</sup>	

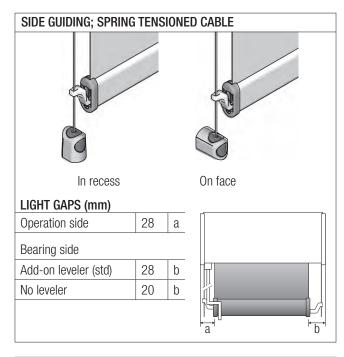
MAXIMUM LOAD (KG)*					
Туре	Tube 31 Tube 37 Tube 50				
Gear 3:1 11.5 10.0 7.5					
Maximum load = bottom rail + (optional) additional weight + fabric					

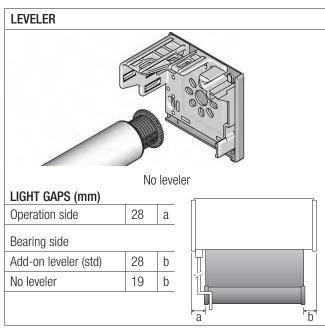


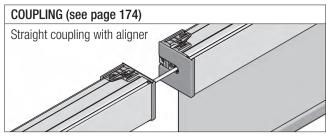
The technical terms on this page are clarified in the glossary in the back.

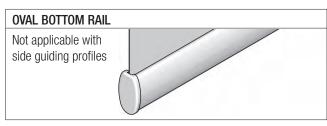






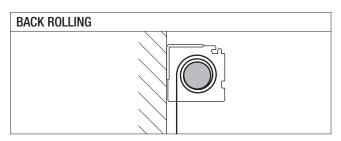


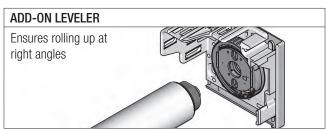


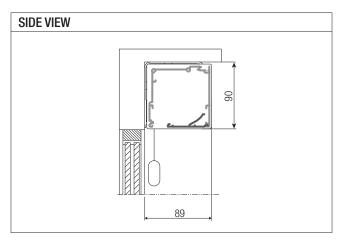


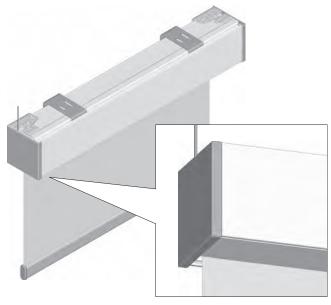
### MOTOR OPERATED ROLLER BLIND BACK ROLLING WITH POCKET M

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- U-shaped extruded pocket with accessible closed bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- · Range of motors available depending on requirements
  - Current: 24V or 230V
  - Force from 3.5 kg to 15 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring-loaded end plug and removable closing profile for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- · High quality fabric according to technical specifications





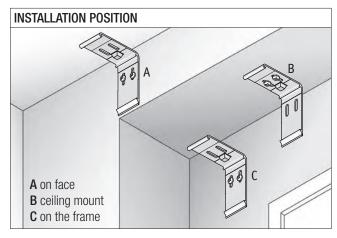




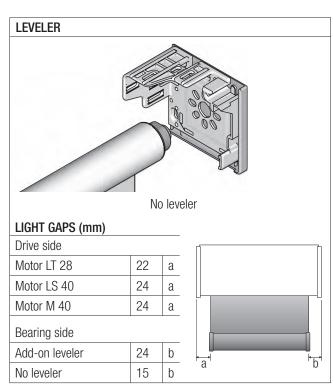
LIGHT GAPS (mm)			← width →	_
Drive side				
Motor LT 28	22	a		
Motor LS 40	24	a		height
Motor M 40	24	a		- he
Bearing side	24	b		
			<del> </del> a <del> </del> b	

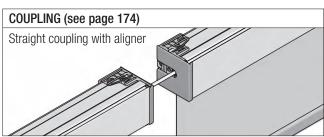
SIZE LIMITATIONS*	
Min. width	380 - 645 mm (depending on motor size)
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>

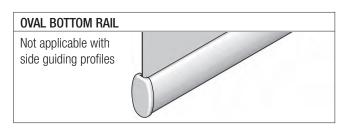
MAXIMUM LOAD (KG)*					
Туре	U	Tube 31	Tube 37	Tube 50	
Motor LT 28	24V	4.0	3.5	-	
Motor LS 40	230V	-	-	15.0	
Motor M 40 230V 15.0					
Maximum load = bottom rail + (optional) additional weight + fabric					

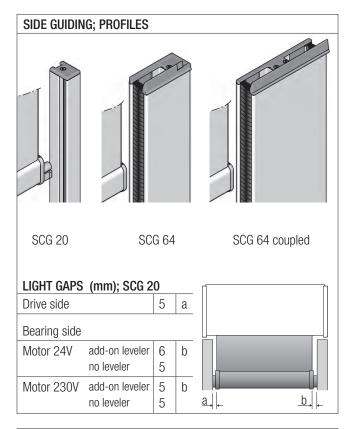


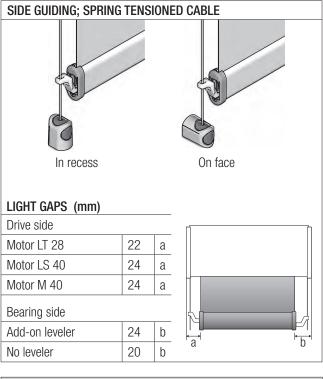
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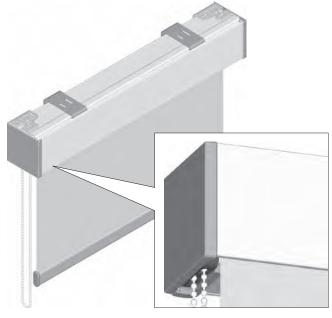


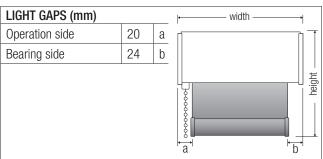


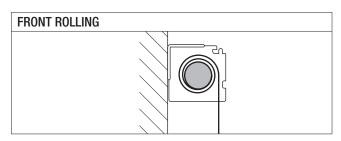


### CHAIN OPERATED ROLLER BLIND FRONT ROLLING WITH POCKET M

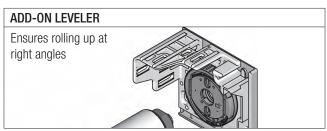
- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- U-shaped extruded pocket with accessible closed bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- · Patented clutch for safe operation in grey, black or white
- Universal clutch for left or right hand operation
- · High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Spring-loaded end plug and removable closing profile for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- High quality fabric according to technical specifications



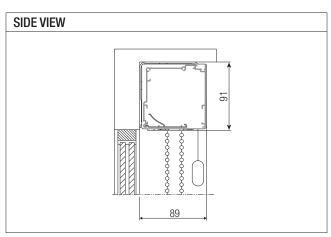


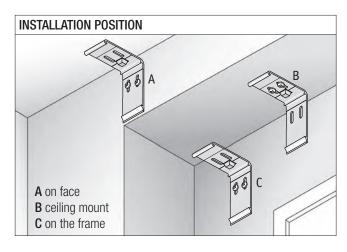


SIZE LIMITATIONS*			
Min. width	300 mm		
Max. width	3600 mm		
Min. height	500 mm		
Max. height	4000 mm		
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>		

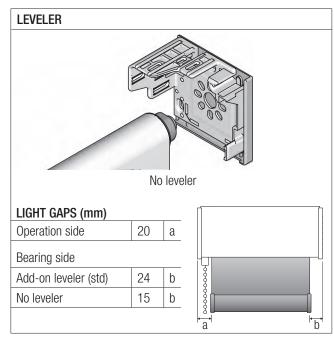


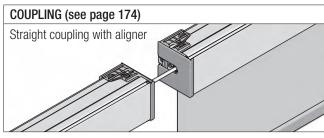
MAXIMUM LOAD (KG)*					
Туре	Tube 31 Tube 37 Tube 50				
Gear 1:1 x 1	2.5				
Gear 1:1 x 2	4.7 4.0 3.0				
Gear 1.75:1 5.8 5.0 3.7					
Maximum load = bottom rail + (optional) additional weight + fabric					

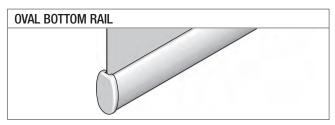


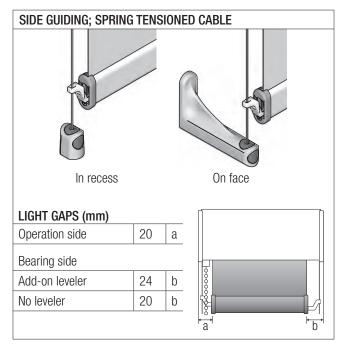


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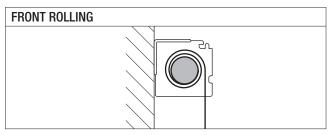


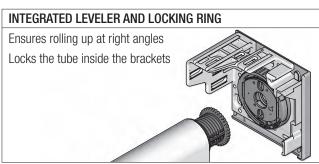


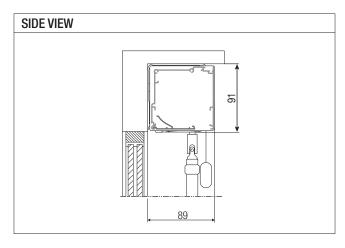


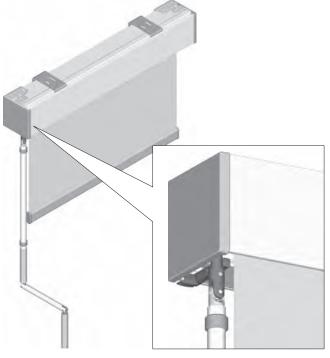
### CRANK OPERATED ROLLER BLIND FRONT ROLLING WITH POCKET M

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- U-shaped extruded pocket with accessible closed bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- 3:1 Geared crank for quick, easy and safe operation in grey, black or white
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring-loaded end plug with locking ring for safe use and removable closing profile for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- High quality fabric according to technical specifications





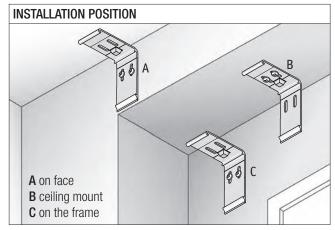




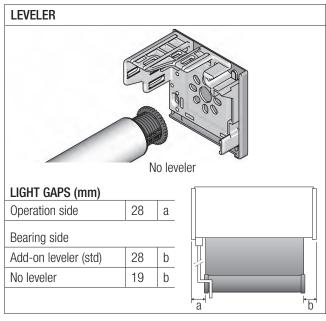
LIGHT GAPS (mm)			⊬ width — →
Operation side	28	a	1
Bearing side	28	b	
			tudien tu

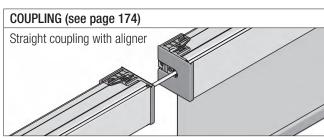
SIZE LIMITATIONS*				
Min. width	300 mm			
Max. width	3600 mm			
Min. height	500 mm			
Max. height	4000 mm			
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 26 m <sup>2</sup>			

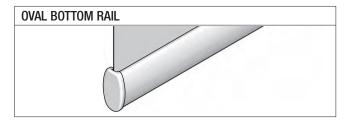
MAXIMUM LOAD (KG)*						
Туре	Tube 31	Tube 37	Tube 50			
Gear 3:1 11.5 10.0 7.5						
Maximum load = bottom rail + (optional) additional weight + fabric						

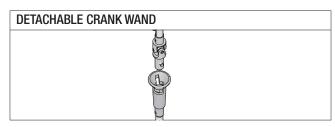


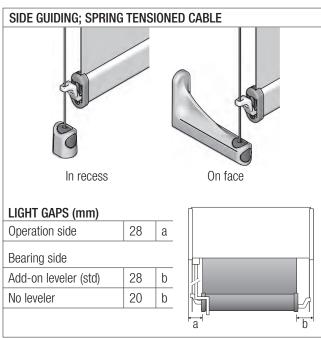
The technical terms on this page are clarified in the glossary in the back.





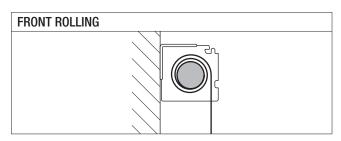


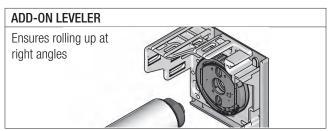


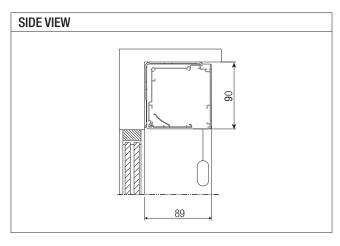


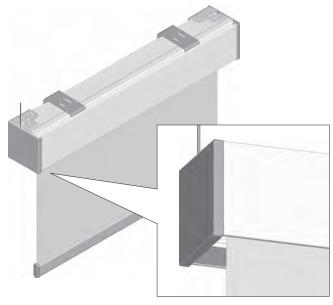
### MOTOR OPERATED ROLLER BLIND FRONT ROLLING WITH POCKET M

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- U-shaped extruded pocket with accessible closed bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- · Range of motors available depending on requirements
  - Current: 24V or 230V
  - Force from 3.5 kg to 15 kg
  - Noise standard or silent
  - Wired control (recommended) or remote
- Spring-loaded end plug and removable closing profile for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- High quality fabric according to technical specifications





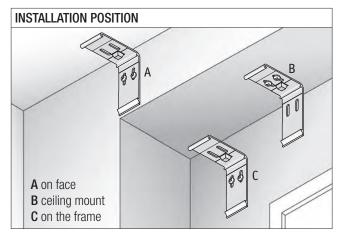




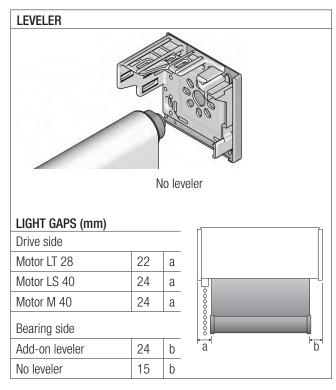
LIGHT GAPS (mm)			⊬ width — →	—   
Drive side				
Motor LT 28	22	a		
Motor LS 40	24	a		height
Motor M 40	24	a		- he
Bearing side	24	b		
			Ha Hb	+

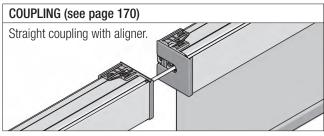
SIZE LIMITATIONS*	
Min. width	380 - 645 mm (depending on motor size)
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>

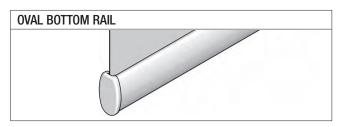
MAXIMUM LOAD (KG)*					
Туре	U	Tube 31	Tube 37	Tube 50	
Motor LT 28	24V	4.0	3.5	-	
Motor LS 40	230V	-	-	15.0	
Motor M 40	230V	-	-	15.0	
Maximum load = bottom rail + (optional) additional weight + fabric					

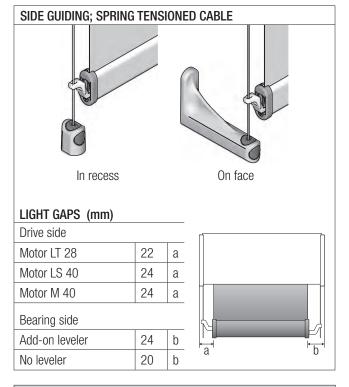


The technical terms on this page are clarified in the glossary in the back.



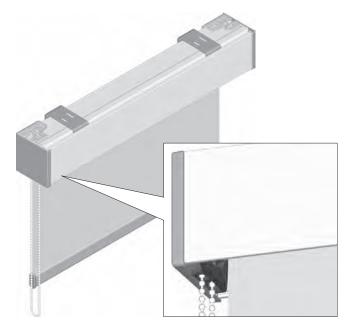




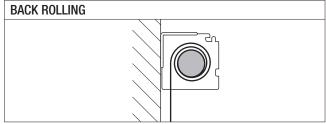


### CHAIN OPERATED ROLLER BLIND BACK ROLLING WITH OPEN **POCKET M**

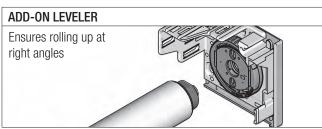
- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of
- U-shaped extruded pocket with open bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in
- Leveling function to limit skewing
  - Optional no leveler
- Patented clutch for safe operation in grey, black or white
- Universal clutch for left and right hand operation
- High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or
  - Optional oval shaped bottom rail
- Back rolling (standard) or front rolling (optional)
- UV stable parts
- High quality fabric according to technical specifications



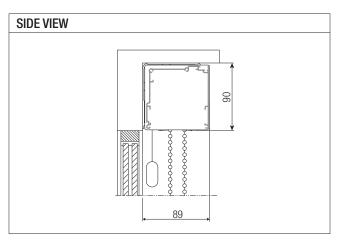
LIGHT GAPS (mm)			← width — →
Operation side	20	a	
Bearing side	24	b	
			a b

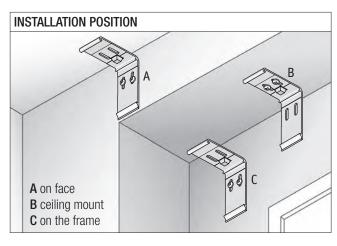


SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>

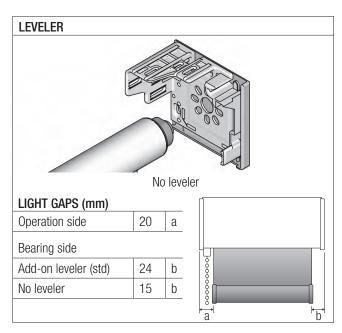


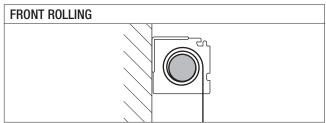
MAXIMUM LOAD (KG)*						
Туре	Tube 31	Tube 37	Tube 50			
Gear 1:1 x1	2.5	-	-			
Gear 1:1 x2	4.7	4.0	3.0			
Gear 1.75:1 5.8 5.0 3.7						
Maximum load = bottom rail + (optional) additional weight + fabric						

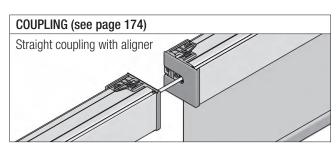


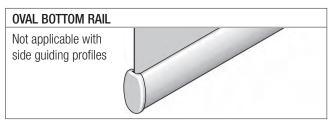


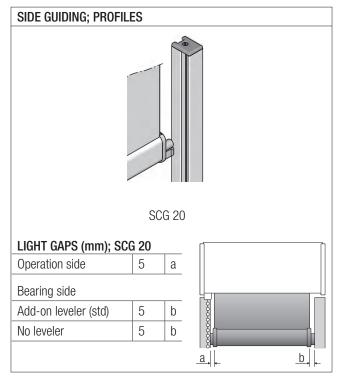
The technical terms on this page are clarified in the glossary in the back.

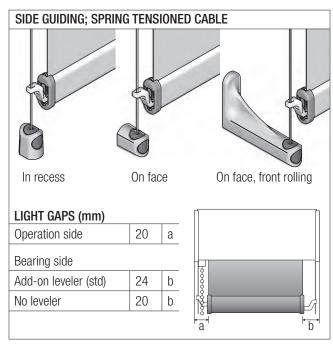






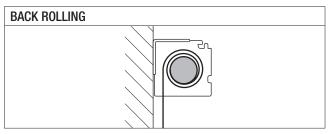


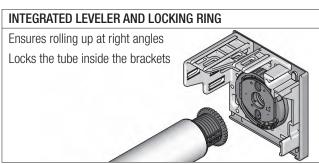


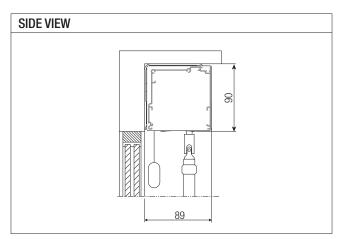


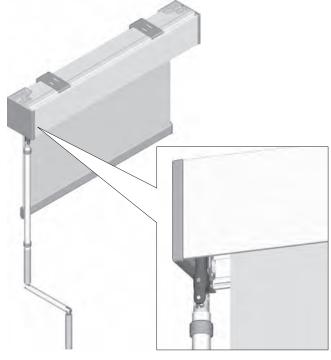
### CRANK OPERATED ROLLER BLIND BACK ROLLING WITH OPEN POCKET M

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- U-shaped extruded pocket with open bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional leveler
- 3:1 Geared crank for quick, easy and safe operation in grey, black or white
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring-loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling (standard) or front rolling (optional)
- UV stable parts
- High quality fabric according to technical specifications





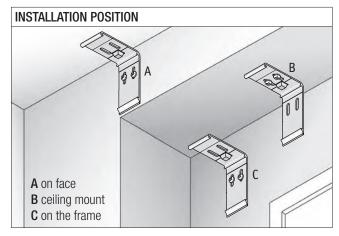




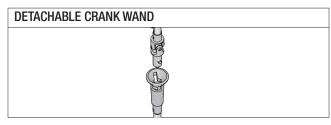
LIGHT GAPS (mm)			⊬ width — →
Operation side	28	a	
Bearing side	28	b	
			tudien the control of

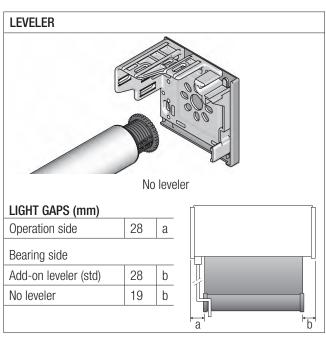
SIZE LIMITATIONS*				
Min. width	300 mm			
Max. width	3600 mm			
Min. height	500 mm			
Max. height	4000 mm			
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 26 m <sup>2</sup>			

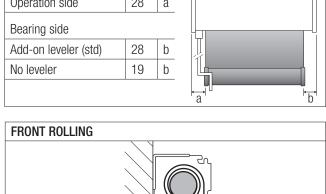
MAXIMUM LOAD (KG)*						
Туре	Tube 31	Tube 37	Tube 50			
Gear 3:1 11.5 10.0 7.5						
Maximum load = bottom rail + (optional) additional weight + fabric						

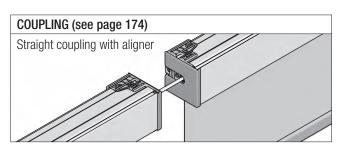


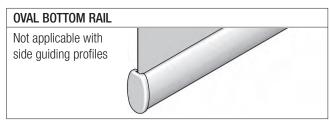
The technical terms on this page are clarified in the glossary in the back.

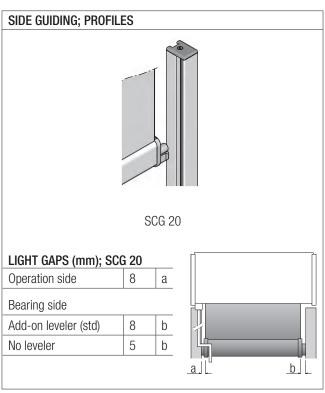


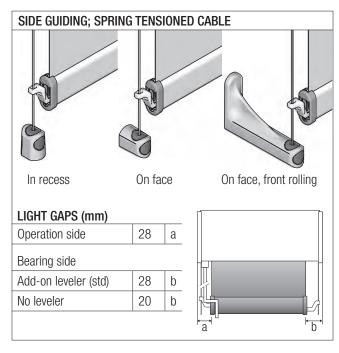






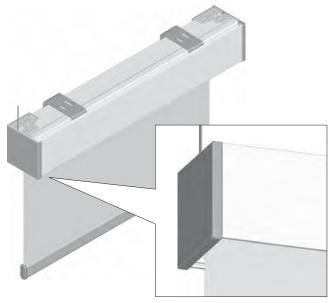






### MOTOR OPERATED ROLLER BLIND BACK ROLLING WITH OPEN **POCKET M**

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of
- U-shaped extruded pocket with open bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in
- Leveling function to limit skewing
  - Optional no leveler
- Range of motors available depending on requirements
  - Current: 24V or 230V
  - Force from 3.5 kg to 15 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or
  - Optional oval shaped bottom rail
- Back rolling (standard) or front rolling (optional)
- UV stable parts
- High quality fabric according to technical specifications

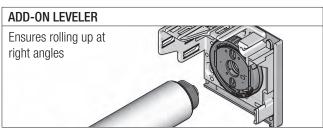


Drive side  Motor LT 28	LIGHT GAPS (mm)			├── width ──	
Motor LS 40 24 a Motor M 40 24 a	Drive side				Ī
Motor M 40 24 a	Motor LT 28	22	а		
	Motor LS 40	24	a		height
Regring side 24 h	Motor M 40	24	a	-	- he
	Rooring side	24	h		
	Dearing Side	24	l D		<u>↓</u>

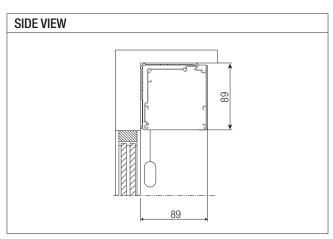
BACK ROLLING	

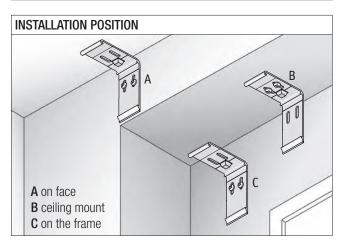
ADD ON LEVELED	

SIZE LIMITATIONS*	
Min. width	380 - 645 mm (depending on motor size)
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>

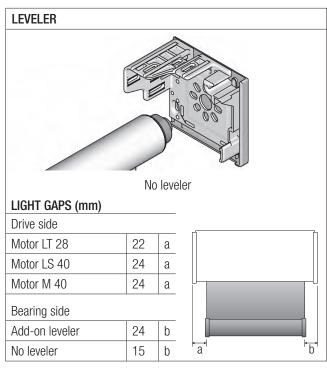


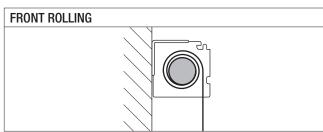
MAXIMUM LOAD (KG)*					
Туре	U	Tube 31	Tube 37	Tube 50	
Motor LT 28 24V 4.0 3.5 -					
Motor LS 40 230V 15.0					
Motor M 40 230V 15.0					
Maximum load = bottom rail + (optional) additional weight + fabric					

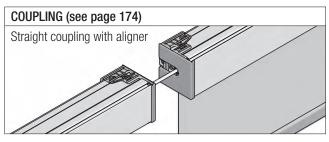


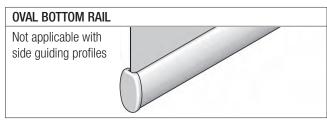


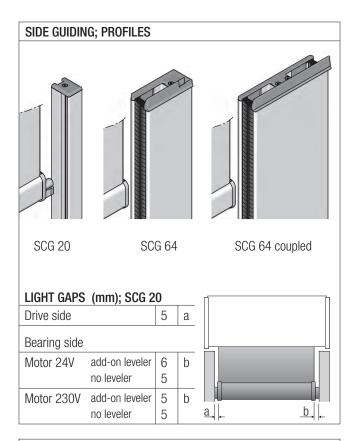
The technical terms on this page are clarified in the glossary in the back.

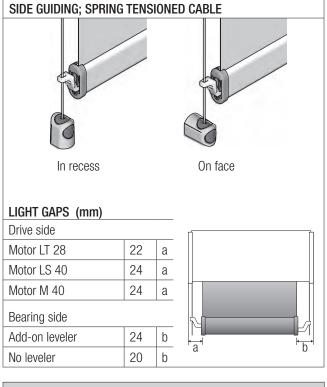






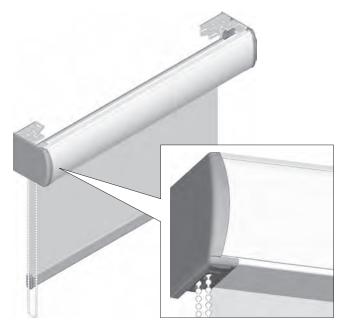




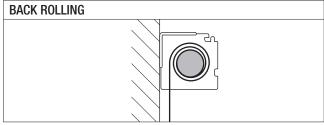


### CHAIN OPERATED ROLLER BLIND BACK ROLLING WITH DESIGN VALANCE M

- Die cast brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- Design L-shaped extruded valance
  - In natural anodised, or powder coated black or white finish
- Leveling function to limit skewing
  - Optional no leveler
- Patented clutch for quick, easy and safe installation in grey, black or white
- Universal clutch for left or right hand operation
- High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications



LIGHT GAPS (mm)			← width — →
Operation side	20	a	
Bearing side	24	b	
			Tubjeu b

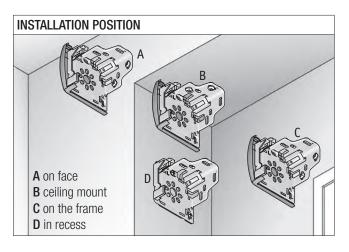


ADD-ON LEVELER	
Ensures rolling up at right angles	

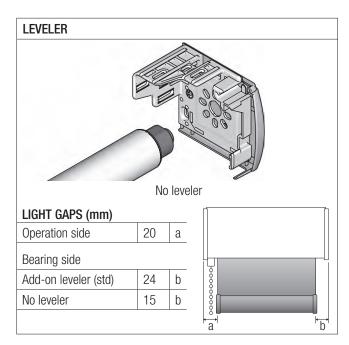
SIDE VIEW	
	06
	0000000
	97

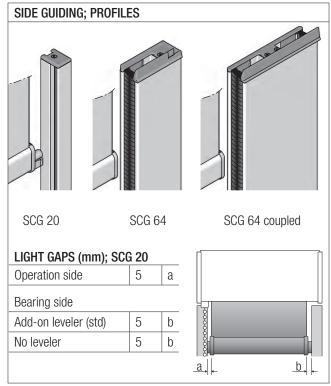
SIZE LIMITATIONS*				
Min. width	300 mm			
Max. width	3600 mm			
Min. height	500 mm			
Max. height	4000 mm			
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>			

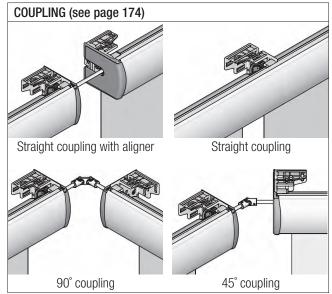
MAXIMUM LOAD (KG)*					
Туре	Tube 31	Tube 37	Tube 50		
Gear 1:1 x 1 2.5					
Gear 1:1 x 2 4.7 4.0 3.0					
Gear 1.75:1 5.8 5.0 3.7					
Maximum load = bottom rail + (optional) additional weight + fabric					

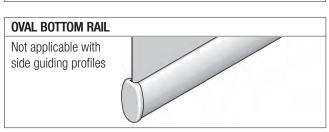


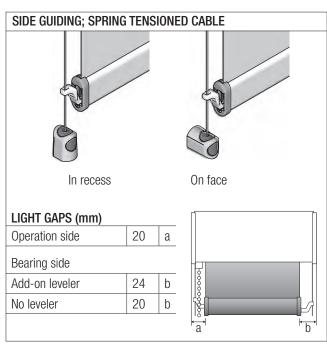
The technical terms on this page are clarified in the glossary in the back.





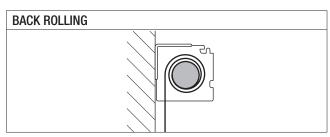


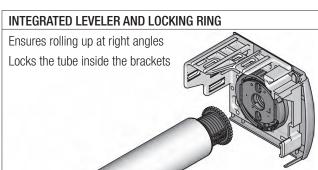


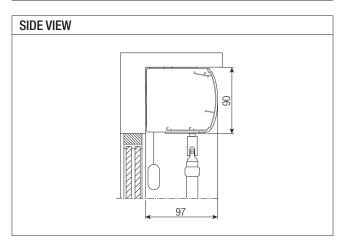


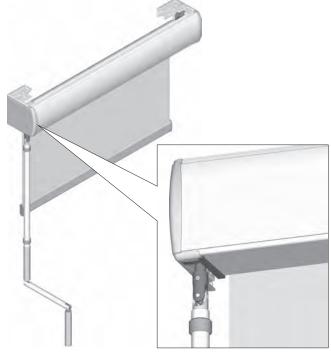
### CRANK OPERATED ROLLER BLIND BACK ROLLING WITH DESIGN VALANCE M

- Die cast brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- Design L-shaped extruded valance
  - In natural anodised, or powder coated black or white finish
- Leveling function to limit skewing
  - Optional no leveler
- 3:1 Geared crank for quick, easy and safe installation in grey, black or white
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring-loaded end plug with locking ring for safe use and easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





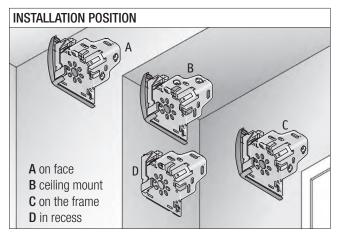




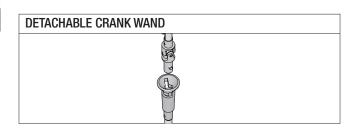
LIGHT GAPS (mm)			⊬ width — →
Operation side	28	а	
Bearing side	28	b	
			a b tube

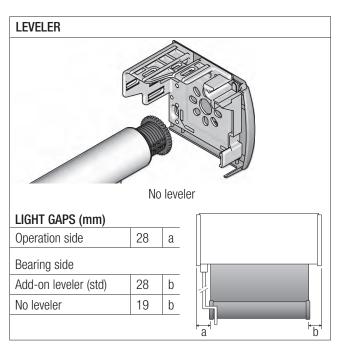
SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 26 m <sup>2</sup>

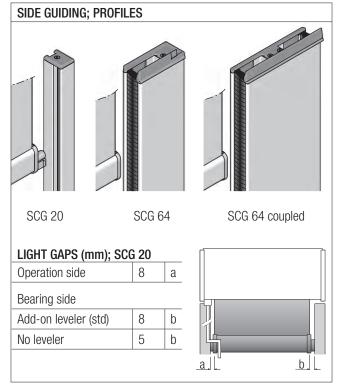
MAXIMUM LOAD (KG)*						
Туре	Tube 31	Tube 37	Tube 50			
Gear 3:1 11.5 10.0 7.5						
Maximum load = bottom rail + (optional) additional weight + fabric						

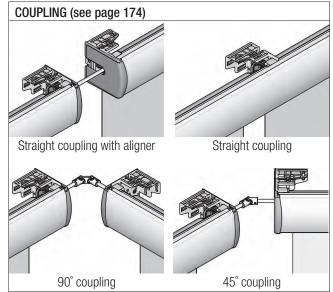


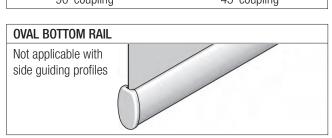
The technical terms on this page are clarified in the glossary in the back.

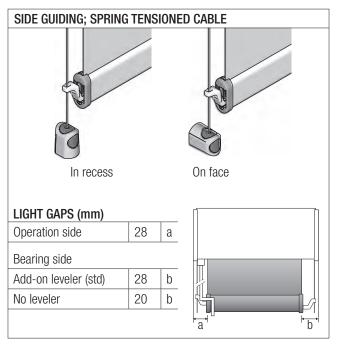






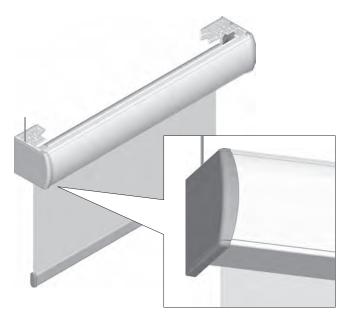




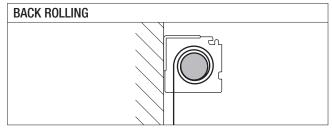


### MOTOR OPERATED ROLLER BLIND BACK ROLLING WITH DESIGN VALANCE $\ensuremath{\mathsf{M}}$

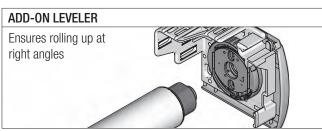
- Die cast brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- Design L-shaped extruded valance
  - In natural anodised, or powder coated black or white finish
- Leveling function to limit skewing
  - Optional no leveler
- · Range of motors available depending on requirements
  - Current: 24V or 230V
  - Force from 3.5 kg to 15 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications



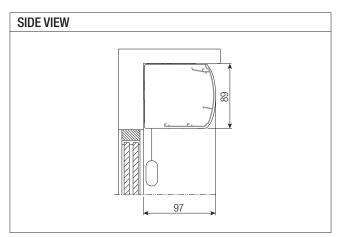
LIGHT GAPS (mm)			width —	<b>—</b>
Drive side				$\neg \uparrow$
Motor LT 28	22	а		
Motor LS 40	24	а		height
Motor M 40	24	а		he
Decring side	0.4	h		
Bearing side	24	b	<b>—</b>	
			a	b

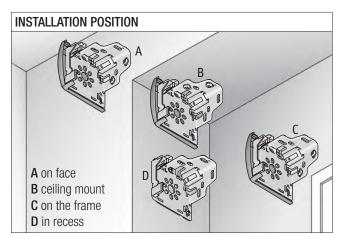


SIZE LIMITATIONS*	
Min. width	380 - 645 mm (depending on motor size)
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>

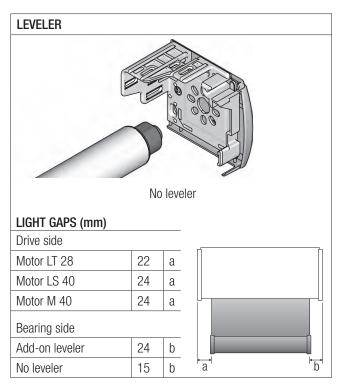


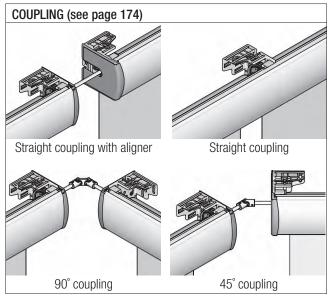
MAXIMUM LOAD (KG)*					
Туре	U	Tube 31	Tube 37	Tube 50	
Motor LT 28	24V	4.0	3.5	-	
Motor LS 40	230V	-	-	15.0	
Motor M 40	230V	-	-	15.0	
Maximum load = bottom rail + (optional) additional weight + fabric					

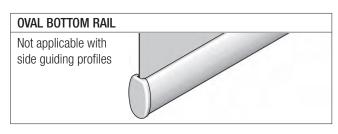


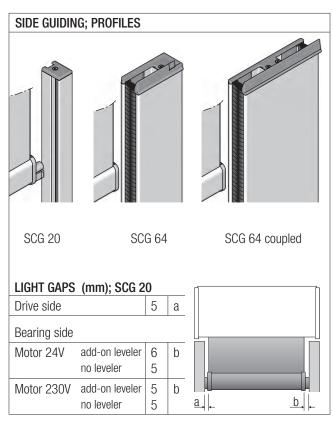


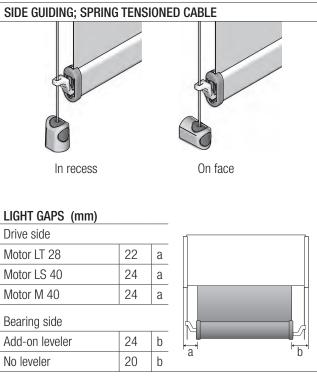
The technical terms on this page are clarified in the glossary in the back.





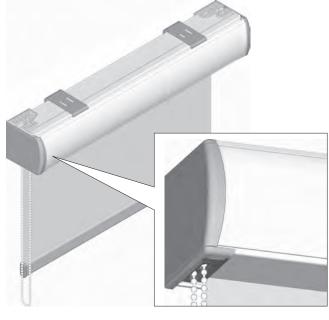




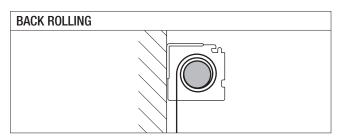


### CHAIN OPERATED ROLLER BLIND BACK ROLLING WITH DESIGN CASSETTE M

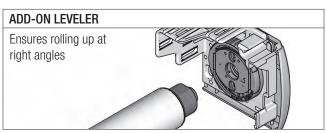
- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- 2-part extruded design cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- · Patented clutch for safe operation in grey, black or white
- Universal clutch for left and right hand operation
- High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications



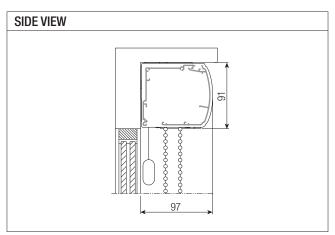
LIGHT GAPS (mm)			· width ·
Operation side	20	a	
Bearing side	24	b	
			- tubien

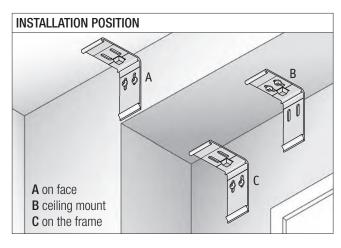


SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>

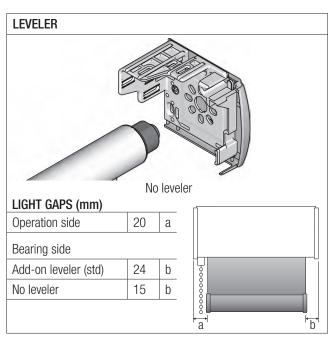


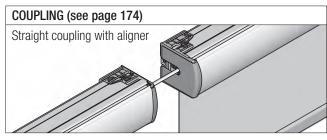
MAXIMUM LOAD (KG)*						
Туре	Tube 31	Tube 37	Tube 50			
Gear 1:1 x 1	2.5	-	-			
Gear 1:1 x 2	4.7	4.0	3.0			
Gear 1.75:1 5.8 5.0 3.7						
Maximum load = bottom rail + (optional) additional weight + fabric						

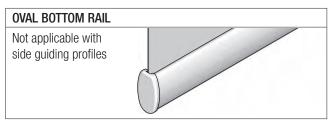


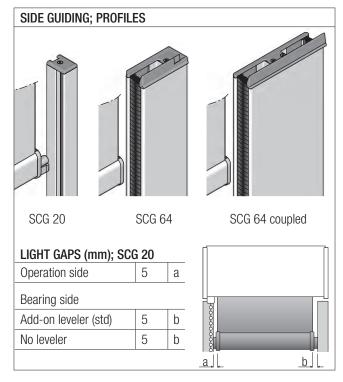


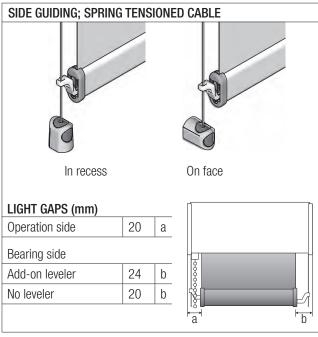
The technical terms on this page are clarified in the glossary in the back.





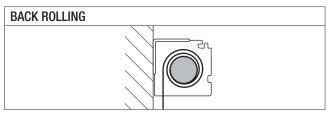


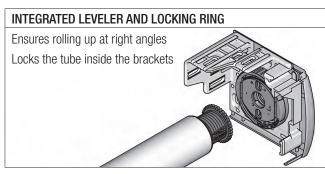


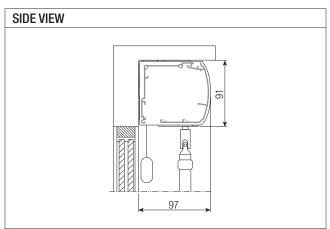


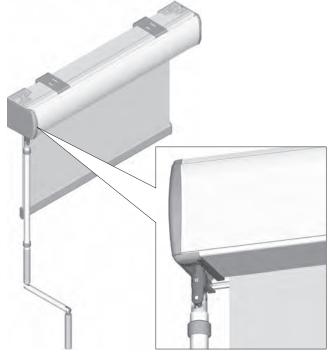
### CRANK OPERATED ROLLER BLIND BACK ROLLING WITH DESIGN CASSETTE M

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- 2-part extruded design cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- 3:1 Geared crank for quick, easy and safe operation in grey, black or white
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring-loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- · Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- · High quality fabric according to technical specifications





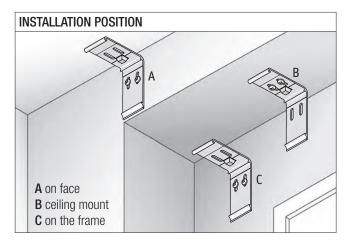




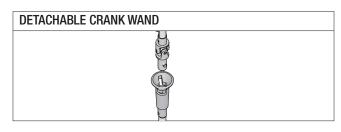
LIGHT GAPS (mm)			width —
Operation side	28	а	1
Bearing side	28	b	
			tubieu tu

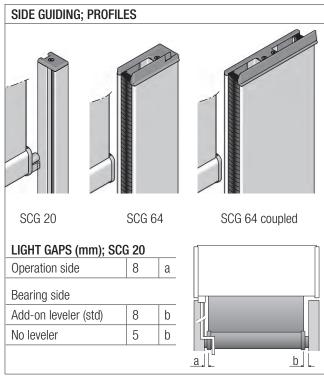
SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 26 m <sup>2</sup>

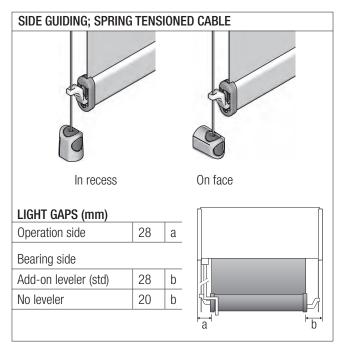
MAXIMUM LOAD (KG)*						
Туре	Tube 31	Tube 37	Tube 50			
Gear 3:1 11.5 10.0 7.5						
Maximum load = bottom rail + (optional) additional weight + fabric						

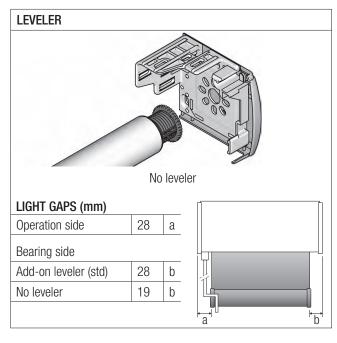


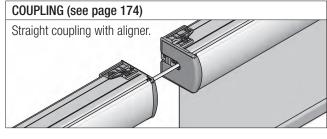
The technical terms on this page are clarified in the glossary in the back.

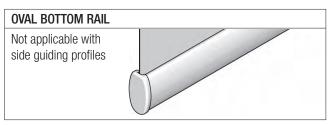






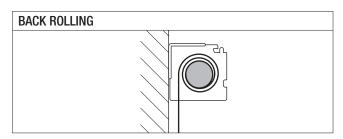


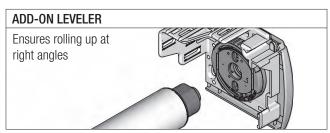


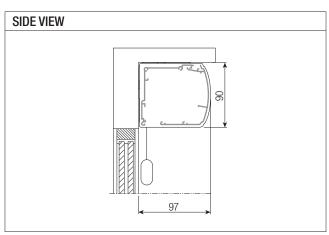


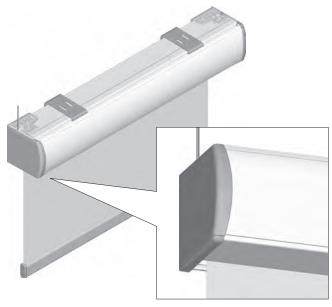
### MOTOR OPERATED ROLLER BLIND BACK ROLLING WITH DESIGN CASSETTE $\ensuremath{\mathsf{M}}$

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- 2-part extruded design cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- · Range of motors available depending on requirements
  - Current: 24V or 230V
  - Force from 3.5 kg to 15 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- · High quality fabric according to technical specifications





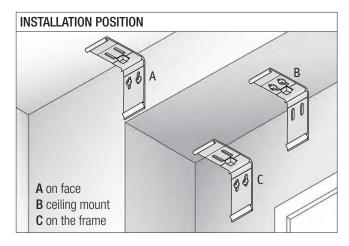




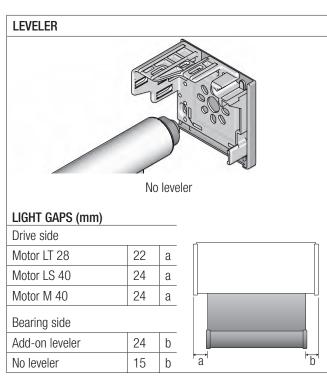
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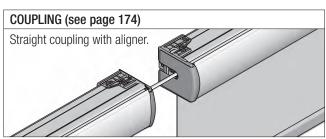
SIZE LIMITATIONS*	
Min. width	380 - 645 mm (depending on motor size)
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>

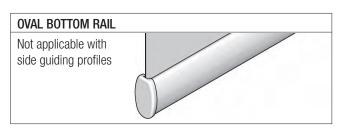
MAXIMUM LOAD (KG)*				
Туре	U	Tube 31	Tube 37	Tube 50
Motor LT 28	24V	4.0	3.5	-
Motor LS 40	230V	-	-	15.0
Motor M 40	230V	-	-	15.0
Maximum load = bottom rail + (optional) additional weight + fabric				

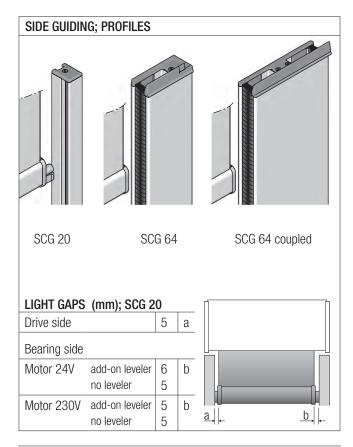


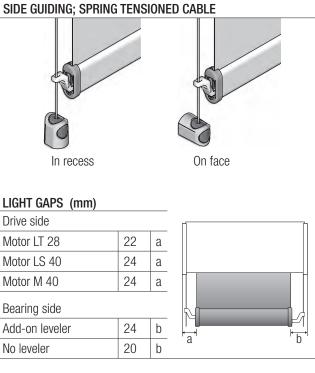
The technical terms on this page are clarified in the glossary in the back.







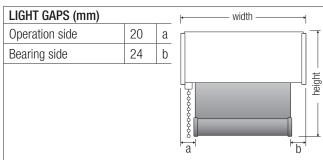


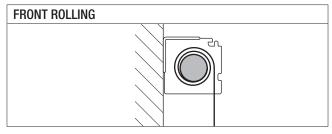


## CHAIN OPERATED ROLLER BLIND FRONT ROLLING WITH DESIGN VALANCE M

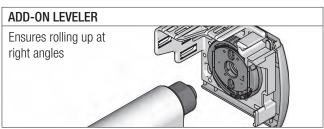
- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- Extruded Design valance
  - In natural anodised, or powder coated black or white finish
- Leveling function to limit skewing
  - Optional no leveler
- Patented clutch for quick, easy and safe installation in grey, black or white
- Universal clutch for left and right hand operation
- · High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front or back rolling
- UV stable parts
- High quality fabric according to technical specifications



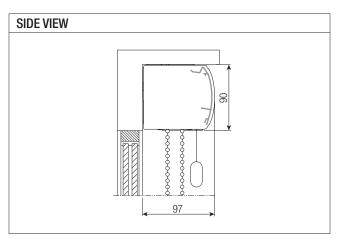


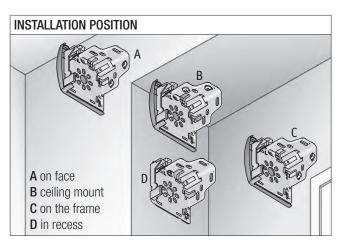


SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>

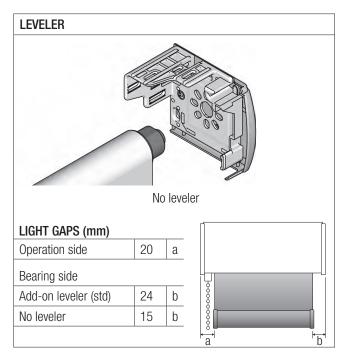


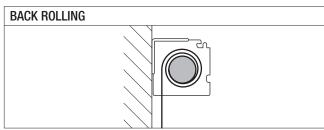
MAXIMUM LOAD (KG)*					
Туре	Tube 31	Tube 37	Tube 50		
Gear 1:1 x 1	2.5	-	-		
Gear 1:1 x 2	4.7	4.0	3.0		
Gear 1.75:1 5.8 5.0 3.7					
Maximum load = bottom rail + (optional) additional weight + fabric					

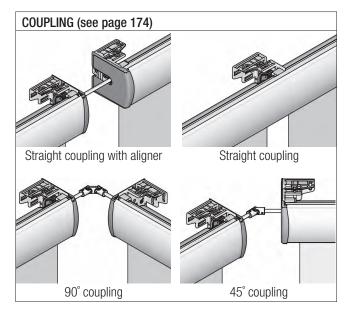


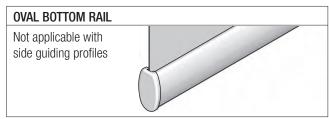


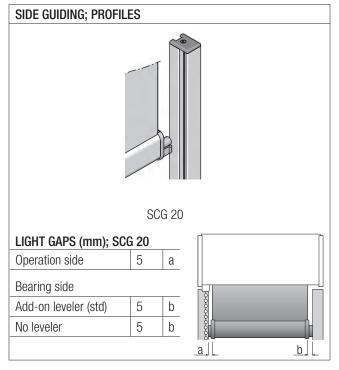
The technical terms on this page are clarified in the glossary in the back.

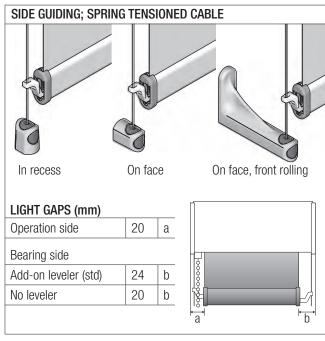






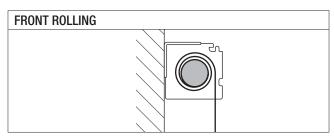


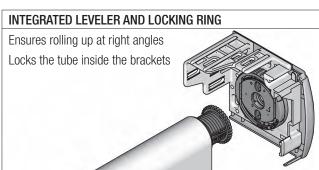


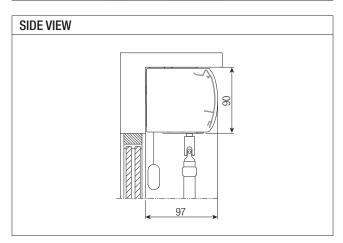


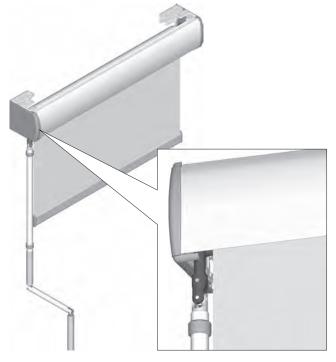
## CRANK OPERATED ROLLER BLIND FRONT ROLLING WITH DESIGN VALANCE M

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of Valance
- Extruded Design valance
  - In natural anodised, or powder coated black or white finish
- Leveling function to limit skewing
  - Optional no leveler
- 3:1 Geared crank for quick, easy and safe installation in grey, black or white
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring-loaded end plug with locking ring for safe use and easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front or back rolling
- UV stable parts
- High quality fabric according to technical specifications





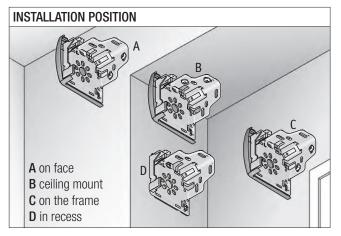




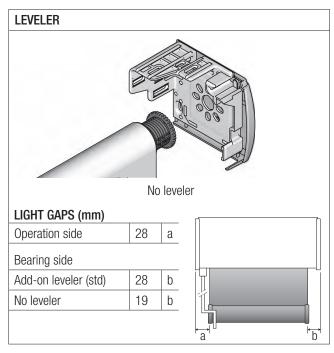
LIGHT GAPS (mm)			← width — →
Operation side	28	a	
Bearing side	28	b	
			a

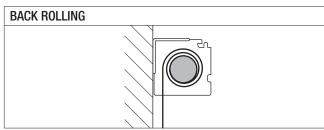
SIZE LIMITATIONS	*
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 26 m <sup>2</sup>

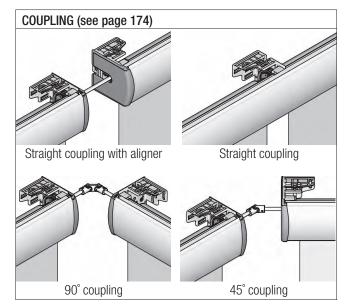
MAXIMUM LOAD (KG)*					
Туре	Tube 31	Tube 37	Tube 50		
Gear 3:1	11.5	10.0	7.5		
Maximum load = bottom rail + (optional) additional weight + fabric					

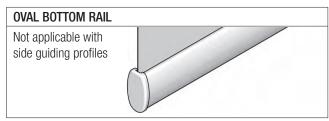


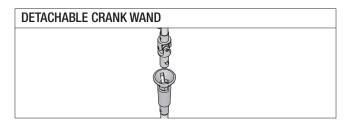
The technical terms on this page are clarified in the glossary in the back.

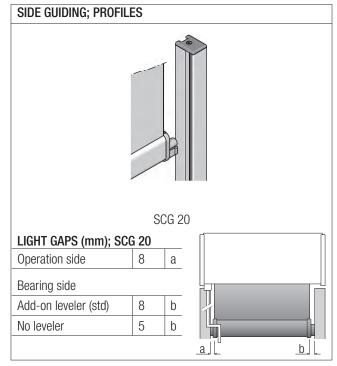


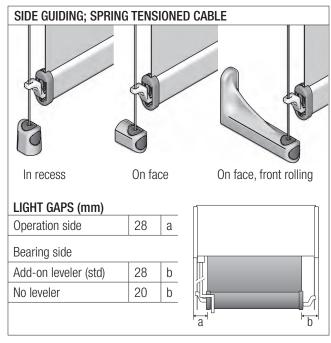






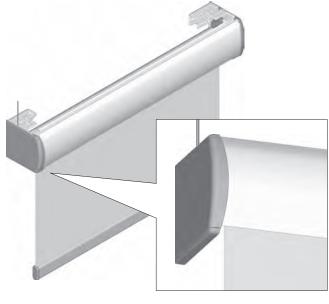






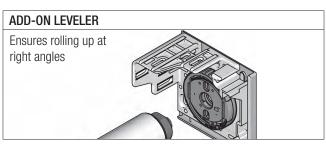
## MOTOR OPERATED ROLLER BLIND FRONT ROLLING WITH DESIGN VALANCE M

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- Extruded Design valance
  - In natural anodised, or powder coated black or white finish
- Leveling function to limit skewing
  - Optional no leveler
- · Range of motors available depending on requirements
  - Current: 24V or 230V
  - Force from 3.5 kg to 15 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring-loaded end plug for easy installation and maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front or back rolling
- UV stable parts
- High quality fabric according to technical specifications



LIGHT GAPS (mm)			_ width —
Drive side	_		
Motor LT 28	22	a	
Motor LS 40	24	a	
Motor M 40	24	a	_
	_		_
Bearing side	24	b	
			<del> </del>

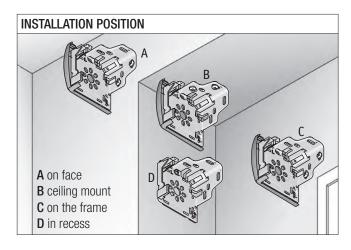
FRONT ROLLING	



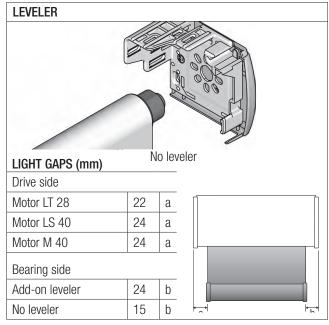
SIDE VIEW		
	88	

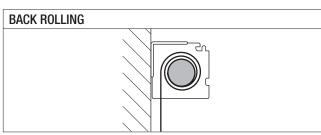
SIZE LIMITATIONS*	
Min. width	380 - 645 mm (depending on motor size)
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>

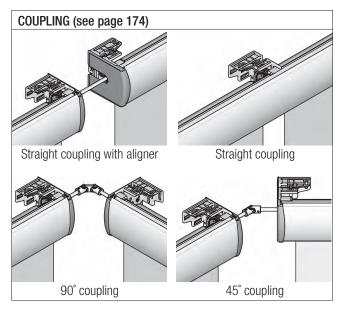
MAXIMUM LOAD (KG)*						
Туре	U	Tube 31	Tube 37	Tube 50		
Motor LT 28	24V	4.0	3.5	-		
Motor LS 40	230V	-	-	15.0		
Motor M 40 230V 15.0						
Maximum load = bottom rail + (optional) additional weight + fabric						

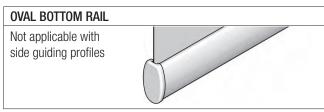


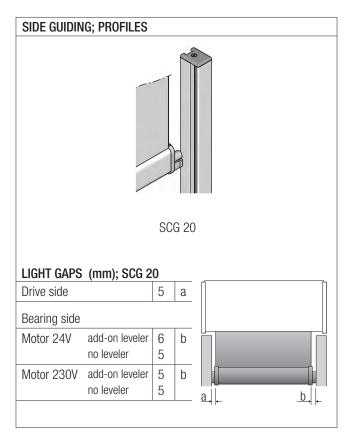
The technical terms on this page are clarified in the glossary in the back.

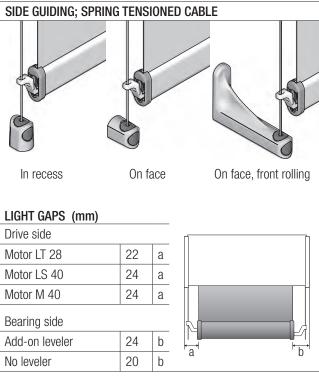






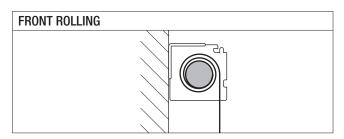


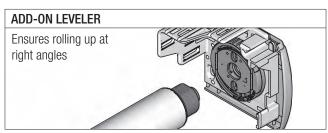


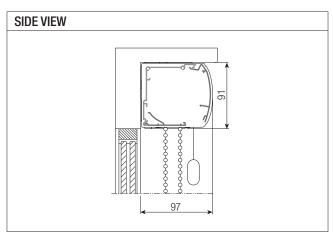


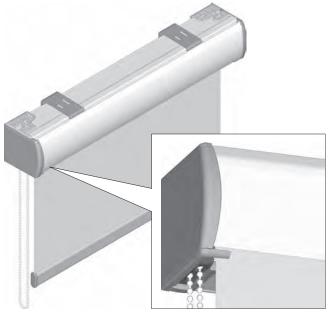
### CHAIN OPERATED ROLLER BLIND FRONT ROLLING WITH DESIGN CASSETTE $\ensuremath{\mathsf{M}}$

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- 3-part extruded design cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- · Patented clutch for safe operation in grey, black or white
- Universal clutch for left and right hand operation
- High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Spring-loaded end plug and removable closing profile for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- · High quality fabric according to technical specifications





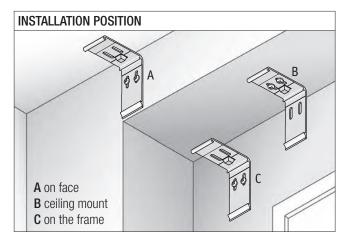




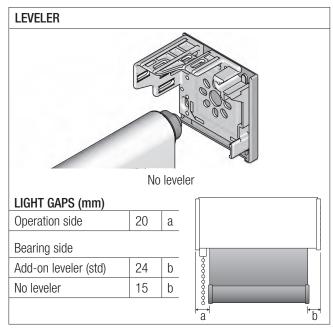
LIGHT GAPS (mm)			width —
Operation side	20	a	
Bearing side	24	b	
			a la

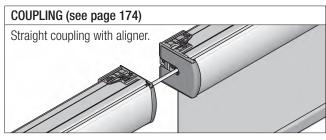
SIZE LIMITATIONS*			
Min. width	300 mm		
Max. width	3600 mm		
Min. height	500 mm		
Max. height	4000 mm		
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>		

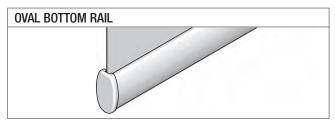
MAXIMUM LOAD (KG)*					
Туре	Tube 31	Tube 37	Tube 50		
Gear 1:1 x 1	2.5	-	-		
Gear 1:1 x 2	4.7	4.0	3.0		
Gear 1.75:1 5.8 5.0 3.7					
Maximum load = bottom rail + (optional) additional weight + fabric					

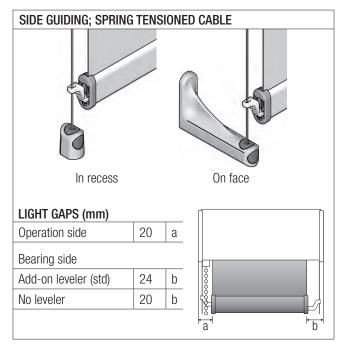


The technical terms on this page are clarified in the glossary in the back.



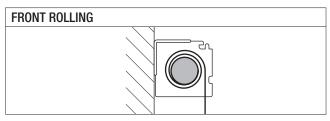


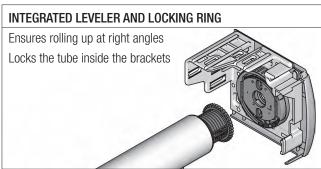


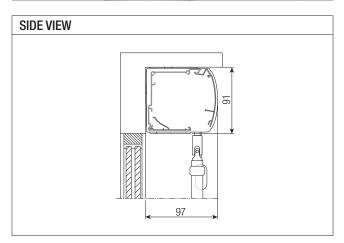


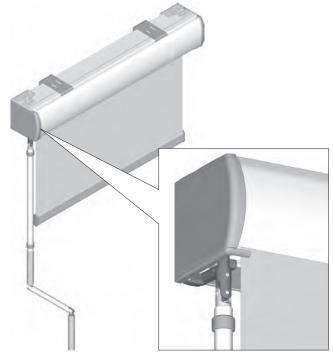
### CRANK OPERATED ROLLER BLIND FRONT ROLLING WITH DESIGN CASSETTE M

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- 3-part extruded design cassette with closed bottom and complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- 3:1 Geared crank for quick, easy and safe operation in grey, black or white
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring-loaded end plug with locking ring for safe use and removable closing profile for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- High quality fabric according to technical specifications





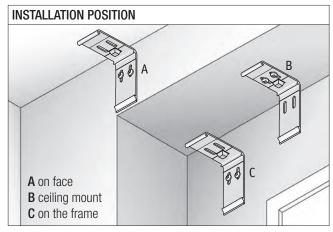




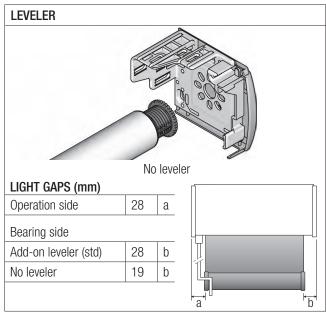
LIGHT GAPS (mm)			⊬ width — →	
Operation side	28	a		1
Bearing side	28	b		
			a	- height -

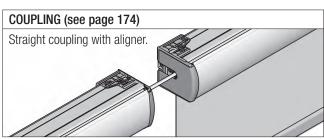
SIZE LIMITATIONS*				
Min. width	300 mm			
Max. width	3600 mm			
Min. height	500 mm			
Max. height	4000 mm			
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 26 m <sup>2</sup>			

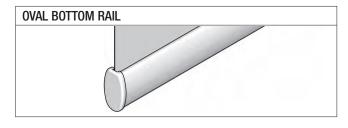
MAXIMUM LOAD (KG)*					
Туре	Tube 31	Tube 37	Tube 50		
Gear 3:1 11.5 10.0 7.5					
Maximum load = bottom rail + (optional) additional weight + fabric					

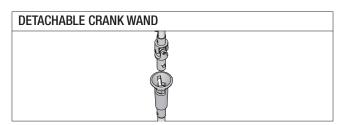


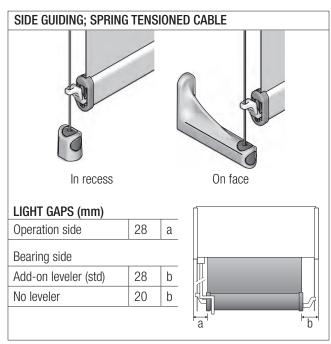
The technical terms on this page are clarified in the glossary in the back.





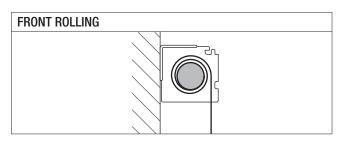


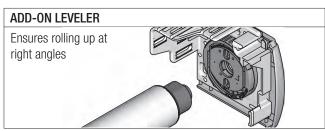


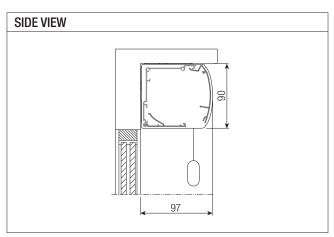


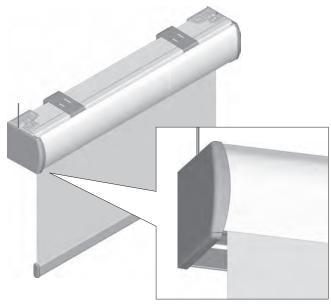
### MOTOR OPERATED ROLLER BLIND FRONT ROLLING WITH DESIGN CASSETTE M

- Die cast end brackets with plastic covers
  - Covers of brackets in grey, black or white to match colour of valance
- 3-part extruded design cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Leveling function to limit skewing
  - Optional no leveler
- · Range of motors available depending on requirements
  - Current: 24V or 230V
  - Force from 3.5 kg to 15 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring-loaded end plug with locking ring for safe use and removable closing profile for easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottom rail, natural anodised, black or white
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- High quality fabric according to technical specifications





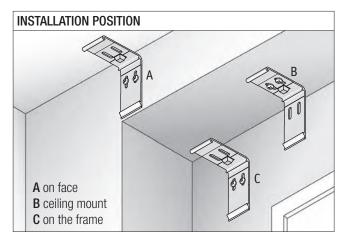




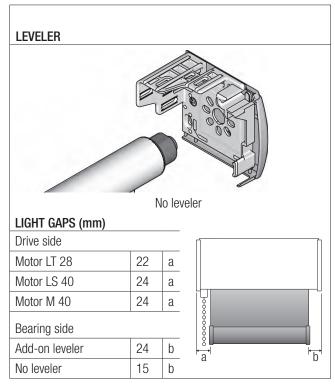
LIGHT GAPS (mm)			←───width ────
Drive side			
Motor LT 28	22	a	
Motor LS 40	24	a	height
Motor M 40	24	a	he
Bearing side	24	b	
			Ha Ha

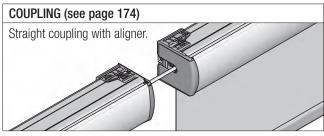
SIZE LIMITATIONS*	
Min. width	380 - 645 mm (depending on motor size)
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>

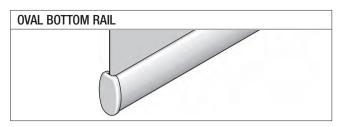
MAXIMUM LOAD (KG)*					
Туре	U	Tube 31	Tube 37	Tube 50	
Motor LT 28	24V	4.0	3.5	-	
Motor LS 40	230V	-	-	15.0	
Motor M 40 230V 15.0					
Maximum load = bottom rail + (optional) additional weight + fabric					

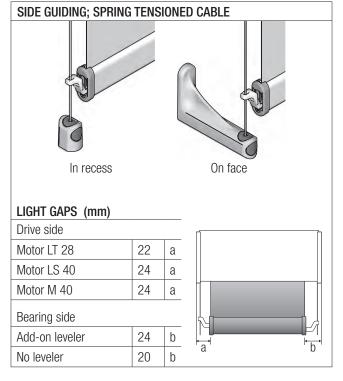


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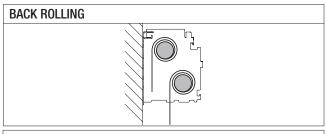


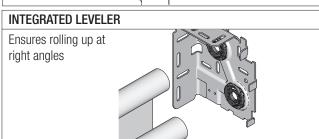


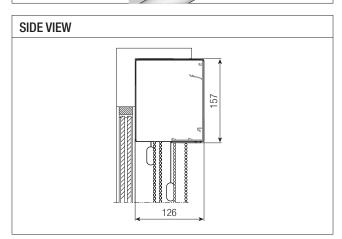


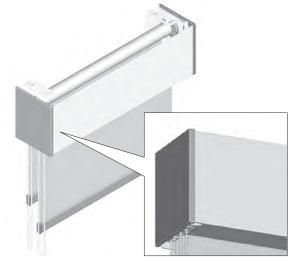
### CHAIN OPERATED BACK ROLLING DUO ROLLER BLIND WITH VALANCE

- Powder coated steel brackets with plastic covers
  - Colour coordinated in grey, black or white
- L-shaped extruded aluminium valance
  - Natural anodized, or powder coated black or white finish
- Integrated leveling function on one side to limit skewing
  - Optional add-on leveler at any side
  - Optional no leveler
- Patented universal clutch for left and right hand operation
- High tensile stainless steel endless ball chain
  - Optional plastic ball chain in grey, black or white
- Sping loaded end plug for easy installation and maintenance
- Extruded aluminium tubes
- Uncovered extruded aluminium bottom rail
  - Natural anodized, or powder coated black or white finish
- Optional uncovered oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





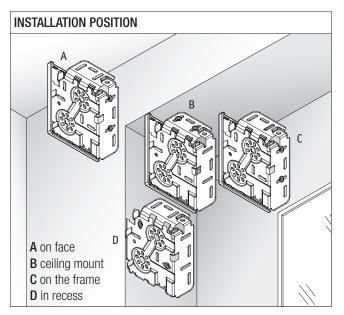




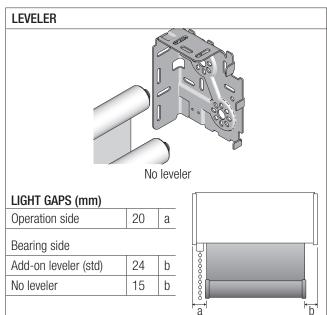
LIGHT GAPS (mm)			
Operation side	21	a	
Bearing side	15	b	
			a

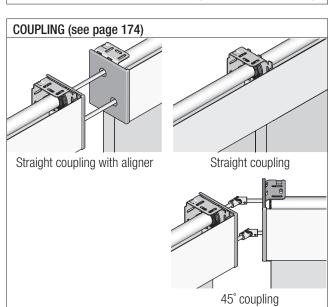
SIZE LIMITATIONS*	
Min. width	300 mm
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 10 m <sup>2</sup> coupled blinds; 13 m <sup>2</sup>

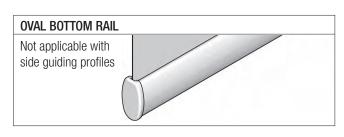
MAXIMUM LOAD (KG)*					
Туре	Tube 31	Tube 37	Tube 50		
Gear 1:1	2.0	-	-		
Gear 1:1 x2 4.7 4.0 3.0					
Gear 1.75:1 5.8 5.0 3.7					
Maximum load = bottom rail + (optional) additional weight + fabric					

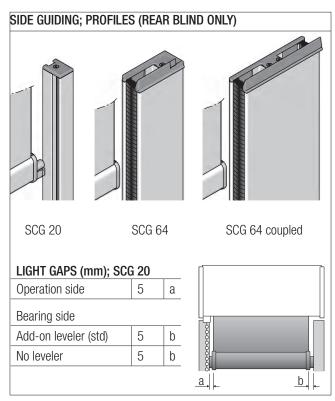


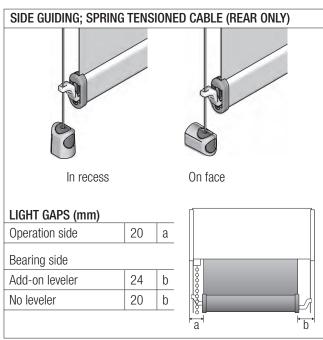
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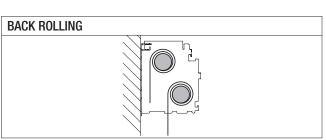


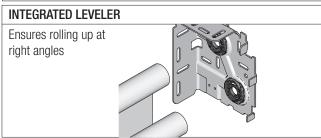


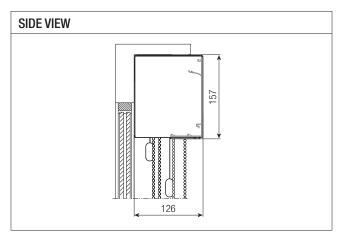


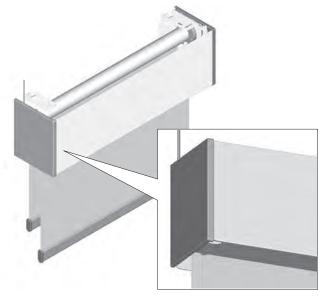
### MOTOR OPERATED BACK ROLLING DUO ROLLER BLIND WITH VALANCE

- Powder coated steel brackets with plastic covers
  - Colour coordinated in grey, black or white
- L-shaped extruded aluminium valance
  - Natural anodized, or powder coated black or white finish
- Integrated leveling function on one side to limit skewing
  - Optional add-on leveler at any side
  - Optional no leveler
- · Range of motors available depending on requirements
  - Current: 24 V or 230 V
  - Force from 3.5 kg to 15 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- · Sping loaded end plug for easy installation and maintenance
- Extruded aluminium tubes
- Uncovered extruded aluminium bottom rail
- Natural anodized, or powder coated black or white finish
  - Optional uncovered oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





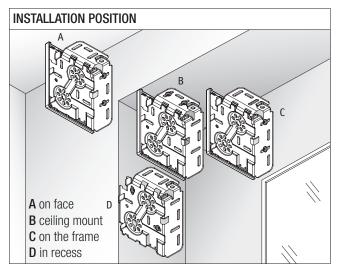




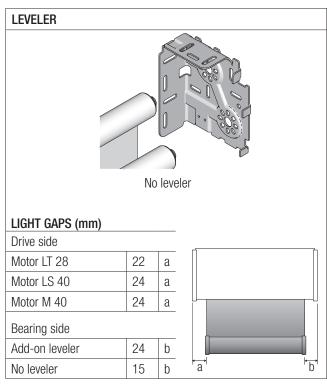
LIGHT GAPS (mm)			
Motor LT 28	22	b	
Motor LS 40	24	b	
Motor M 40	24		
Bearing side	15		

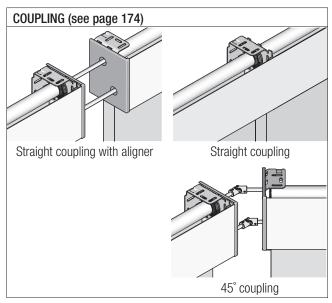
SIZE LIMITATIONS*	
Min. width	380 - 645 mm (depending on motor size)
Max. width	3600 mm
Min. height	500 mm
Max. height	4000 mm
Max. surface	single blind; 12 m <sup>2</sup> coupled blinds; 34 m <sup>2</sup>

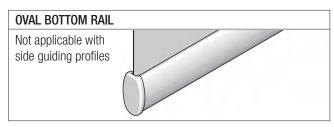
MAXIMUM LOAD (KG)*					
Туре	U	Tube 31	Tube 37	Tube 50	
Motor LT 28	24V	4.0	3.5	-	
Motor LS 40	230V	-	-	15.0	
Motor M 40	230V	-	-	15.0	
Maximum load = bottom rail + (optional) additional weight + fabric					

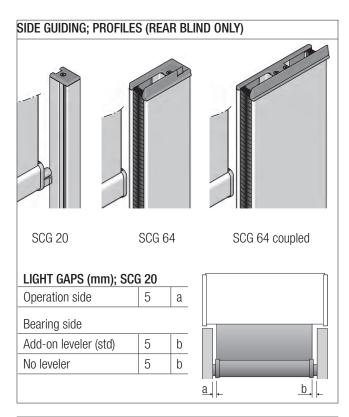


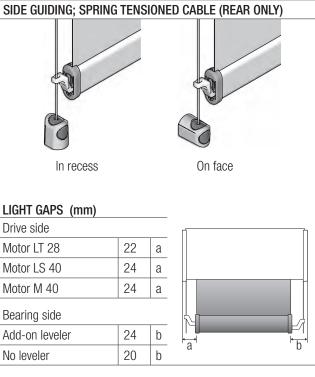
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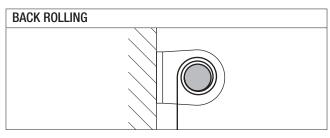


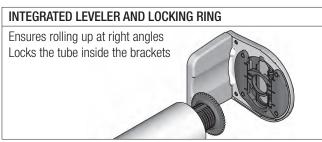


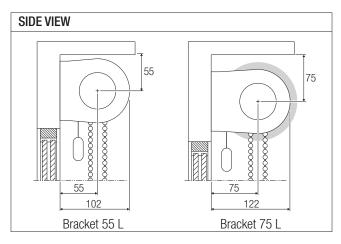


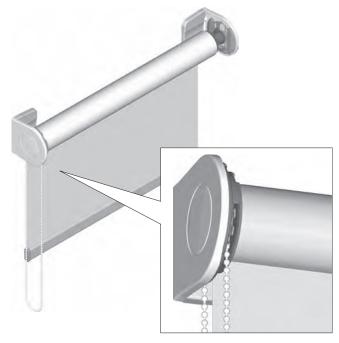
### CHAIN OPERATED ROLLER BLIND INSTALLED ON END BRACKETS L

- Heavy-duty powder coated steel brackets in white, grey or black
- Integrated leveling function to limit skewing
  - Optional no leveler
- Patented clutch with mounting plate for easy and secure installation in white, grey or black
- Universal 3:1 clutch, with integrated autostop, for left and right hand operation
- 1:1 Clutch with patented Counter Balance System (CBS) for large and heavy or coupled blinds
- High tensile stainless steel chain (ø 6.4 mm)
  - Optional plastic ball chain (ø 6.4 mm) in white, grey or black
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back or front rolling
- UV stable parts
- High quality fabric according to technical specifications





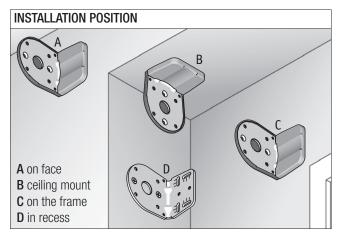




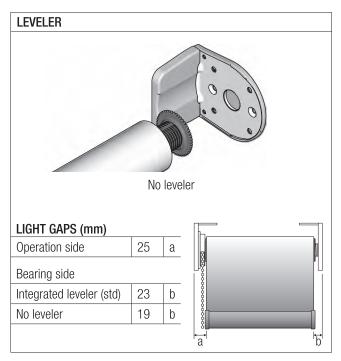
LIGHT GAPS (mm)			<del> </del> wid	th ——→
Operation side	25	а		
Bearing side	23	b		
				height -
			000000000000000000000000000000000000000	l he
			a a	b

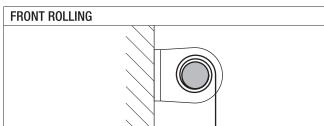
SIZE LIMITATIONS*	
Min. width	220 mm (depending on CBS size)
Max. width	4000 mm
Min. height	500 mm
Max. height	6000 mm
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>

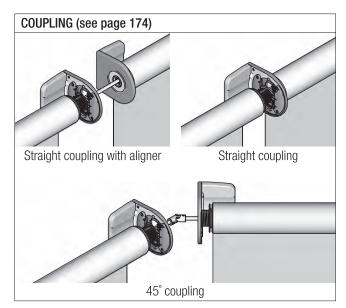
MAXIMUM LOAD (KG)*				
Туре	Tube 50	Tube 62		
Gear 1:1, Counter Balance System	20	20		
Gear 3:1	6.0	4.8		
Maximum load = bottom rail + (optional) additional weight + fabric				

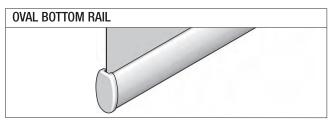


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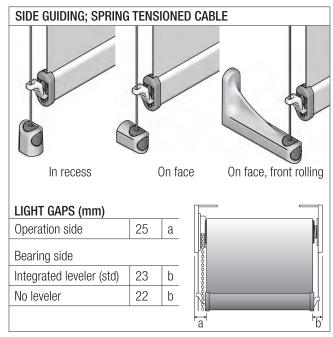






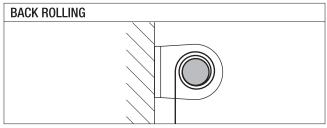
### **AUTOSTOP**

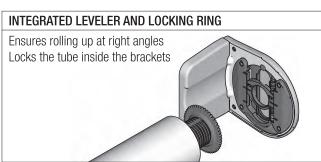
Optional; 3:1 gear without autostop.

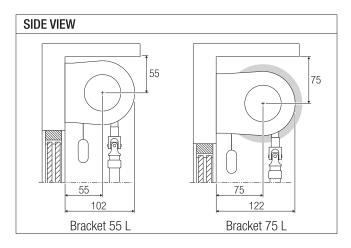


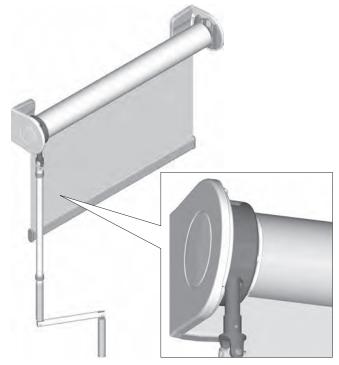
### CRANK OPERATED ROLLER BLINDS INSTALLED ON END BRACKETS L

- Heavy-duty powder coated steel brackets in white, grey or black
- Integrated leveling function to limit skewing
  - Optional no leveler
- Crank drive with mounting plate for easy and secure installation in white, grey or black
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back or front rolling
- UV stable parts
- High quality fabric according to technical specifications





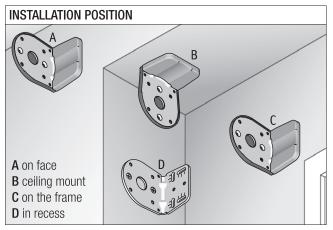




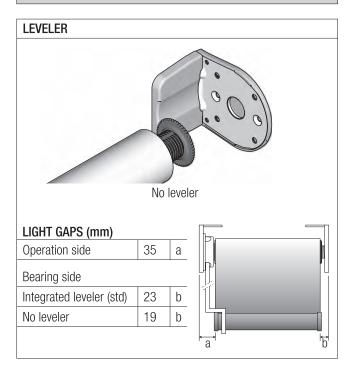
LIGHT GAPS (mm)			, width —	<b>──</b>
Operation side	35	a		
Bearing side	23	b		
			a	o i height

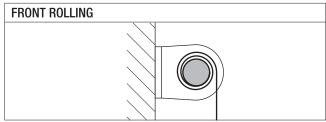
SIZE LIMITATIONS*		
Min. width	215 mm	
Max. width	4000 mm	
Min. height	500 mm	
Max. height	6000 mm	
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 32 m <sup>2</sup>	

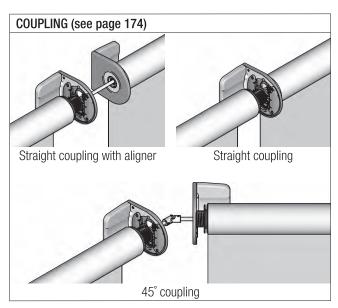
MAXIMUM LOAD (KG)*			
Туре	Tube 50	Tube 62	
Gear 3:1	13.1	10.6	
Maximum load = bottom rail + (optional) additional weight + fabric			

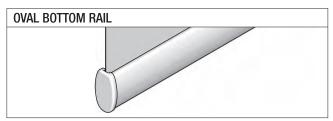


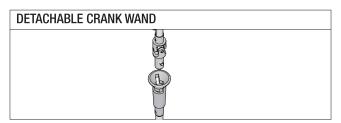
The technical terms on this page are clarified in the glossary in the back.

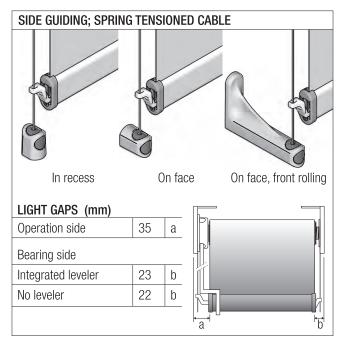






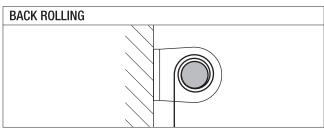


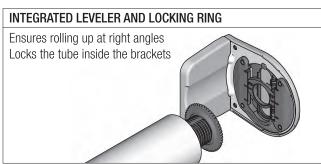


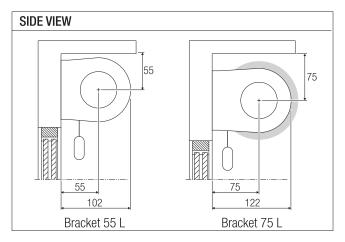


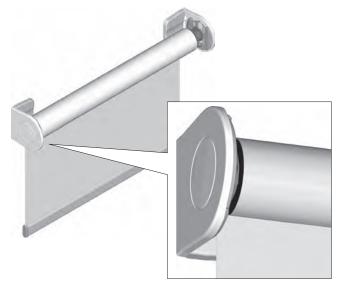
### MOTOR OPERATED ROLLER BLIND INSTALLED ON END BRACKETS L

- Heavy-duty powder coated steel brackets in white, grey or black
- Integrated leveling function to limit skewing
  - Optional no leveler
- Range of 230V motors depending on requirements
  - Force up to 37.5 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back or front rolling
- UV stable parts
- High quality fabric according to technical specifications





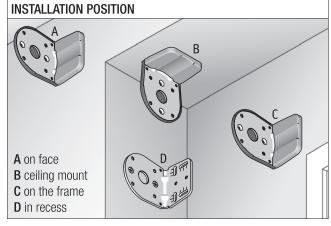




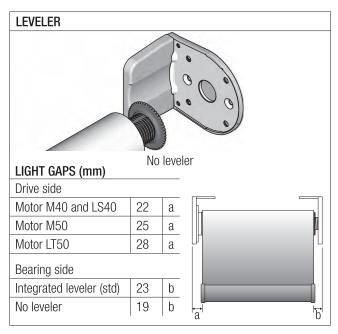
LIGHT GAPS (mm)					
Drive side			<b>+</b>	– width —	
Motor M40 and LS40	18	a			
Motor M50	21	a			
Motor LT50	28	a			height -
Daaring aida	00	T 6			hei
Bearing side	23	b			
			<u></u>		
			ä		D

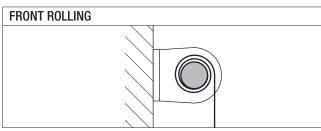
SIZE LIMITATIONS*				
Min. width	575 - 675 mm (depending on motor size)			
Max. width	4000 mm			
Min. height	500 mm			
Max. height	6000 mm			
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>			

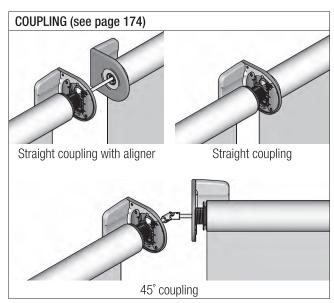
MAXIMUM LOAD (KG)*				
Туре	U	Tube 50	Tube 62	
Motor M40 and LS40	230 V	33.8	27.2	
Motor M50 and LT50 230 V 37.5 30.3				
Maximum load = bottom rail + (optional) additional weight + fabric				

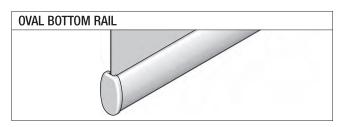


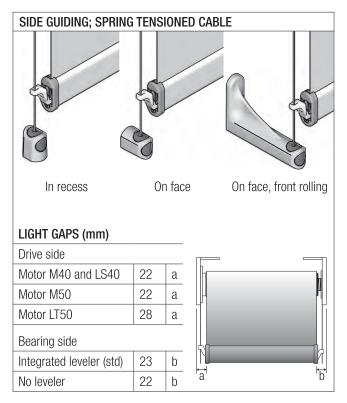
The technical terms on this page are clarified in the glossary in the back.







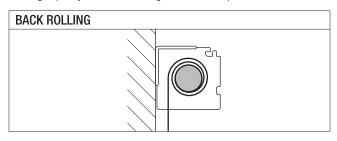


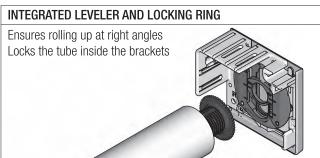


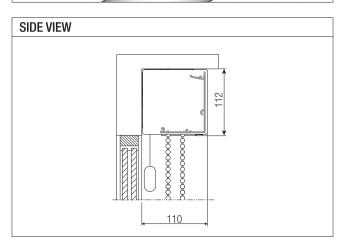
\*Size limitations and maximum load depend on operation type and are further calculated on the basis of a fabric with; weight = 345 gr/m², thickness = 0.44 mm. Maximum deflection of tube 50 = 5 mm and tube 62 = 6 mm.

## CHAIN OPERATED ROLLER BLIND BACK ROLLING WITH VALANCE L

- Die cast brackets with plastic covers in white, grey or black
- L-shaped extruded aluminium valance in natural anodized or powder coated white or black finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Patented clutch with mounting plate for easy and secure installation in white, grey or black
- Universal 3:1 clutch, with integrated autostop, for left and right hand operation
- 1:1 Clutch with patented Counter Balance System (CBS) for large and heavy or coupled blinds
- High tensile stainless steel chain (ø 6.4 mm)
  - Optional plastic ball chain (ø 6.4 mm) in white, grey or black
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





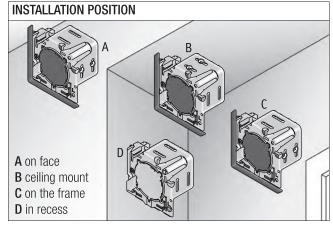




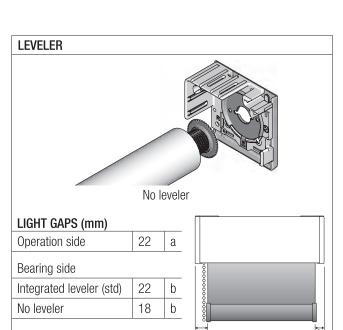
LIGHT GAPS (mm)			width —	
Operation side	22	a		1
Bearing side	22	b		
			a	- height -

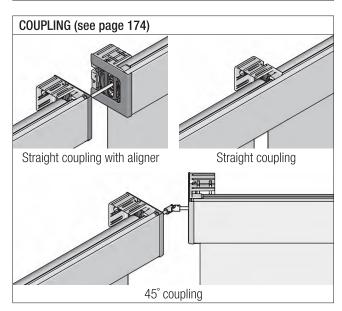
SIZE LIMITATIONS*			
Min. width	220 mm (depending on CBS size)		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm	profile guiding 5000 mm	
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>		

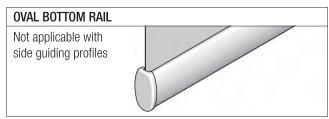
MAXIMUM LOAD (KG)*					
Туре	Tube 50	Tube 62			
Gear 1:1, Counter Balance System	20	20			
Gear 3:1	6.0	4.8			
Maximum load = bottom rail + (optional) additional weight + fabric					



The technical terms on this page are clarified in the glossary in the back.

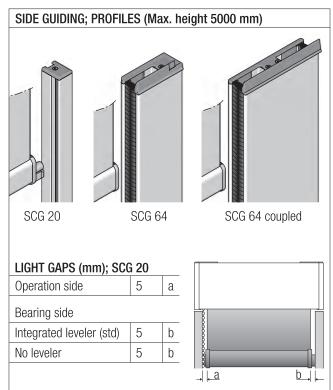


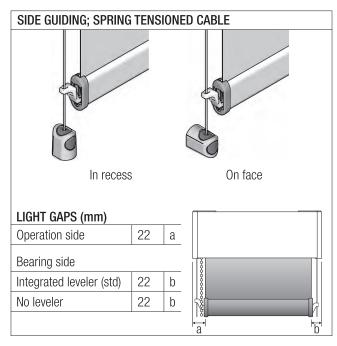




### **AUTOSTOP**

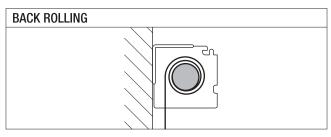
Optional; 3:1 gear without autostop.

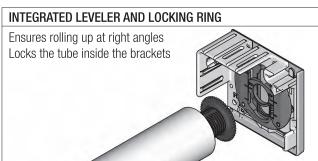


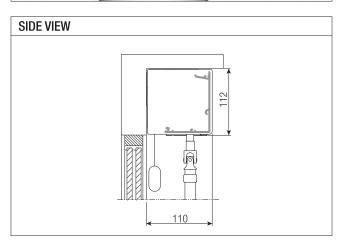


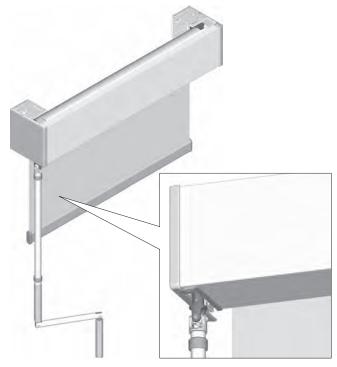
### CRANK OPERATED ROLLER BLIND BACK ROLLING WITH VALANCE L

- Die cast brackets with plastic covers in white, grey or black
- L-shaped extruded aluminium valance in natural anodized or powder coated white or black finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Crank drive with mounting plate for easy and secure installation in white, grey or black
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





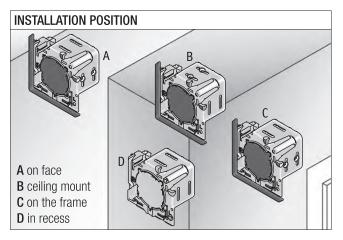




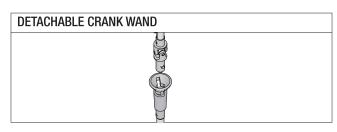
LIGHT GAPS (mm)			├── width ── →
Operation side	32	a	
Bearing side	22	b	
			tubieu a b

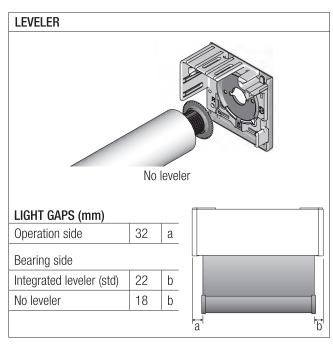
SIZE LIMITATIONS*			
Min. width	300 mm		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm	profile guiding 5000 mm	
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 32 m <sup>2</sup>		

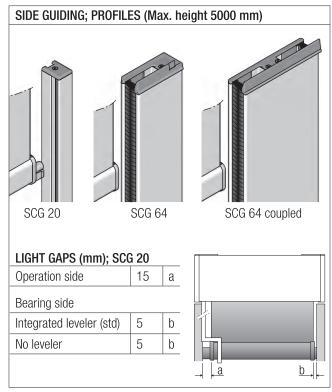
MAXIMUM LOAD (KG)*				
Туре	Tube 50	Tube 62		
Gear 3:1	13.1	10.6		
Maximum load = bottom rail + (optional) additional weight + fabric				

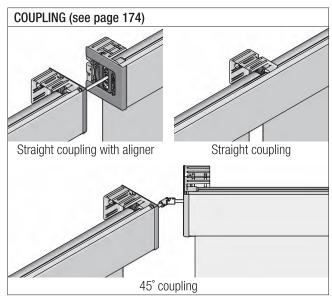


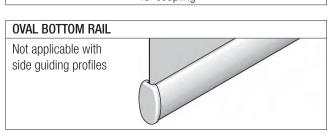
The technical terms on this page are clarified in the glossary in the back.

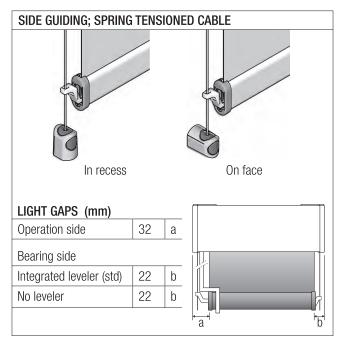






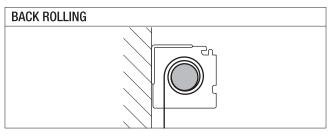


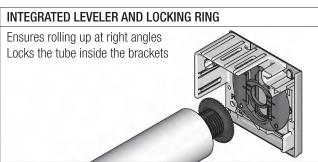


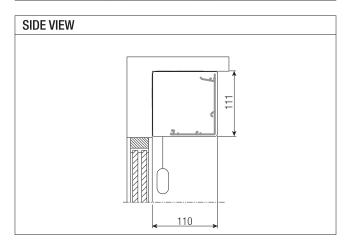


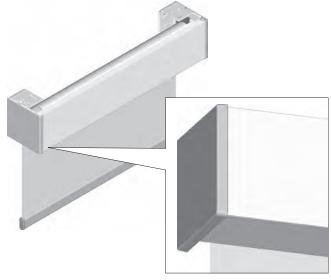
### MOTOR OPERATED ROLLER BLIND BACK ROLLING WITH VALANCE L

- Die cast brackets with plastic covers in white, grey or black
- L-shaped extruded aluminium valance in natural anodized or powder coated white or black finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Range of 230V motors depending on requirements
  - Force up to 37.5 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





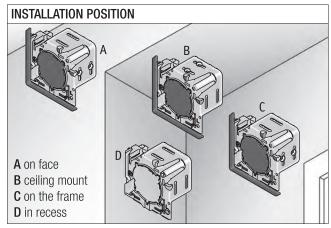




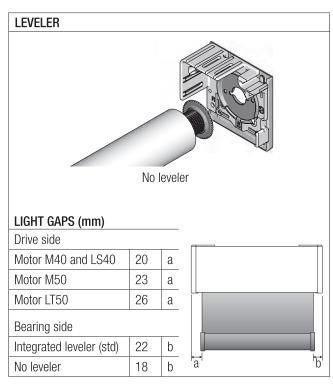
LIGHT GAPS (mm)				
Drive side			├── width ──	
Motor M40 and LS40	20	а		1
Motor M50	23	a		
Motor LT50	26	a		height
Bearing side	22	b		he he
			a b	

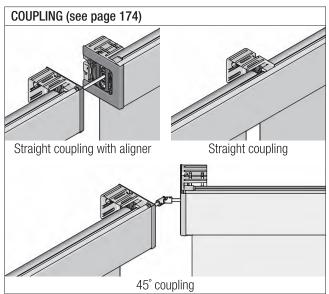
	,			
SIZE LIMITATIONS	<b>)</b> *			
Min. width	575 - 675 n	575 - 675 mm (depending on motor size)		
Max. width	4000 mm	4000 mm		
Min. height	500 mm	500 mm		
Max. height	6000 mm	6000 mm profile guiding 5000 mm		
Max. surface	single blind;	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>		

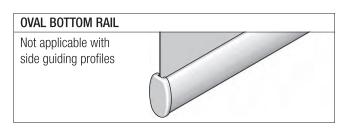
MAXIMUM LOAD (KG)*					
Туре	U	Tube 50	Tube 62		
Motor M40 and LS40	230 V	33.8	27.2		
Motor M50 and LT50 230 V 37.5 30.3					
Maximum load = bottom rail + (optional) additional weight + fabric					

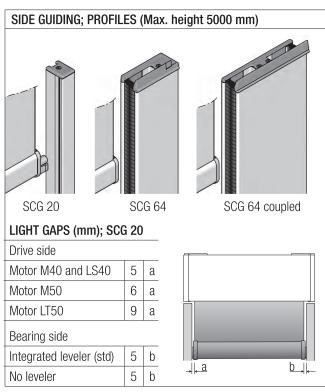


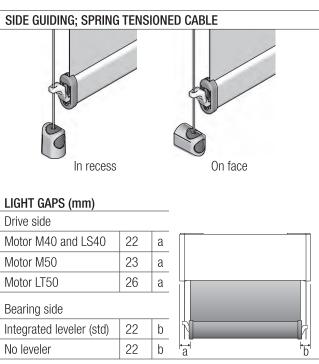
The technical terms on this page are clarified in the glossary in the back.





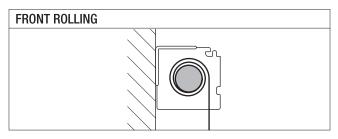


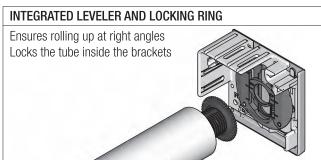


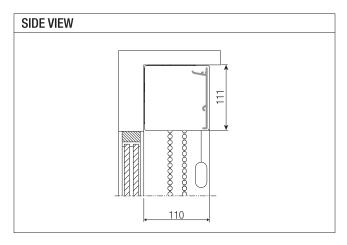


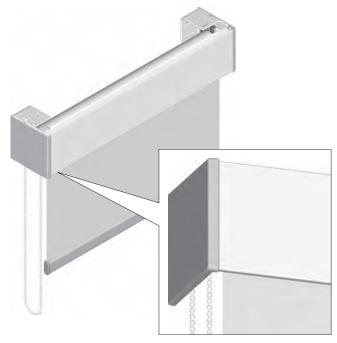
### CHAIN OPERATED ROLLER BLIND FRONT ROLLING WITH VALANCE L

- Die cast brackets with plastic covers in white, grey or black
- Flat extruded aluminium valance in natural anodized or powder coated white or black finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Patented clutch with mounting plate for easy and secure installation in white, grey or black
- Universal 3:1 clutch, with integrated autostop, for left and right hand operation
- 1:1 Clutch with patented Counter Balance System (CBS) for large and heavy or coupled blinds
- High tensile stainless steel chain (ø 6.4 mm)
  - Optional plastic ball chain (ø 6.4 mm) in white, grey or black
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front (standard) or back (option) rolling
- UV stable parts
- High quality fabric according to technical specifications





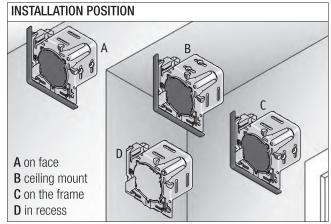




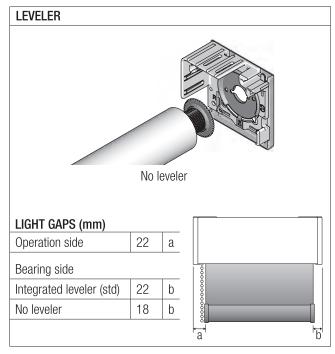
LIGHT GAPS (mm)			ı⊷— width ——→
Operation side	22	а	
Bearing side	22	b	
			p p p p p p p p p p p p p p p p p p p

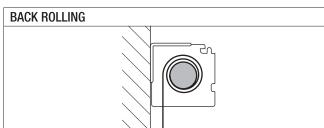
SIZE LIMITATIONS*			
Min. width	220 mm (depending on CBS size)		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm profile guiding 5000 mm		
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>		

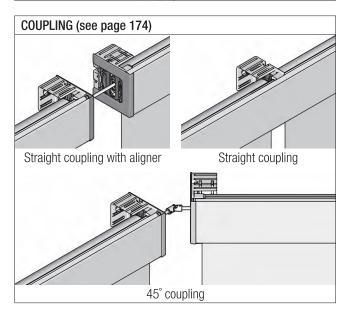
MAXIMUM LOAD (KG)*		
Туре	Tube 50	Tube 62
Gear 1:1, Counter Balance System	20	20
Gear 3:1	6.0	4.8
Maximum load = bottom rail + (optional) additional w	eight + fabric	

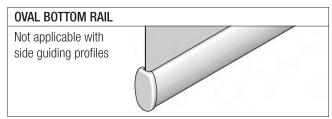


The technical terms on this page are clarified in the glossary in the back.

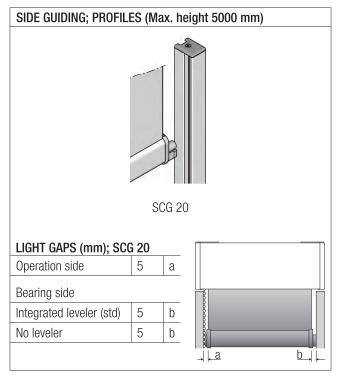


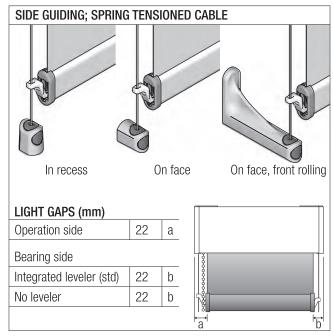






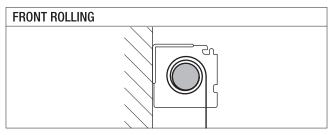
# AUTOSTOP Optional; 3:1 gear without autostop.

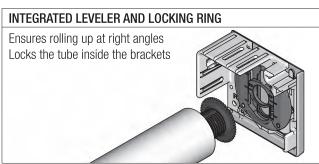


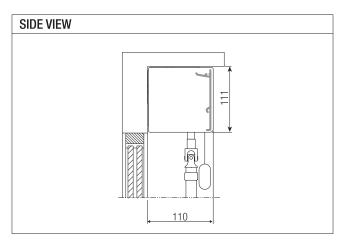


### CRANK OPERATED ROLLER BLIND FRONT ROLLING WITH VALANCE L

- Die cast brackets with plastic covers in white, grey or black
- Flat extruded aluminium valance in natural anodized or powder coated white or black finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Crank drive with mounting plate for easy and secure installation in white, grey or black
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front (standard) or back (option) rolling
- UV stable parts
- · High quality fabric according to technical specifications





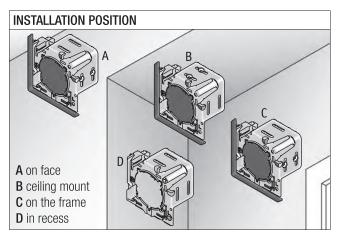




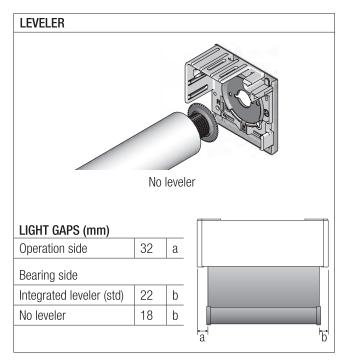
LIGHT GAPS (mm)			ı←—— width ———
Operation side	32	a	
Bearing side	22	b	
			T Height

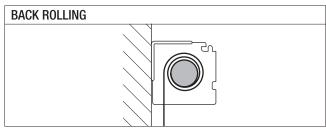
SIZE LIMITATIONS*			
Min. width	300 mm		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm profile guiding 5000 mm		
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 32 m <sup>2</sup>		

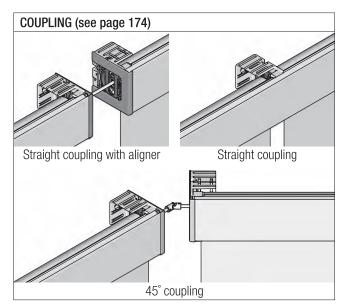
MAXIMUM LOAD (KG)*		
Туре	Tube 50	Tube 62
Gear 3:1	13.1	10.6
Maximum load = bottom rail + (optiona	l) additional weight + :	fabric

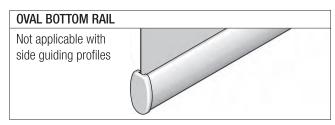


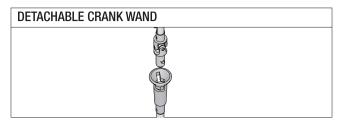
The technical terms on this page are clarified in the glossary in the back.

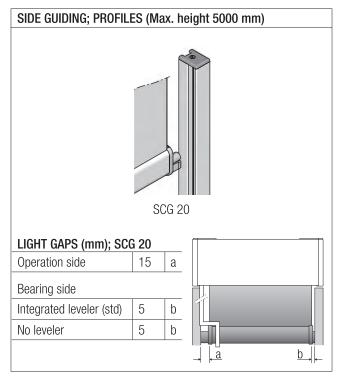


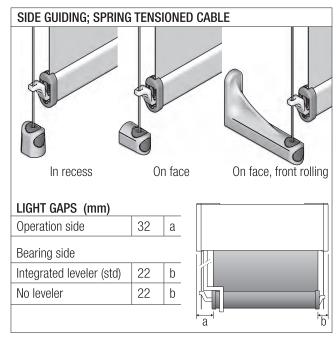






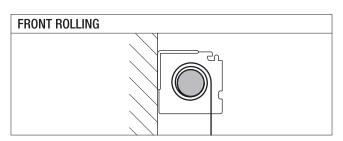


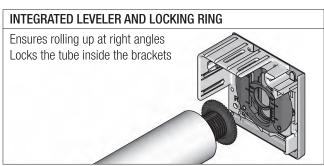


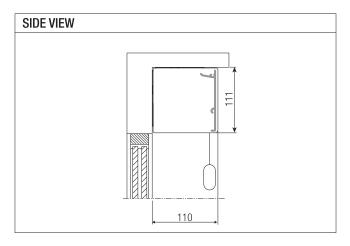


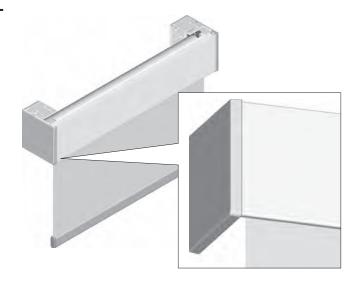
### MOTOR OPERATED ROLLER BLIND FRONT ROLLING WITH VALANCE L

- Die cast brackets with plastic covers in white, grey or black
- Flat extruded aluminium valance in natural anodized or powder coated white or black finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Range of 230V motors depending on requirements
  - Force up to 37.5 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front (standard) or back (option) rolling
- UV stable parts
- High quality fabric according to technical specifications





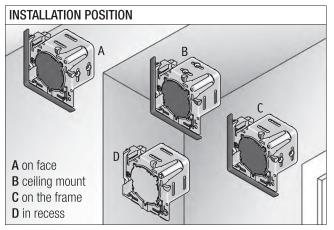




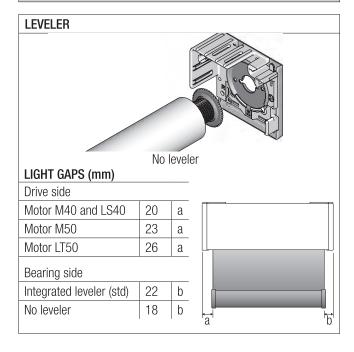
		├── width ──	
20	а		1
23	a		
26	a		height .
22	b		- he
	23 26	23 a 26 a	23 a 26 a

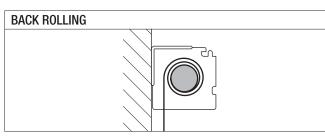
SIZE LIMITATIONS*			
Min. width	575 - 675 mm (depending on motor size)		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm profile guiding 5000 mm		
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>		

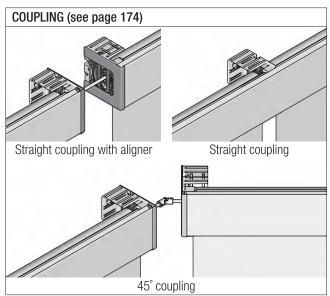
MAXIMUM LOAD (KG)*						
Туре	U	Tube 50	Tube 62			
Motor M40 and LS40	230 V	33.8	27.2			
Motor M50 and LT50 230 V 37.5 30.3						
Maximum load = bottom rail + (option	nal) additional v	veight + fabric				

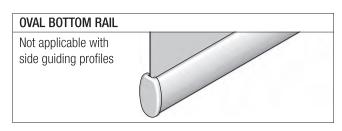


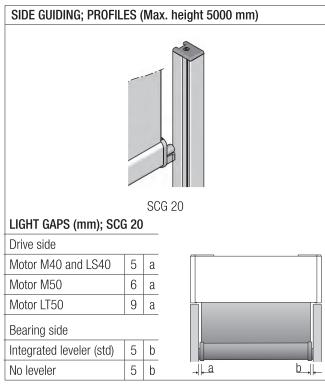
The technical terms on this page are clarified in the glossary in the back.

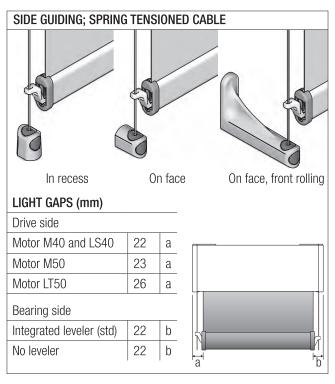






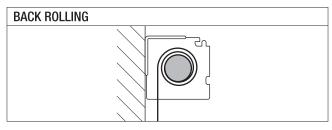


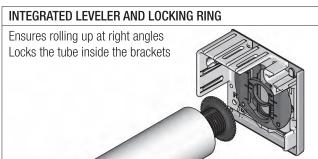


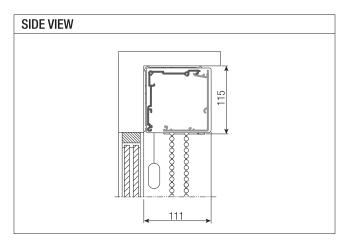


### CHAIN OPERATED ROLLER BLIND BACK ROLLING WITH CASSETTE L

- Die cast brackets with plastic covers in white, grey or black
- 2-part extruded cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Patented clutch with mounting plate for easy and secure installation in white, grey or black
- Universal 3:1 clutch, with integrated autostop, for left and right hand operation
- 1:1 Clutch with patented Counter Balance System (CBS) for large and heavy or coupled blinds
- High tensile stainless steel chain (ø 6.4 mm)
  - Optional plastic ball chain (ø 6.4 mm) in white, grey or black
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





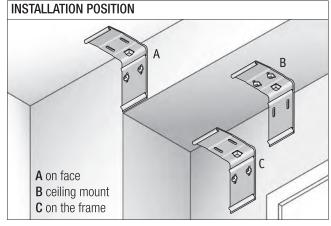




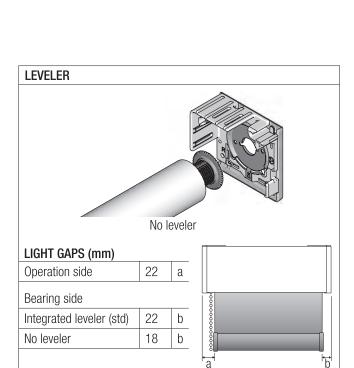
LIGHT GAPS (mm)			⊬ width — →
Operation side	22	a	
Bearing side	22	b	
			900000
			'a' 'b'

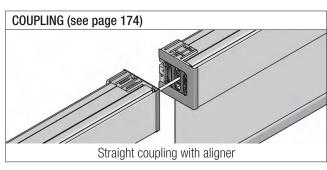
SIZE LIMITATIONS*				
Min. width	220 mm (de	pending on CBS size)		
Max. width	4000 mm			
Min. height	500 mm			
Max. height	6000 mm	profile guiding 5000 mm		
Max. surface	single blind;	16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>		

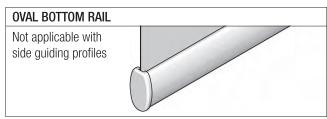
MAXIMUM LOAD (KG)*			
Туре	Tube 50	Tube 62	
Gear 1:1, Counter Balance System	20	20	
Gear 3:1	6.0	4.8	
Maximum load = bottom rail + (optional) additional weight + fabric			



The technical terms on this page are clarified in the glossary in the back.

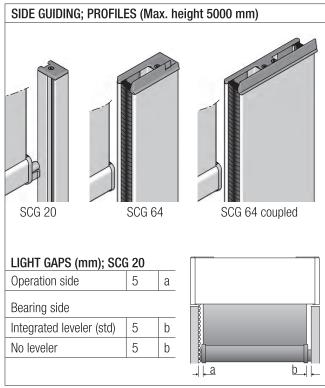


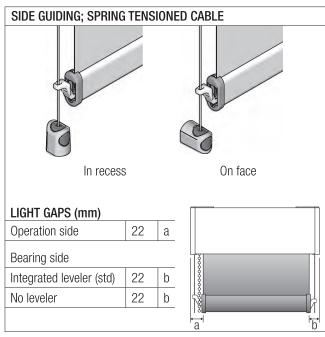




#### **AUTOSTOP**

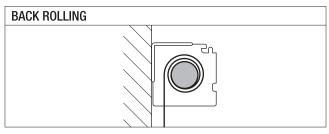
Optional; 3:1 gear without autostop.

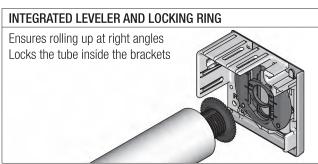


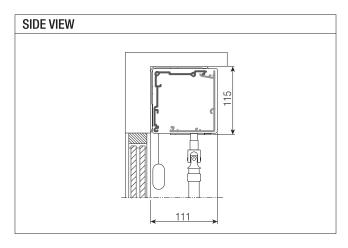


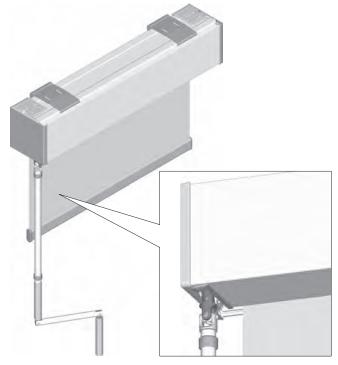
### CRANK OPERATED ROLLER BLIND BACK ROLLING WITH CASSETTE L

- Die cast brackets with plastic covers in white, grey or black
- 2-part extruded cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Crank drive with mounting plate for easy and secure installation in white, grey or black
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





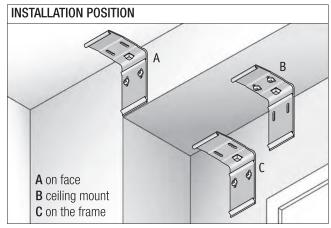




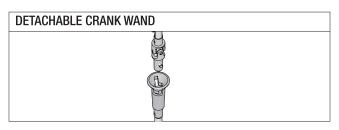
LIGHT GAPS (mm)			r width
Operation side	32	a	
Bearing side	22	b	
			a bight

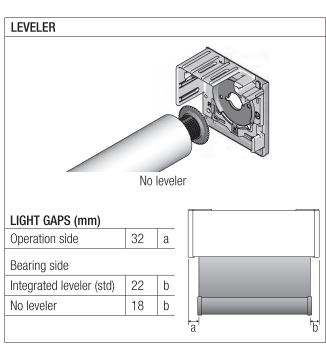
SIZE LIMITATIONS*			
Min. width	300 mm		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm	profile guiding 5000 mm	
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 32 m <sup>2</sup>		

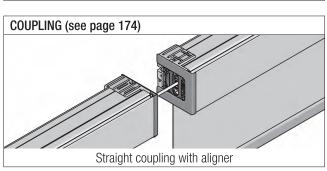
MAXIMUM LOAD (KG)*			
Туре	Tube 50	Tube 62	
Gear 3:1	13.1	10.6	
Maximum load = bottom rail + (optional) additional weight + fabric			

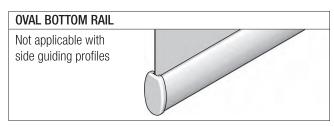


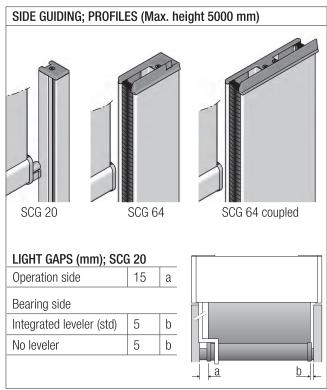
The technical terms on this page are clarified in the glossary in the back.

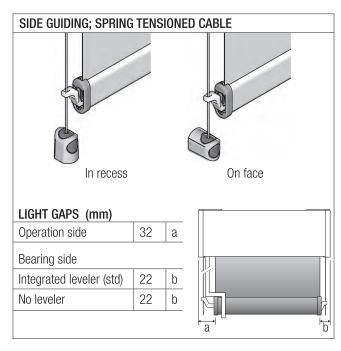






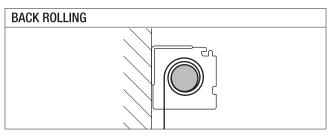


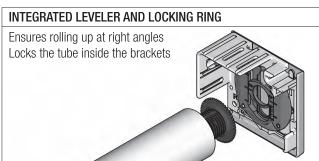


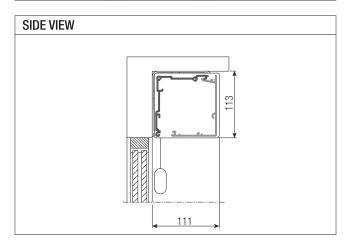


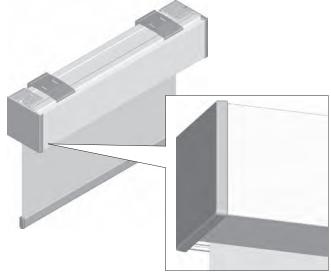
### MOTOR OPERATED ROLLER BLIND BACK ROLLING WITH CASSETTE L

- Die cast brackets with plastic covers in white, grey or black
- 2-part extruded cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Range of 230V motors depending on requirements
  - Force up to 37.5 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





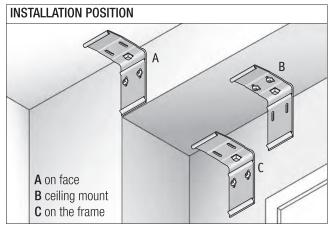




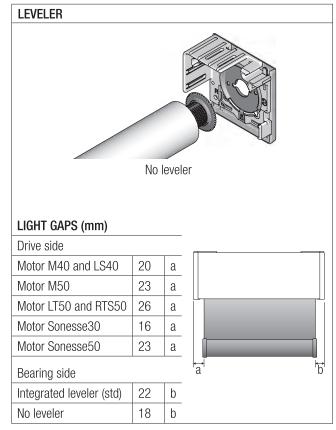
LIGHT GAPS (mm)			
Drive side			├── width ──
Motor M40 and LS40	20	а	
Motor M50	23	а	
Motor LT50	26	а	height
Bearing side	22	b	a b

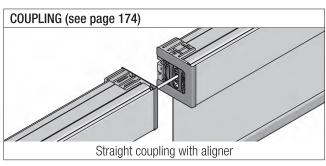
SIZE LIMITATIONS*		
Min. width		200 (danaadiaa aa aata a'aa)
		nm (depending on motor size)
Max. width	4000 mm	
Min. height	500 mm	
Max. height	6000 mm	profile guiding 5000 mm
Max. surface	single blind;	16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>

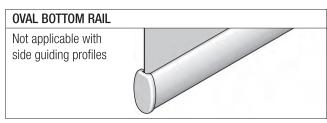
MAXIMUM LOAD (KG)*				
Туре	U	Tube 50	Tube 62	
Motor M40 and LS40	230 V	33.8	27.2	
Motor M50 and LT50	230 V	37.5	30.3	
Maximum load = bottom rail + (optional) additional weight + fabric				

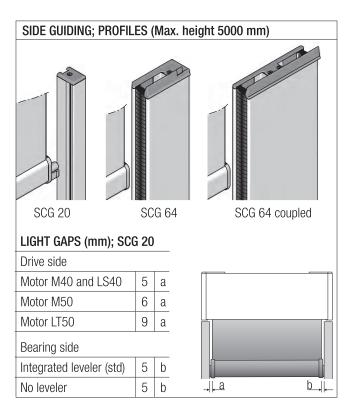


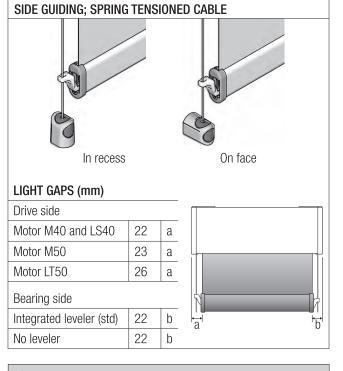
The technical terms on this page are clarified in the glossary in the back.





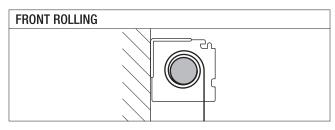


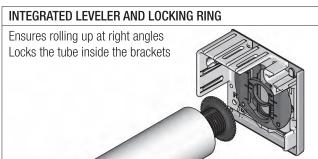


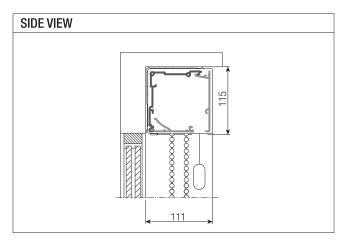


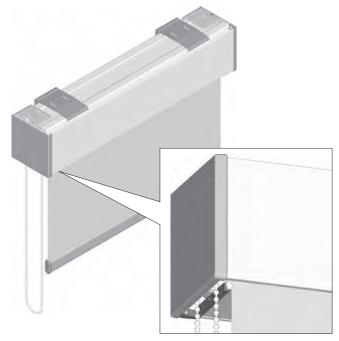
### CHAIN OPERATED ROLLER BLIND FRONT ROLLING WITH CASSETTE L

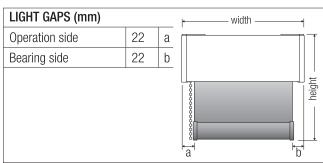
- Die cast brackets with plastic covers in white, grey or black
- 3-part extruded cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Patented clutch with mounting plate for easy and secure installation in white, grey or black
- Universal 3:1 clutch, with integrated autostop, for left and right hand operation
- 1:1 Clutch with patented Counter Balance System (CBS) for large and heavy or coupled blinds
- High tensile stainless steel chain (ø 6.4 mm)
  - Optional plastic ball chain (ø 6.4 mm) in white, grey or black
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- High quality fabric according to technical specifications





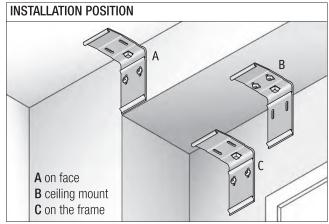




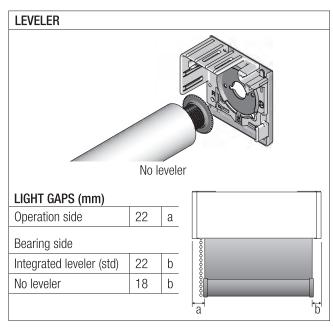


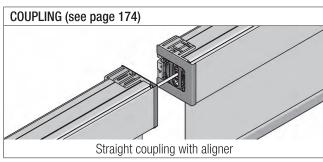
SIZE LIMITATIONS*	
Min. width	220 mm (depending on CBS size)
Max. width	4000 mm
Min. height	500 mm
Max. height	6000 mm
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>

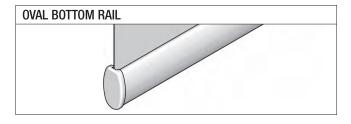
MAXIMUM LOAD (KG)*			
Туре	Tube 50	Tube 62	
Gear 1:1, Counter Balance System	20	20	
Gear 3:1	6.0	4.8	
Maximum load = bottom rail + (optional) additional weight + fabric			



The technical terms on this page are clarified in the glossary in the back.

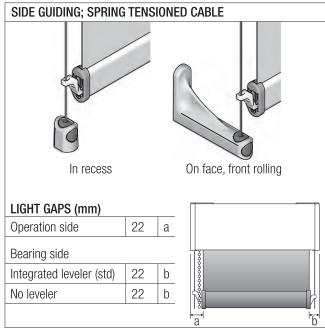






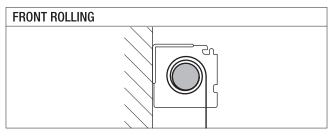
#### **AUTOSTOP**

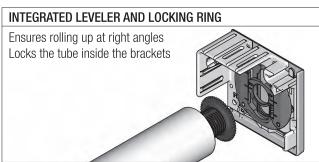
Optional; 3:1 gear without autostop.

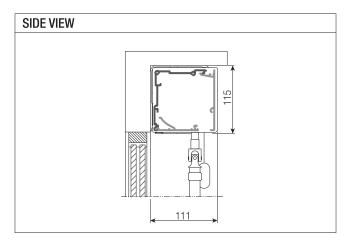


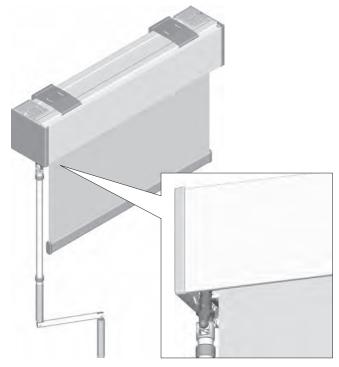
### CRANK OPERATED ROLLER BLIND FRONT ROLLING WITH CASSETTE L

- Die cast brackets with plastic covers in white, grey or black
- 3-part extruded cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Crank drive with mounting plate for easy and secure installation in white, grey or black
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- High quality fabric according to technical specifications





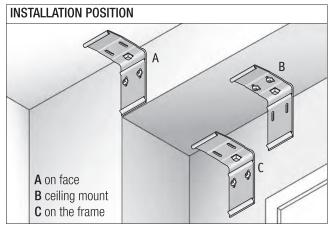




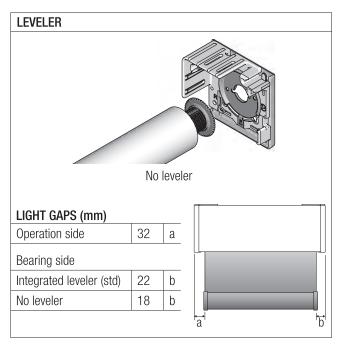
LIGHT GAPS (mm)			r width ──	
Operation side	32	а		
Bearing side	22	b		
			a	height

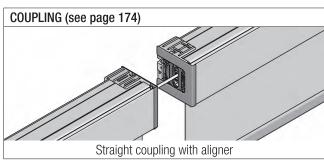
SIZE LIMITATIONS*		
Min. width	300 mm	
Max. width	4000 mm	
Min. height	500 mm	
Max. height	6000 mm	
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 32 m <sup>2</sup>	

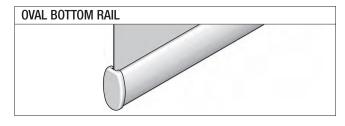
MAXIMUM LOAD (KG)*			
Туре	Tube 50	Tube 62	
Gear 3:1	13.1	10.6	
Maximum load = bottom rail + (optional) additional weight + fabric			

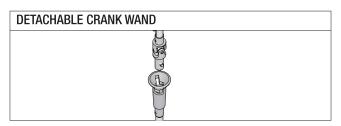


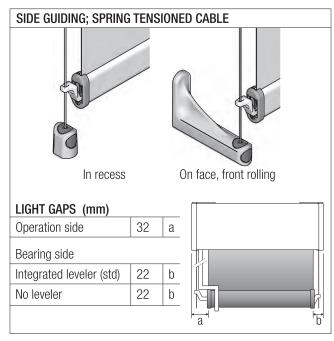
The technical terms on this page are clarified in the glossary in the back.





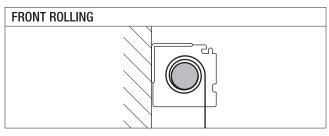


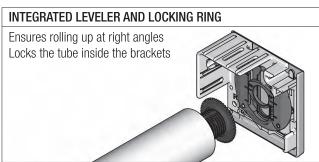


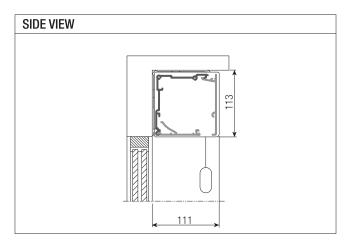


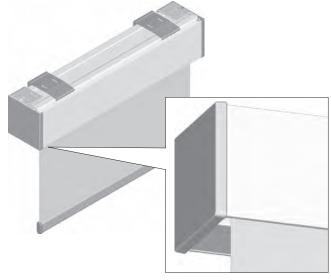
### MOTOR OPERATED ROLLER BLIND FRONT ROLLING WITH CASSETTE L

- Die cast brackets with plastic covers in white, grey or black
- 3-part extruded cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Range of 230V motors depending on requirements
  - Force up to 37.5 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front rolling
- UV stable plastic parts
- High quality fabric according to technical specifications





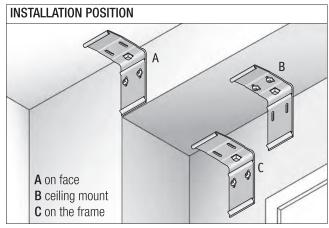




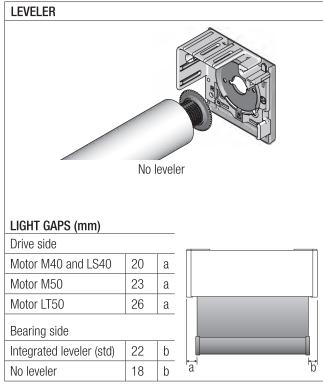
LIGHT GAPS (mm)				
Drive side			├── width ──	
Motor M40 and LS40	20	а		7
Motor M50	23	а		
Motor LT50	26	а		height
Bearing side	22	b	a b	he he

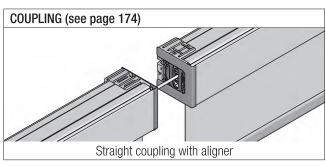
SIZE LIMITATIONS*	
Min. width	575 - 675 mm (depending on motor size)
Max. width	4000 mm
Min. height	500 mm
Max. height	6000 mm
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>

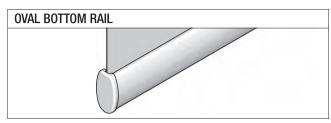
MAXIMUM LOAD (KG)*				
Туре	U	Tube 50	Tube 62	
Motor M40 and LS40	230 V	33.8	27.2	
Motor M50 and LT50 230 V 37.5 30.3				
Maximum load = bottom rail + (optional) additional weight + fabric				

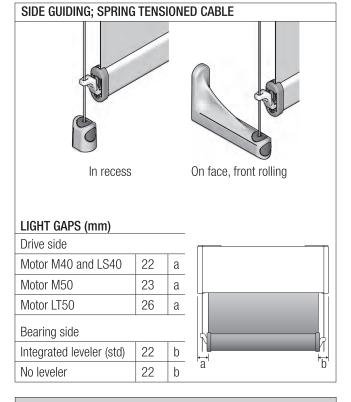


The technical terms on this page are clarified in the glossary in the back.



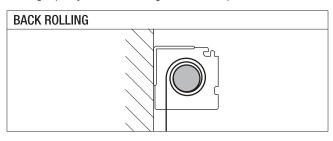


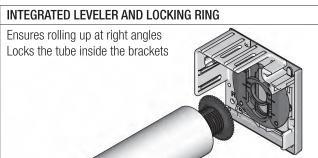


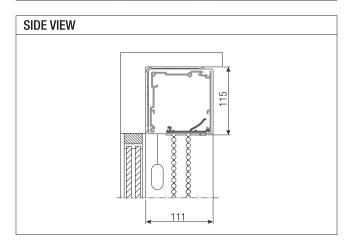


#### CHAIN OPERATED ROLLER BLIND BACK ROLLING WITH POCKET L

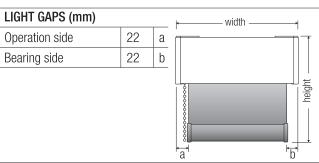
- Die cast brackets with plastic covers in white, grey or black
- U-shaped extruded pocket with accessible closed bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Patented clutch with mounting plate for easy and secure installation in white, grey or black
- Universal 3:1 clutch, with integrated autostop, for left and right hand operation
- 1:1 Clutch with patented Counter Balance System (CBS) for large and heavy or coupled blinds
- High tensile stainless steel chain (ø 6.4 mm)
  - Optional plastic ball chain (ø 6.4 mm) in white, grey or black
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





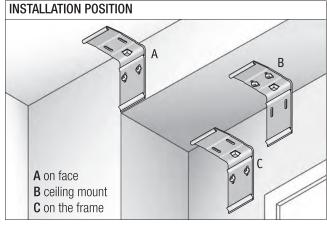




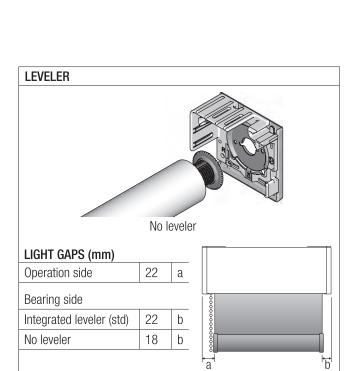


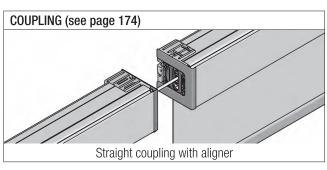
SIZE LIMITATIONS*			
Min. width	220 mm (depending on CBS size)		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm profile guiding 5000 mm		
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>		

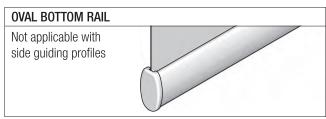
MAXIMUM LOAD (KG)*				
Туре	Tube 50	Tube 62		
Gear 1:1, Counter Balance System	20	20		
Gear 3:1	6.0	4.8		
Maximum load = bottom rail + (optional) additional weight + fabric				



The technical terms on this page are clarified in the glossary in the back.

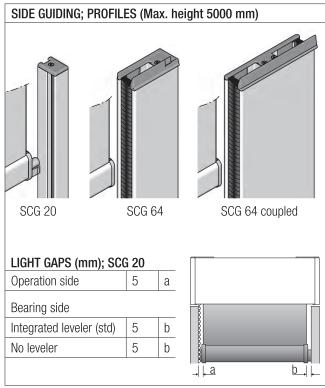


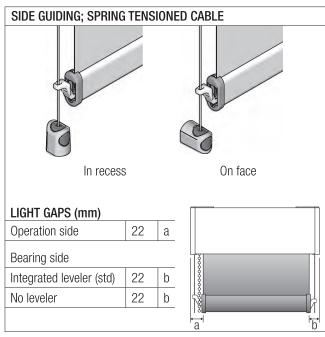




#### **AUTOSTOP**

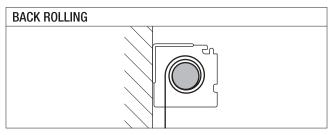
Optional; 3:1 gear without autostop.

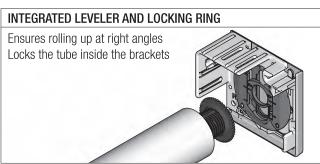


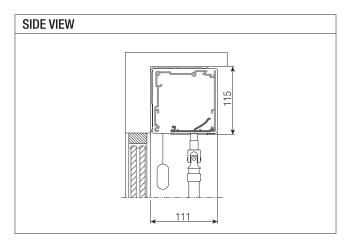


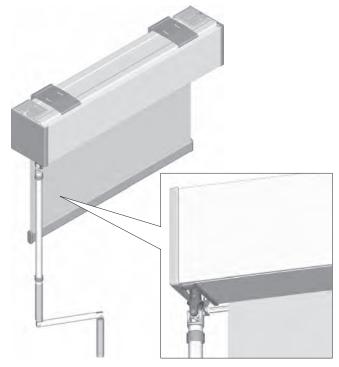
#### CRANK OPERATED ROLLER BLIND BACK ROLLING WITH POCKET L

- Die cast brackets with plastic covers in white, grey or black
- U-shaped extruded pocket with accessible closed bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Crank drive with mounting plate for easy and secure installation in white, grey or black
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





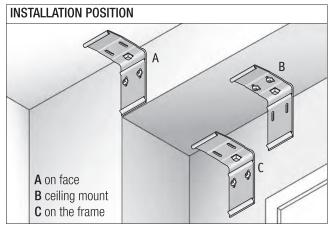




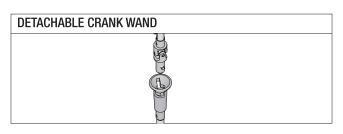
LIGHT GAPS (mm)			ı←—— width ———
Operation side	32	a	
Bearing side	22	b	
			T Height

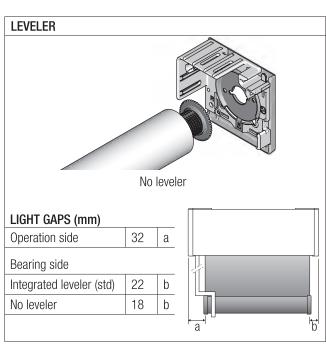
SIZE LIMITATIONS*			
Min. width	300 mm		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm profile guiding 5000 mm		
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 32 m <sup>2</sup>		

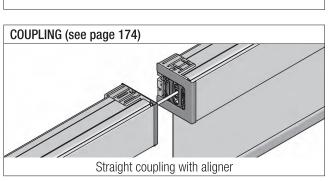
MAXIMUM LOAD (KG)*			
Туре	Tube 50	Tube 62	
Crank	13.1	10.6	
Maximum load = bottom rail + (optional) additional weight + fabric			

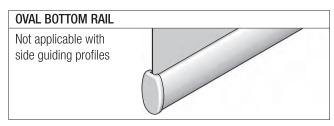


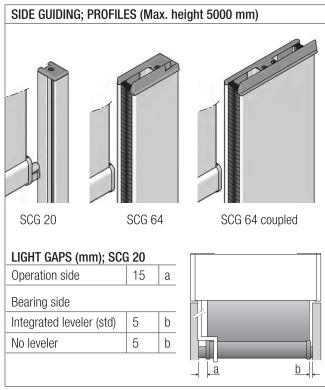
The technical terms on this page are clarified in the glossary in the back.

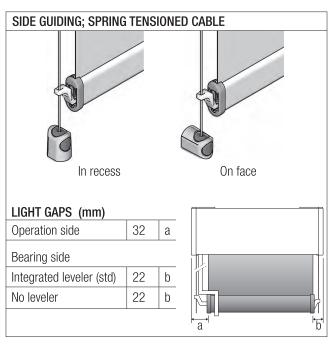






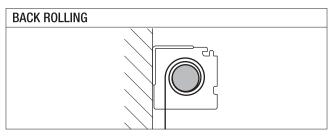


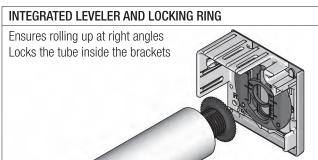


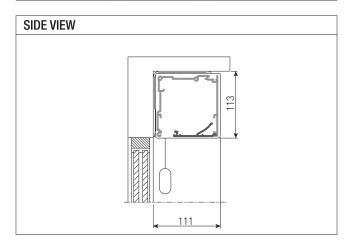


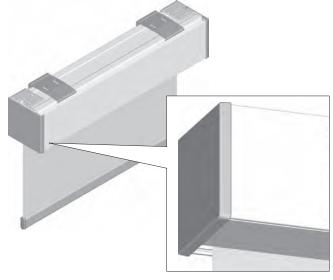
### MOTOR OPERATED ROLLER BLIND BACK ROLLING WITH POCKET L

- Die cast brackets with plastic covers in white, grey or black
- U-shaped extruded pocket with accessible closed bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Range of 230V motors depending on requirements
  - Force up to 37.5 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





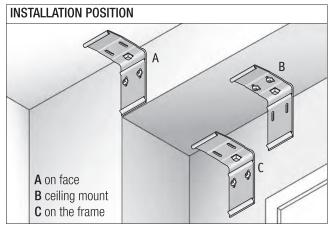




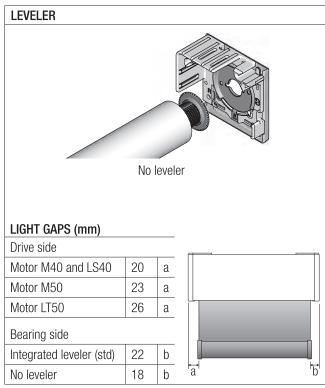
LIGHT GAPS (mm)			
Drive side			├── width ──
Motor M40 and LS40	20	а	
Motor M50	23	а	
Motor LT50	26	а	height
Bearing side	22	b	a b

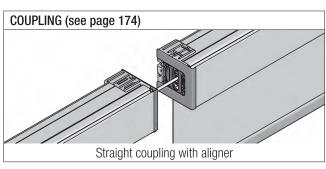
SIZE LIMITATIONS*				
Min. width	575 - 675 n	nm (depending on motor size)		
Max. width	4000 mm	4000 mm		
Min. height	500 mm	500 mm		
Max. height	6000 mm	profile guiding 5000 mm		
Max. surface	single blind;	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>		

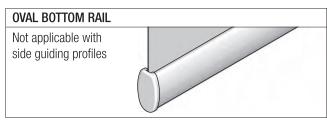
MAXIMUM LOAD (KG)*					
Туре	U	Tube 50	Tube 62		
Motor M40 and LS40	230 V	33.8	27.2		
Motor M50 and LT50 230 V 37.5 30.3					
Maximum load = bottom rail + (optional) additional weight + fabric					

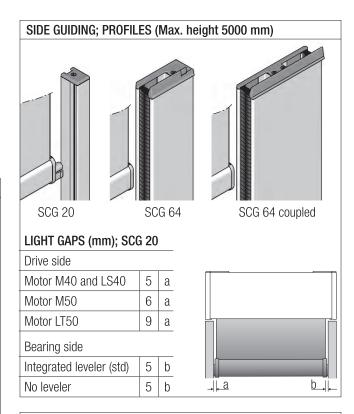


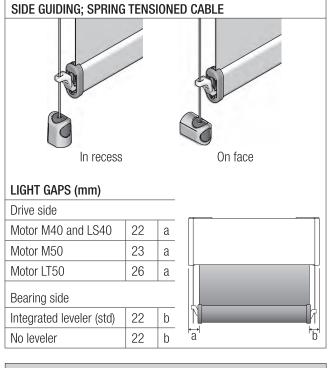
The technical terms on this page are clarified in the glossary in the back.





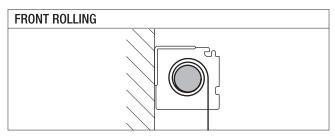


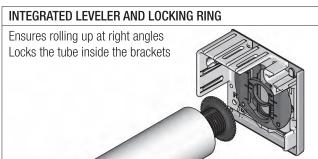


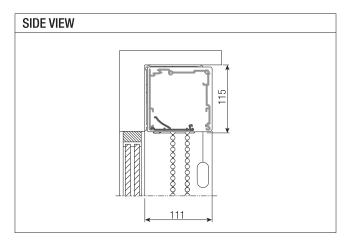


### CHAIN OPERATED ROLLER BLIND FRONT ROLLING WITH POCKET L

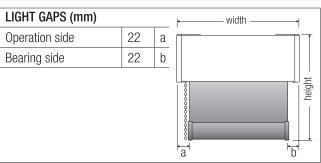
- Die cast brackets with plastic covers in white, grey or black
- U-shaped extruded pocket with accessible closed bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Patented clutch with mounting plate for easy and secure installation in white, grey or black
- Universal 3:1 clutch, with integrated autostop, for left and right hand operation
- 1:1 Clutch with patented Counter Balance System (CBS) for large and heavy or coupled blinds
- High tensile stainless steel chain (ø 6.4 mm)
  - Optional plastic ball chain (ø 6.4 mm) in white, grey or black
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- · High quality fabric according to technical specifications





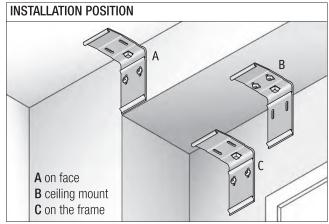




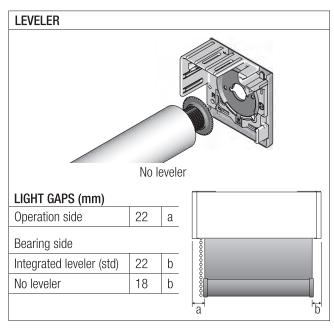


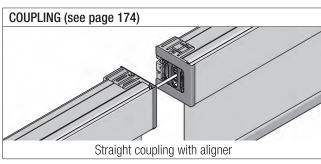
SIZE LIMITATIONS*	
Min. width	220 mm (depending on CBS size)
Max. width	4000 mm
Min. height	500 mm
Max. height	6000 mm
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>

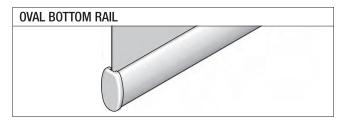
MAXIMUM LOAD (KG)*				
Туре	Tube 50	Tube 62		
Gear 1:1, Counter Balance System	20	20		
Gear 3:1 6.0 4.8				
Maximum load = bottom rail + (optional) additional weight + fabric				



The technical terms on this page are clarified in the glossary in the back.

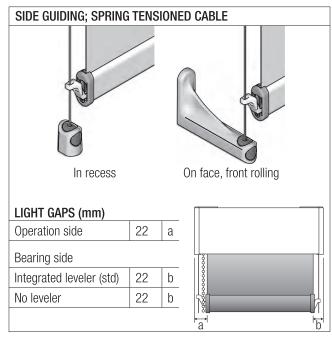






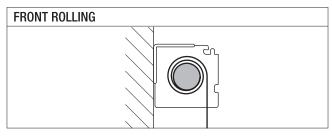
#### **AUTOSTOP**

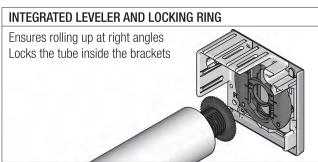
Optional; 3:1 gear without autostop.

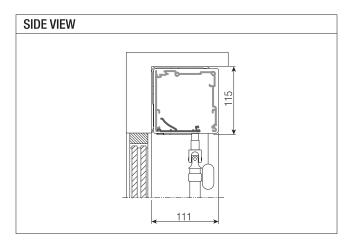


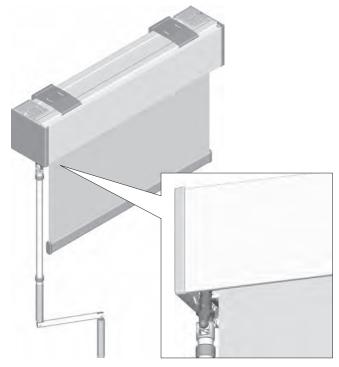
### CRANK OPERATED ROLLER BLIND FRONT ROLLING WITH POCKET L

- Die cast brackets with plastic covers in white, grey or black
- U-shaped extruded pocket with accessible closed bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Crank drive with mounting plate for easy and secure installation in white, grey or black
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- High quality fabric according to technical specifications





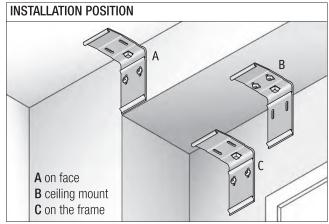




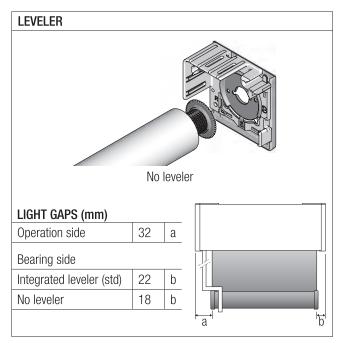
LIGHT GAPS (mm)			ı←—— width ———
Operation side	32	a	
Bearing side	22	b	
			T Height

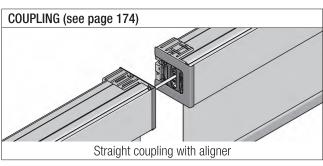
SIZE LIMITATIONS*			
Min. width	300 mm		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm		
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 32 m <sup>2</sup>		

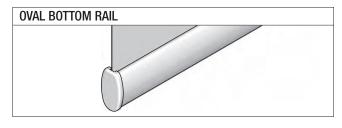
MAXIMUM LOAD (KG)*				
Туре	Tube 50	Tube 62		
Gear 3:1	13.1	10.6		
Maximum load = bottom rail + (optional) additional weight + fabric				

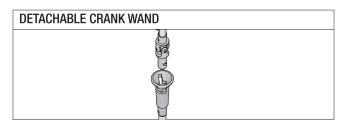


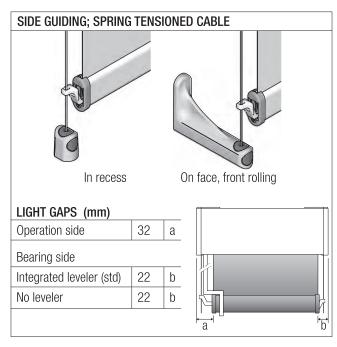
The technical terms on this page are clarified in the glossary in the back.





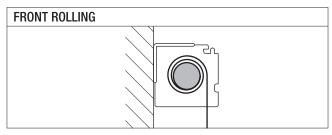


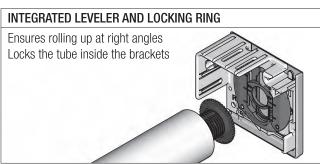


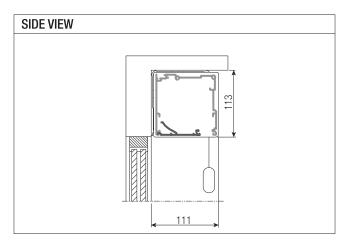


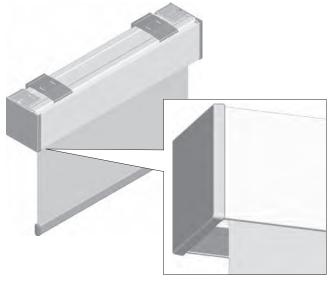
### MOTOR OPERATED ROLLER BLIND FRONT ROLLING WITH POCKET L

- Die cast brackets with plastic covers in white, grey or black
- U-shaped extruded pocket with accessible closed bottom
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Range of 230V motors depending on requirements
  - Force up to 37.5 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- High quality fabric according to technical specifications





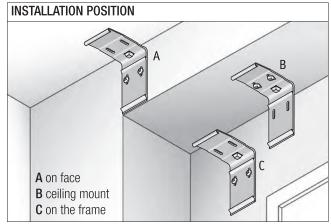




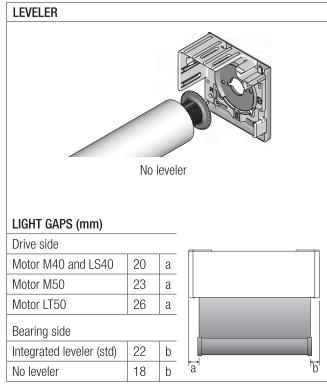
LIGHT GAPS (mm)				
Drive side			├── width ──	
Motor M40 and LS40	20	а		1
Motor M50	23	а		
Motor LT50	26	а		height
Bearing side	22	b		he he

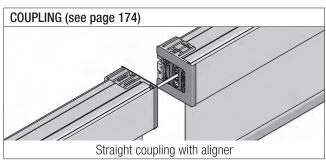
SIZE LIMITATIONS*	
Min. width	575 - 675 mm (depending on motor size)
Max. width	4000 mm
Min. height	500 mm
Max. height	6000 mm
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>

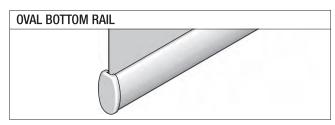
MAXIMUM LOAD (KG)*					
Туре	U	Tube 50	Tube 62		
Motor M40 and LS40	230 V	33.8	27.2		
Motor M50 and LT50 230 V 37.5 30.3					
Maximum load = bottom rail + (optional) additional weight + fabric					

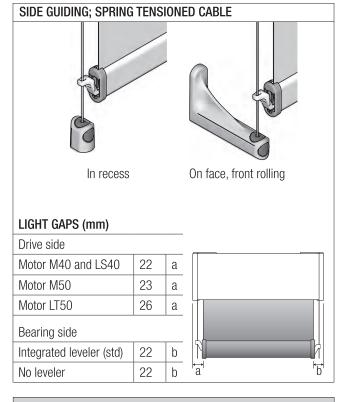


The technical terms on this page are clarified in the glossary in the back.



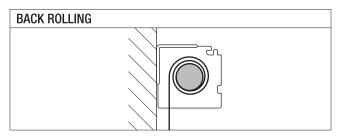


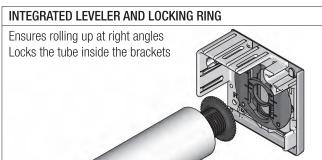


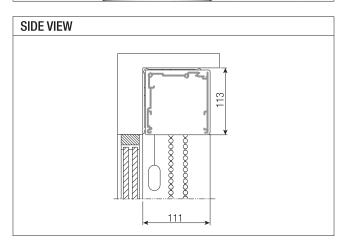


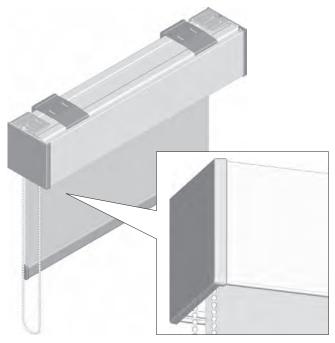
### CHAIN OPERATED ROLLER BLIND BACK ROLLING WITH OPEN POCKET L

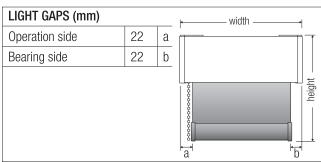
- Die cast brackets with plastic covers in white, grey or black
- U-shaped extruded pocket with open bottom
  - In natural anodised, or powder coated black or white finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Patented clutch with mounting plate for easy and secure installation in white, grey or black
- Universal 3:1 clutch, with integrated autostop, for left and right hand operation
- 1:1 Clutch with patented Counter Balance System (CBS) for large and heavy or coupled blinds
- High tensile stainless steel chain (ø 6.4 mm)
  - Optional plastic ball chain (ø 6.4 mm) in white, grey or black
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back (standard) or front (option) rolling
- UV stable parts
- High quality fabric according to technical specifications





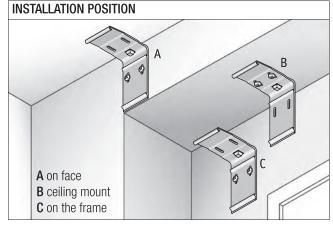




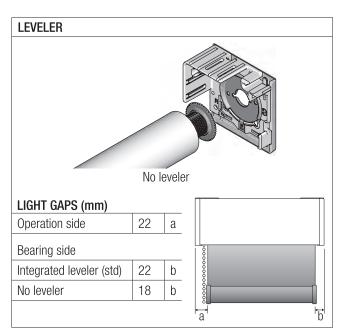


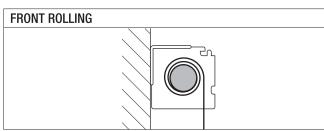
SIZE LIMITATIONS*			
Min. width	220 mm (depending on CBS size)		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm profile guiding 5000 mm		
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>		

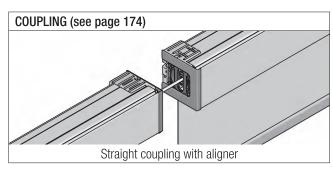
MAXIMUM LOAD (KG)*				
Туре	Tube 50	Tube 62		
Gear 1:1, Counter Balance System	20	20		
Gear 3:1 6.0 4.8				
Maximum load = bottom rail + (optional) additional weight + fabric				

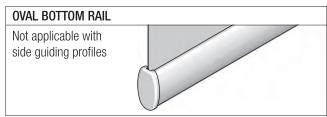


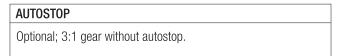
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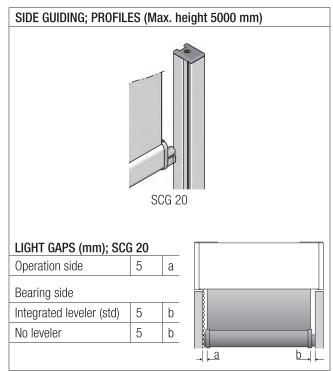


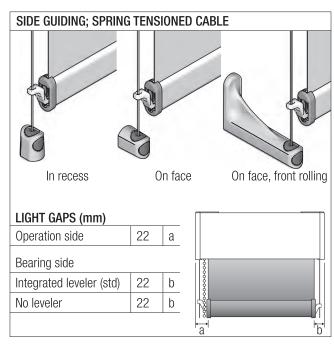






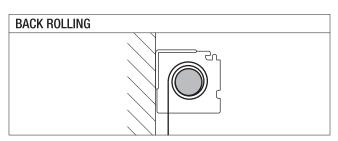


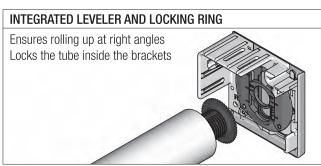


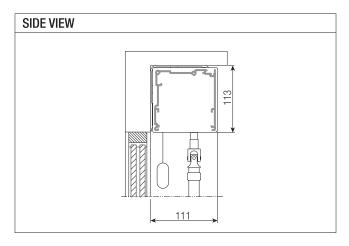


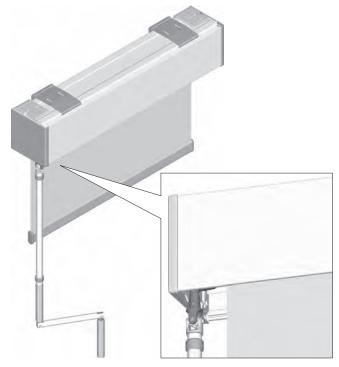
### CRANK OPERATED ROLLER BLIND BACK ROLLING WITH OPEN POCKET L

- Die cast brackets with plastic covers in white, grey or black
- U-shaped extruded pocket with open bottom
  - In natural anodised, or powder coated black or white finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Crank drive with mounting plate for easy and secure installation in white, grey or black
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back (standard) or front (option) rolling
- UV stable parts
- · High quality fabric according to technical specifications





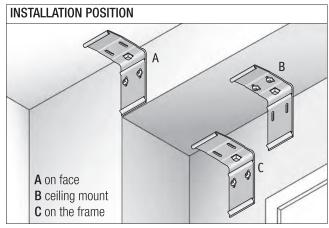




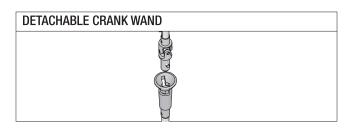
LIGHT GAPS (mm)			⊬width
Operation side	32	а	
Bearing side	22	b	
			t theight

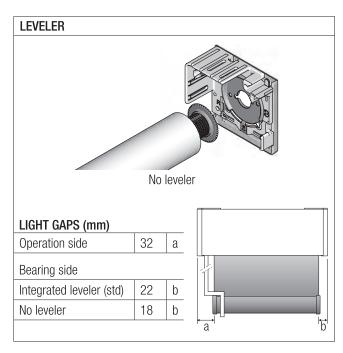
SIZE LIMITATIONS*			
Min. width	300 mm		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm	profile guiding 5000 mm	
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 32 m <sup>2</sup>		

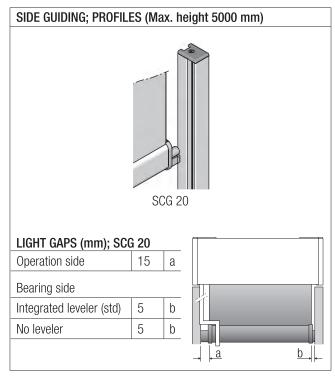
MAXIMUM LOAD (KG)*				
Туре	Tube 50	Tube 62		
Gear 3:1	13.1	10.6		
Maximum load = bottom rail + (optional) additional weight + fabric				

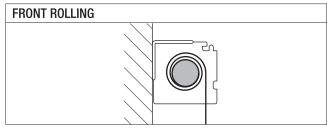


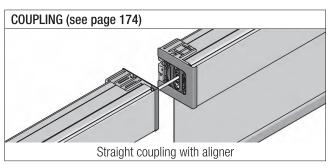
The technical terms on this page are clarified in the glossary in the back.

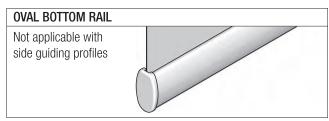


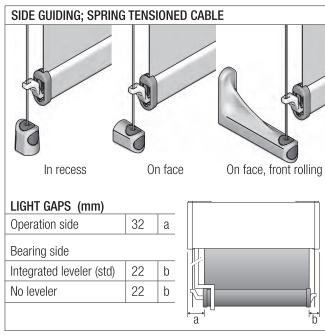






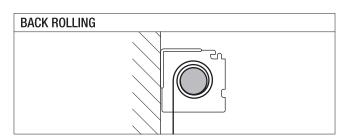


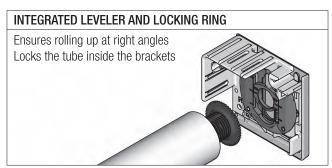


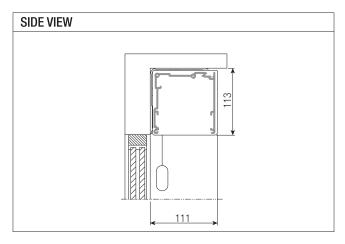


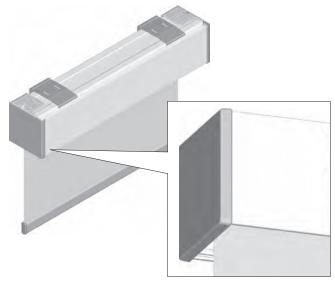
### MOTOR OPERATED ROLLER BLIND BACK ROLLING WITH OPEN POCKET L

- Die cast brackets with plastic covers in white, grey or black
- U-shaped extruded pocket with open bottom
  - In natural anodised, or powder coated black or white finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Range of 230V motors depending on requirements
  - Force up to 37.5 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back (standard) or front (option) rolling
- UV stable parts
- · High quality fabric according to technical specifications





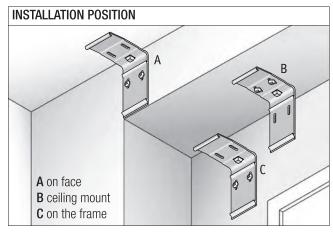




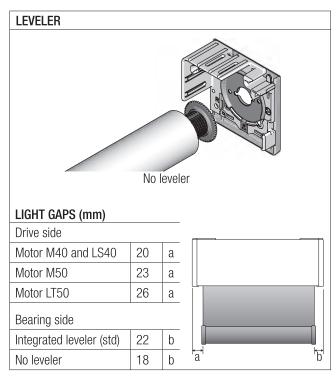
		, width — →
20	a	
23	а	
26	а	height -
22	b	
	23 26	23 a 26 a

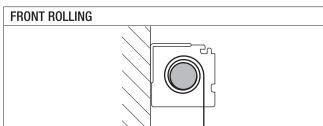
SIZE LIMITATIONS*			
Min. width	575 - 675 n	nm (depending on motor size)	
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm profile guiding 5000 mm		
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>		

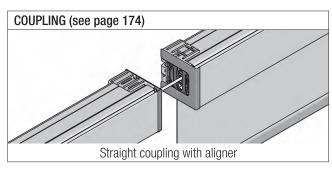
MAXIMUM LOAD (KG)*					
Туре	U	Tube 50	Tube 62		
Motor M40 and LS40	230 V	33.8	27.2		
Motor M50 and LT50 230 V 37.5 30.3					
Maximum load = bottom rail + (optional) additional weight + fabric					

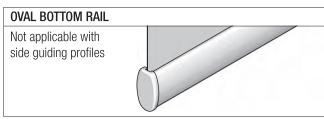


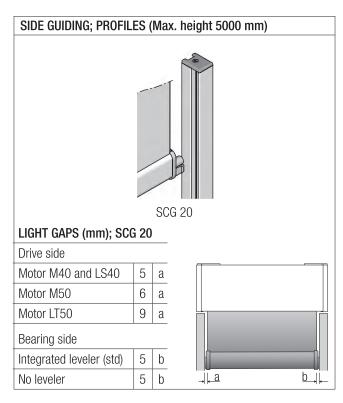
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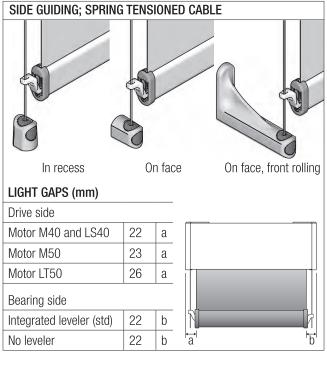






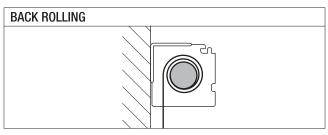


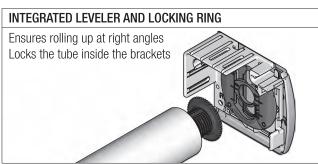


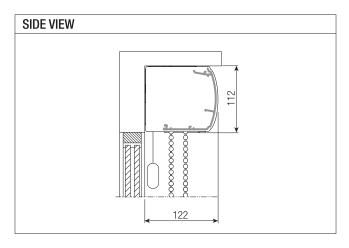


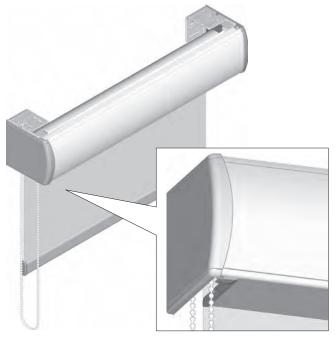
### CHAIN OPERATED ROLLER BLIND BACK ROLLING WITH VALANCE L

- Die cast brackets with plastic covers in white, grey or black
- Design L-shaped extruded aluminium valance in natural anodized or powder coated white or black finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Patented clutch with mounting plate for easy and secure installation in white, grey or black
- Universal 3:1 clutch, with integrated autostop, for left and right hand operation
- 1:1 Clutch with patented Counter Balance System (CBS) for large and heavy or coupled blinds
- High tensile stainless steel chain (ø 6.4 mm)
  - Optional plastic ball chain (ø 6.4 mm) in white, grey or black
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





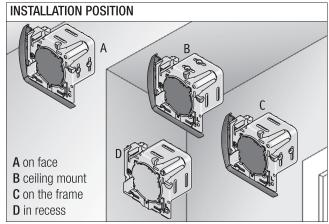




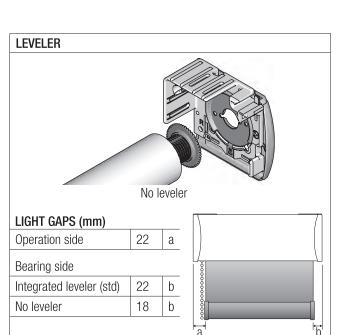
LIGHT GAPS (mm)			⊬width
Operation side	22	а	
Bearing side	22	b	
			The second secon

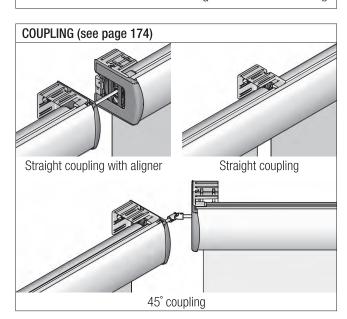
SIZE LIMITATIONS*				
Min. width	220 mm (depending on CBS size)			
Max. width	4000 mm			
Min. height	500 mm			
Max. height	6000 mm profile guiding 5000 mm			
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>			

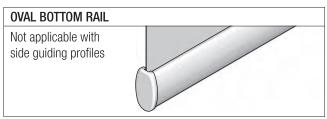
MAXIMUM LOAD (KG)*						
Туре	Tube 50	Tube 62				
Gear 1:1, Counter Balance System	20	20				
Gear 3:1	6.0	4.8				
Maximum load = bottom rail + (optional) additional weight + fabric						



The technical terms on this page are clarified in the glossary in the back.

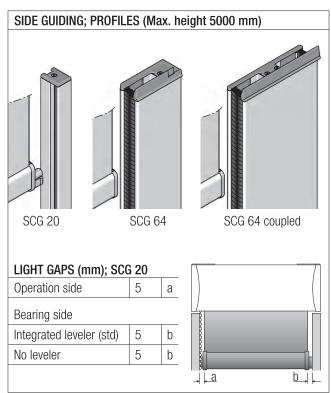


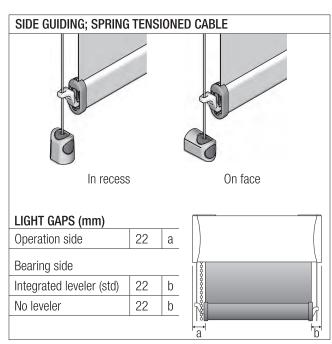




### **AUTOSTOP**

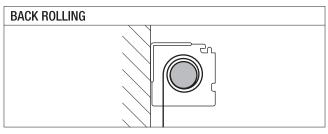
Optional; 3:1 gear without autostop.

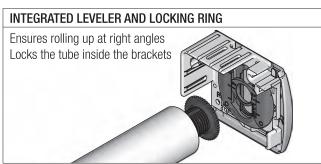


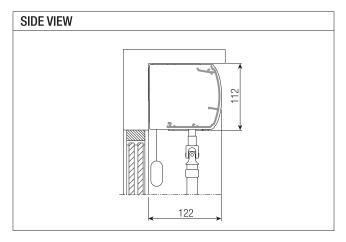


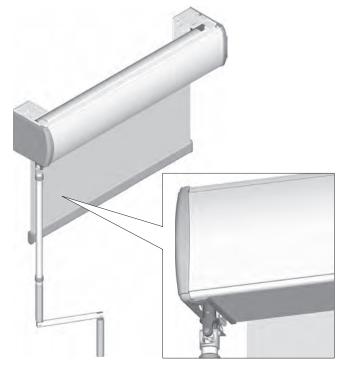
### CRANK OPERATED ROLLER BLIND BACK ROLLING WITH VALANCE L

- Die cast brackets with plastic covers in white, grey or black
- Design L-shaped extruded aluminium valance in natural anodized or powder coated white or black finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Crank drive with mounting plate for easy and secure installation in white, grey or black
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





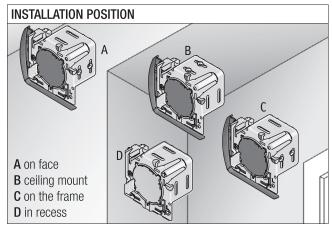




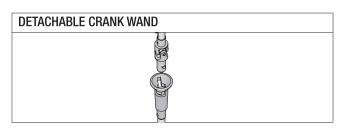
LIGHT GAPS (mm)			ı←—— width ———γ
Operation side	32	а	
Bearing side	22	b	
			a Peight

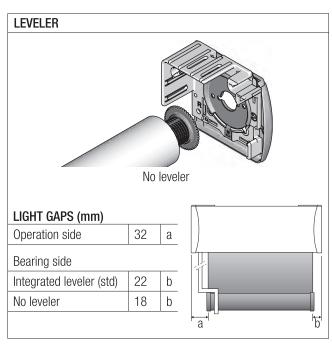
SIZE LIMITATIONS*			
Min. width	300 mm		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm	profile guiding 5000 mm	
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 32 m <sup>2</sup>		

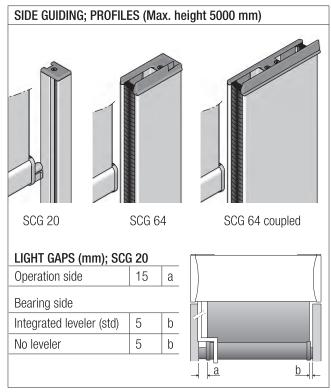
MAXIMUM LOAD (KG)*			
Туре	Tube 50	Tube 62	
Gear 3:1	13.1	10.6	
Maximum load = bottom rail + (optional) additional weight + fabric			

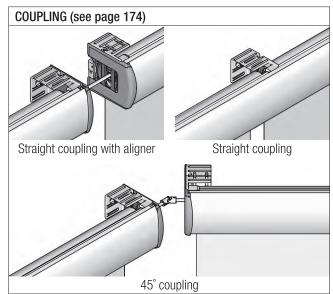


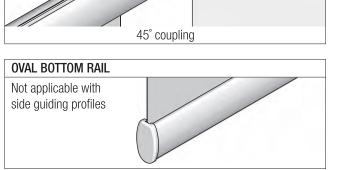
The technical terms on this page are clarified in the glossary in the back.

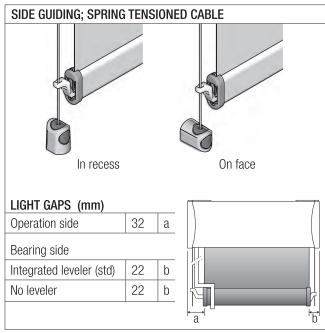






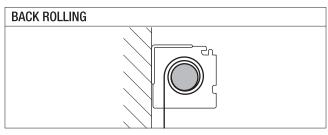


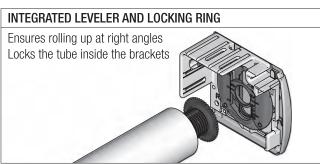


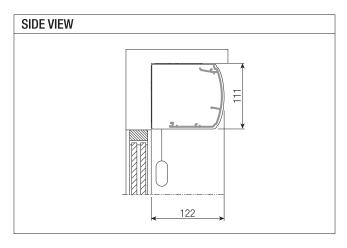


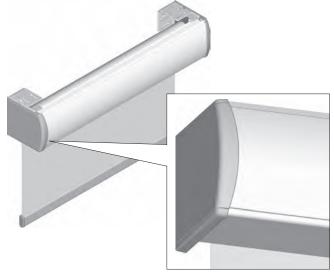
### MOTOR OPERATED ROLLER BLIND BACK ROLLING WITH VALANCE L

- Die cast brackets with plastic covers in white, grey or black
- Design L-shaped extruded aluminium valance in natural anodized or powder coated white or black finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Range of 230V motors depending on requirements
  - Force up to 37.5 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





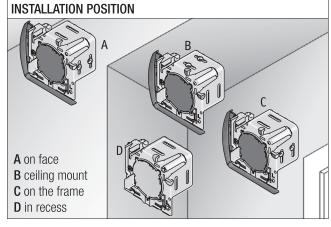




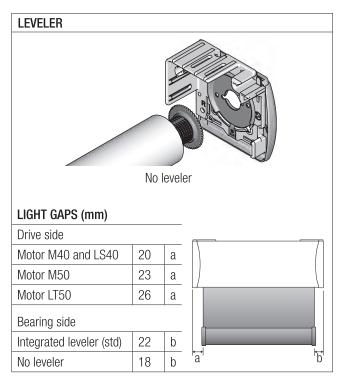
LIGHT GAPS (mm)			
Drive side			r width ───
Motor M40 and LS40	20	а	
Motor M50	23	а	
Motor LT50	26	a	height
Bearing side	22	b	ial b

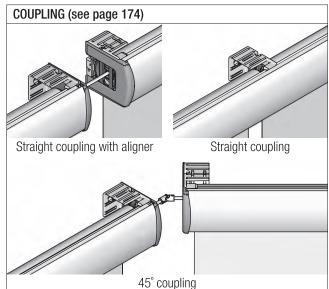
SIZE LIMITATIONS*	:			
Min. width	575 - 675 n	nm (depending on motor size)		
Max. width	4000 mm	4000 mm		
Min. height	500 mm	500 mm		
Max. height	6000 mm profile guiding 5000 mm			
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>			

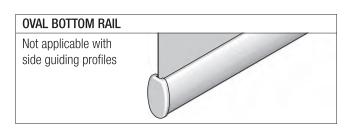
MAXIMUM LOAD (KG)*						
Туре	U	Tube 50	Tube 62			
Motor M40 and LS40	230 V	33.8	27.2			
Motor M50 and LT50 230 V 37.5 30.3						
Maximum load = bottom rail + (optional) additional weight + fabric						

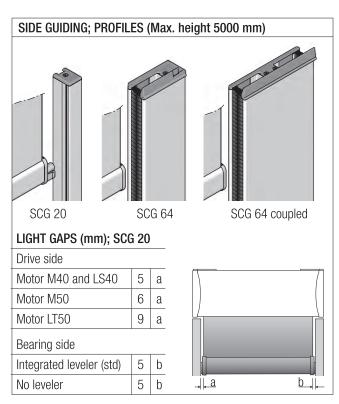


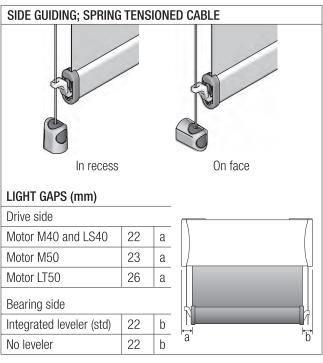
The technical terms on this page are clarified in the glossary in the back.





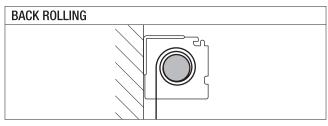


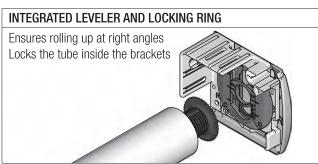


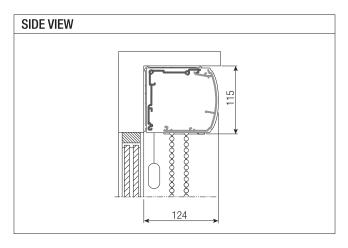


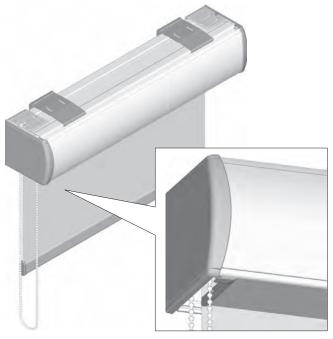
### CHAIN OPERATED ROLLER BLIND BACK ROLLING WITH DESIGN CASSETTE L

- Die cast brackets with plastic covers in white, grey or black
- 2-part extruded design cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Patented clutch with mounting plate for easy and secure installation in white, grey or black
- Universal 3:1 clutch, with integrated autostop, for left and right hand operation
- 1:1 Clutch with patented Counter Balance System (CBS) for large and heavy or coupled blinds
- High tensile stainless steel chain (ø 6.4 mm)
  - Optional plastic ball chain (ø 6.4 mm) in white, grey or black
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





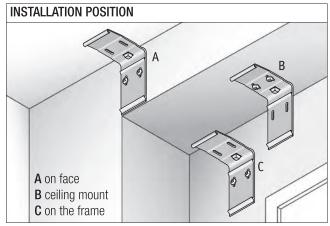




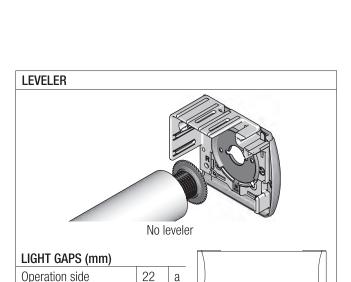
LIGHT GAPS (mm)			⊬ width
Operation side	22	а	
Bearing side	22	b	
			Theight

SIZE LIMITATIONS*				
Min. width	220 mm (de	pending on CBS size)		
Max. width	4000 mm			
Min. height	500 mm			
Max. height	6000 mm	profile guiding 5000 mm		
Max. surface	single blind;	16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>		

MAXIMUM LOAD (KG)*					
Туре	Tube 50	Tube 62			
Gear 1:1, Counter Balance System	20	20			
Gear 3:1	6.0	4.8			
Maximum load = bottom rail + (optional) additional weight + fabric					



The technical terms on this page are clarified in the glossary in the back.



а

b

b

22

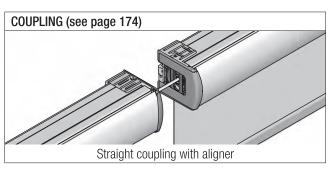
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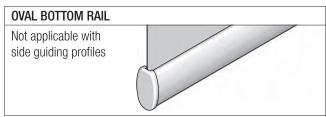
Operation side

Bearing side

No leveler

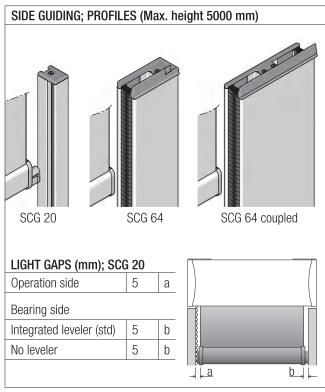
Integrated leveler (std)

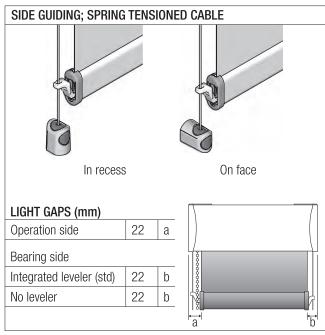




### **AUTOSTOP**

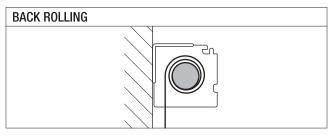
Optional; 3:1 gear without autostop.

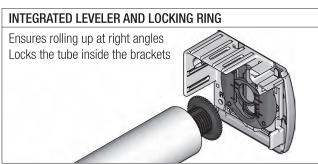


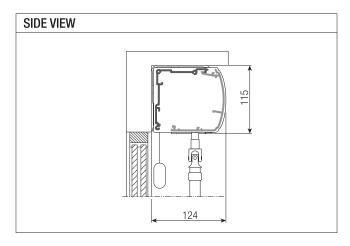


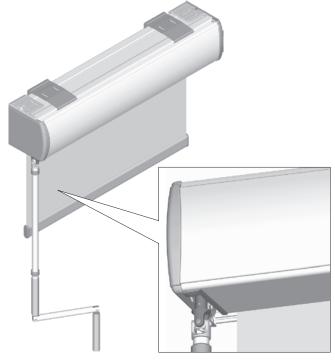
### CRANK OPERATED ROLLER BLIND BACK ROLLING WITH DESIGN CASSETTE L

- Die cast brackets with plastic covers in white, grey or black
- 2-part extruded design cassette with closed bottom and complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Crank drive with mounting plate for easy and secure installation in white, grey or black
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





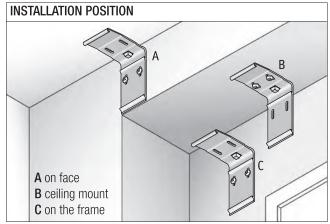




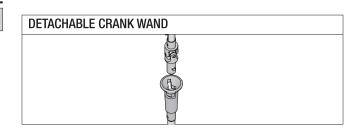
LIGHT GAPS (mm)			إwidth
Operation side	32	a	
Bearing side	22	b	
			The state of the s

SIZE LIMITATIONS*			
Min. width	300 mm		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm	profile guiding 5000 mm	
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 32 m <sup>2</sup>		

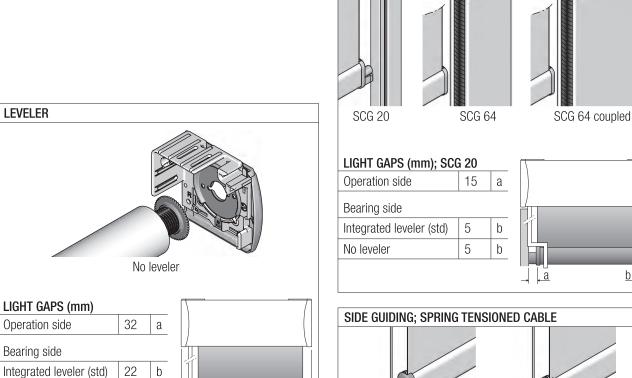
MAXIMUM LOAD (KG)*				
Туре	Tube 50	Tube 62		
Gear 3:1	13.1	10.6		
Maximum load = bottom rail + (optional) additional weight + fabric				

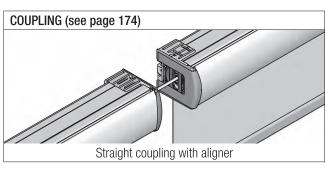


The technical terms on this page are clarified in the glossary in the back.



SIDE GUIDING; PROFILES (Max. height 5000 mm)

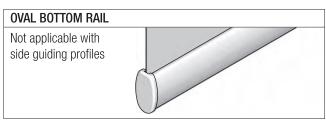


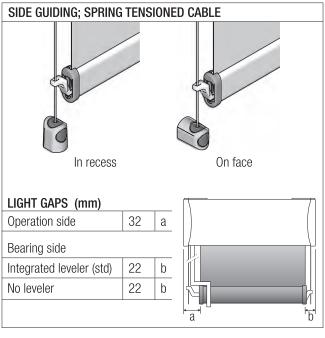


b

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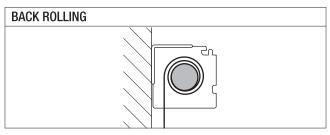
No leveler

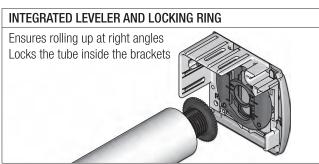


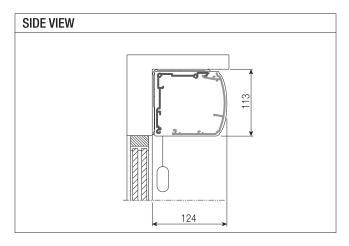


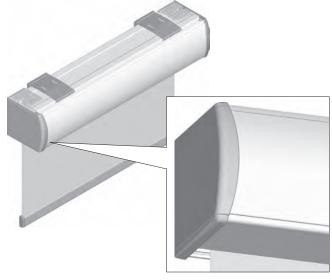
### MOTOR OPERATED ROLLER BLIND BACK ROLLING WITH DESIGN CASSETTE L

- Die cast brackets with plastic covers in white, grey or black
- 2-part extruded design cassette with closed bottom with complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Range of 230V motors depending on requirements
  - Force up to 37.5 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back rolling
- UV stable parts
- High quality fabric according to technical specifications





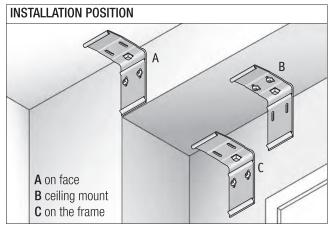




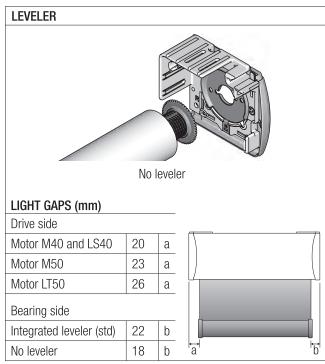
—— width ——→		GAPS (mm)
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	20 a	140 and LS40
	23 a	150
	26 a	T50
	22 b	side
	ı	

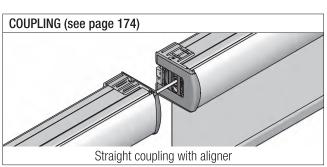
SIZE LIMITATIONS	*	
Min. width	575 - 675 n	nm (depending on motor size)
Max. width	4000 mm	
Min. height	500 mm	
Max. height	6000 mm	profile guiding 5000 mm
Max. surface	single blind;	16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>

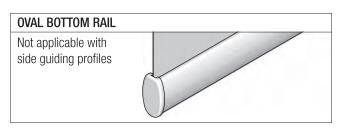
MAXIMUM LOAD (KG)*					
Туре	U	Tube 50	Tube 62		
Motor M40 and LS40	230 V	33.8	27.2		
Motor M50 and LT50	230 V	37.5	30.3		
Maximum load = bottom rail + (optional) additional weight + fabric					

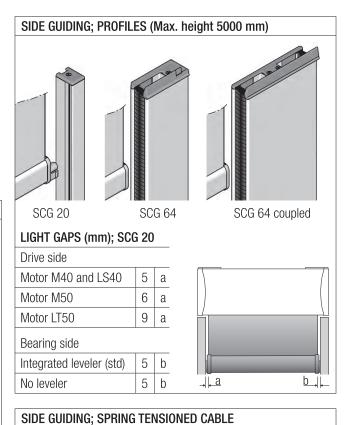


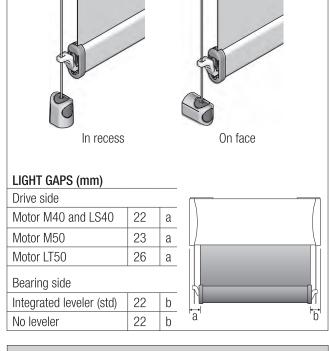
The technical terms on this page are clarified in the glossary in the back.





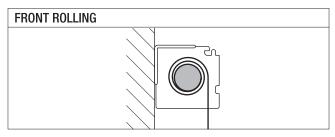


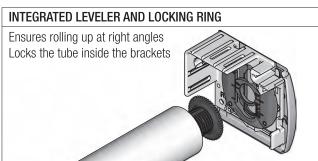


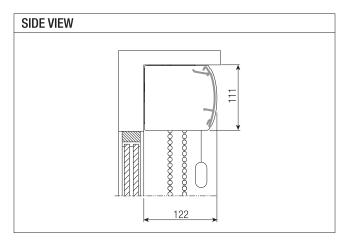


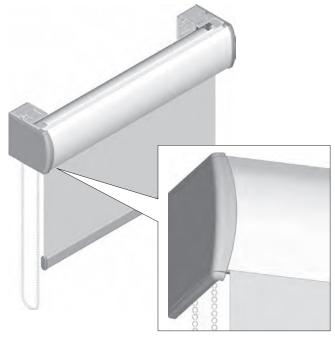
### CHAIN OPERATED ROLLER BLIND FRONT ROLLING WITH DESIGN VALANCE L

- Die cast brackets with plastic covers in white, grey or black
- Design L-shaped extruded aluminium valance in natural anodized or powder coated white or black finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Patented clutch with mounting plate for easy and secure installation in white, grey or black
- Universal 3:1 clutch, with integrated autostop, for left and right hand operation
- 1:1 Clutch with patented Counter Balance System (CBS) for large and heavy or coupled blinds
- High tensile stainless steel chain (ø 6.4 mm)
  - Optional plastic ball chain (ø 6.4 mm) in white, grey or black
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front (standard) or back (option) rolling
- UV stable parts
- · High quality fabric according to technical specifications





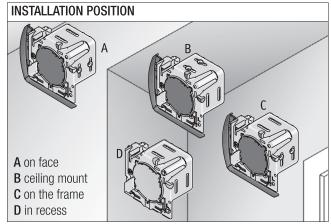




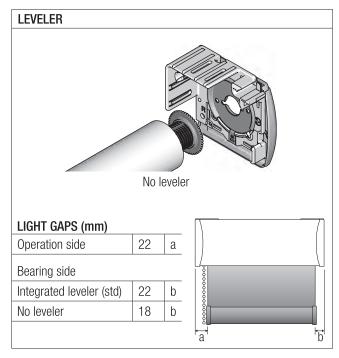
LIGHT GAPS (mm)			r width — →
Operation side	22	а	
Bearing side	22	b	
			tubjel to the first transfer of the first tr

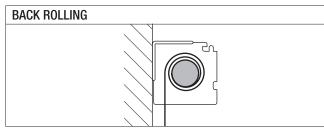
SIZE LIMITATIONS*			
Min. width	220 mm (de	pending on CBS size)	
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm	profile guiding 5000 mm	
Max. surface	single blind;	16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>	

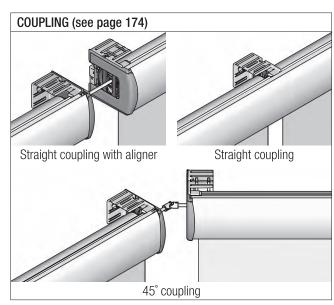
MAXIMUM LOAD (KG)*					
Туре	Tube 50	Tube 62			
Gear 1:1, Counter Balance System	20	20			
Gear 3:1	6.0	4.8			
Maximum load = bottom rail + (optional) additional weight + fabric					

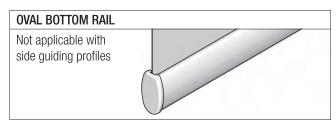


The technical terms on this page are clarified in the glossary in the back.

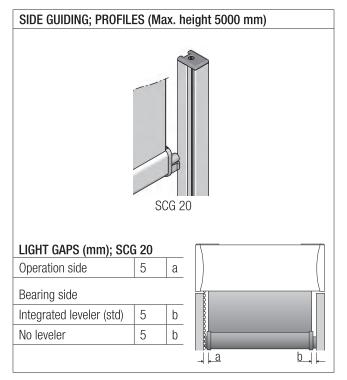


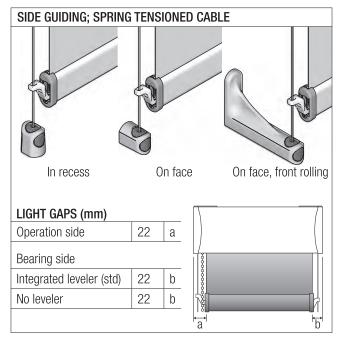






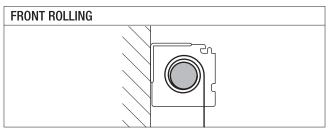
# AUTOSTOP Optional; 3:1 gear without autostop.

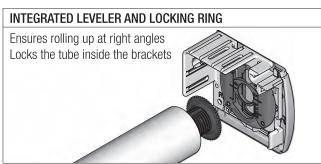


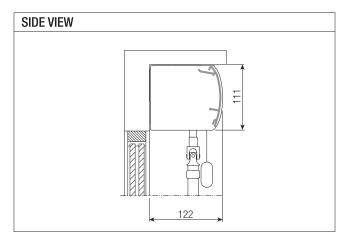


### CRANK OPERATED ROLLER BLIND FRONT ROLLING WITH DESIGN VALANCE L

- Die cast brackets with plastic covers in white, grey or black
- Design L-shaped extruded aluminium valance in natural anodized or powder coated white or black finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Crank drive with mounting plate for easy and secure installation in white, grey or black
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front (standard) or back (option) rolling
- UV stable parts
- · High quality fabric according to technical specifications





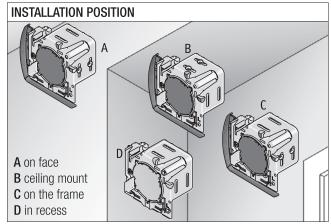




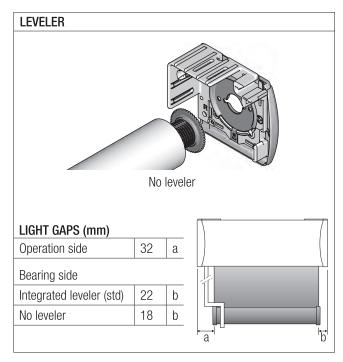
LIGHT GAPS (mm)			⊬——width ———
Operation side	32	a	
Bearing side	22	b	
			theight the second seco

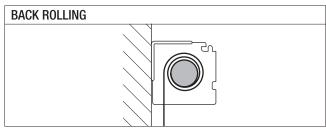
SIZE LIMITATIONS*				
Min. width	300 mm			
Max. width	4000 mm			
Min. height	500 mm			
Max. height	6000 mm profile guiding 5000 mm			
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 32 m <sup>2</sup>			

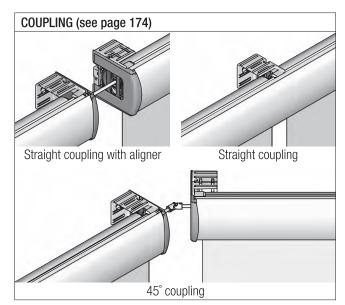
MAXIMUM LOAD (KG)*					
Туре	Tube 50	Tube 62			
Gear 3:1 13.1 10.6					
Maximum load = bottom rail + (optional) additional weight + fabric					

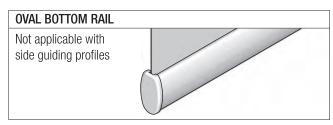


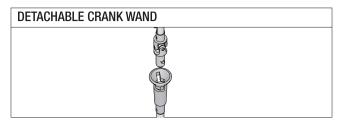
The technical terms on this page are clarified in the glossary in the back.

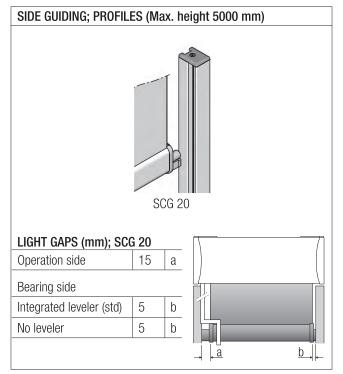


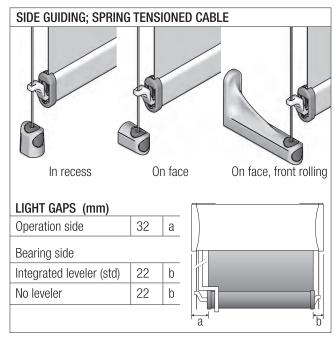






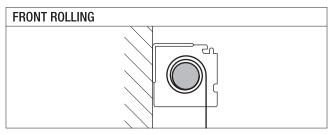


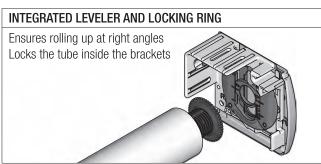


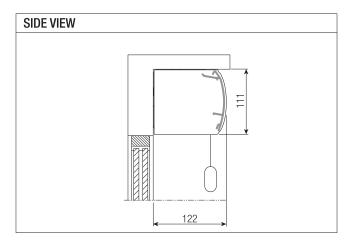


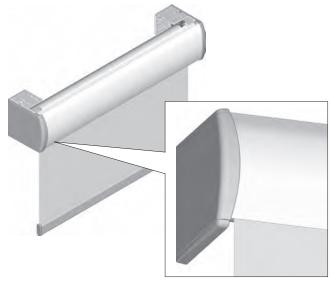
### MOTOR OPERATED ROLLER BLIND FRONT ROLLING WITH DESIGN VALANCE L

- Die cast brackets with plastic covers in white, grey or black
- Design L-shaped extruded aluminium valance in natural anodized or powder coated white or black finish
- Integrated leveling function to limit skewing
  - Optional no leveler
- Range of 230V motors depending on requirements
  - Force up to 37.5 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front (standard) or back (option) rolling
- UV stable parts
- High quality fabric according to technical specifications





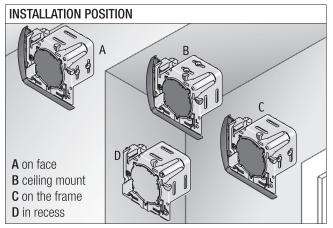




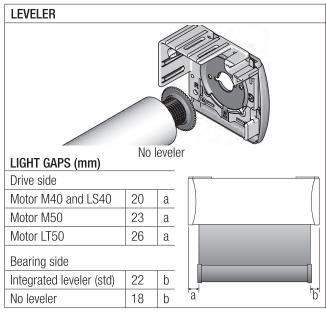
LIGHT GAPS (mm)			
Drive side			+ width
Motor M40 and LS40	20	а	
Motor M50	23	а	
Motor LT50	26	а	height
Bearing side	22	b	hei

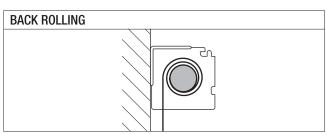
SIZE LIMITATIONS*				
Min. width	575 - 675 m	nm (depending on motor size)		
Max. width	4000 mm			
Min. height	500 mm			
Max. height	6000 mm profile guiding 5000 mm			
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>			

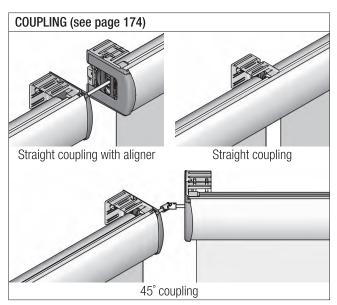
MAXIMUM LOAD (KG)*					
Туре	U	Tube 50	Tube 62		
Motor M40 and LS40	230 V	33.8	27.2		
Motor M50 and LT50 230 V 37.5 30.3					
Maximum load = bottom rail + (optional) additional weight + fabric					

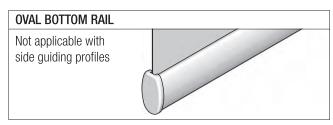


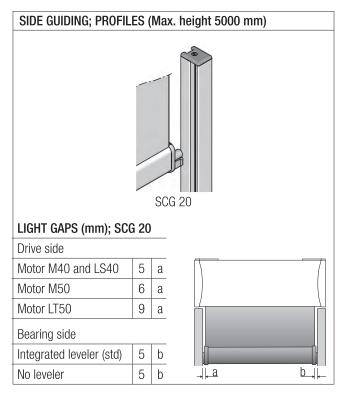
The technical terms on this page are clarified in the glossary in the back.

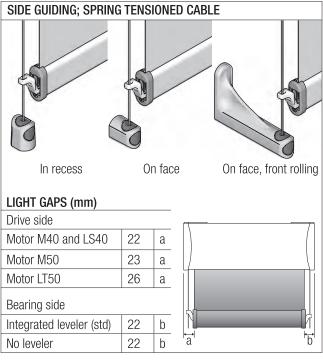






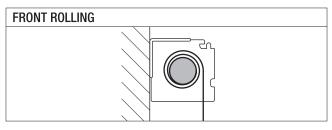


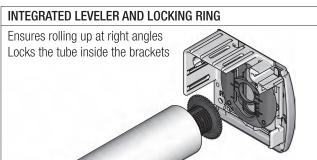


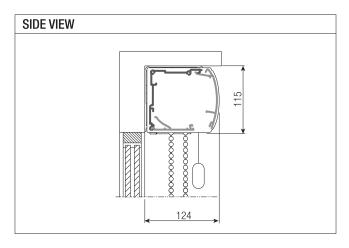


### CHAIN OPERATED ROLLER BLIND FRONT ROLLING WITH DESIGN CASSETTE L

- Die cast brackets with plastic covers in white, grey or black
- 3-part extruded design cassette with closed bottom and complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Patented clutch with mounting plate for easy and secure installation in white, grey or black
- Universal 3:1 clutch, with integrated autostop, for left and right hand operation
- 1:1 Clutch with patented Counter Balance System (CBS) for large and heavy or coupled blinds
- High tensile stainless steel chain (ø 6.4 mm)
  - Optional plastic ball chain (ø 6.4 mm) in white, grey or black
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- High quality fabric according to technical specifications





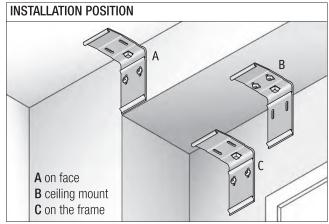




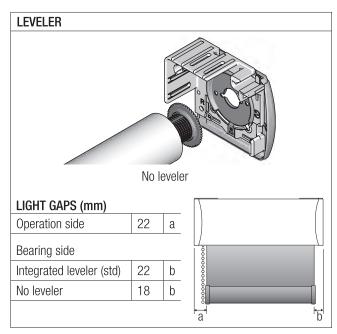
LIGHT GAPS (mm)			⊬width
Operation side	22	а	
Bearing side	22	b	
			a p

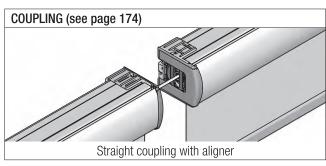
SIZE LIMITATIONS*	
Min. width	220 mm (depending on CBS size)
Max. width	4000 mm
Min. height	500 mm
Max. height	6000 mm
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>

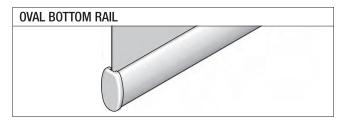
MAXIMUM LOAD (KG)*				
Туре	Tube 50	Tube 62		
Gear 1:1, Counter Balance System	20	20		
Gear 3:1 6.0 4.8				
Maximum load = bottom rail + (optional) additional weight + fabric				



The technical terms on this page are clarified in the glossary in the back.

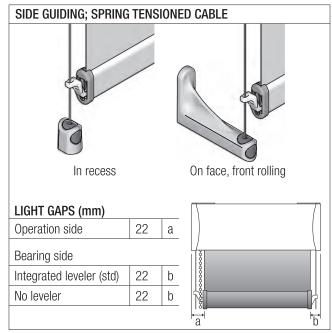






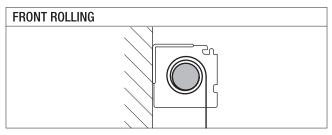
### **AUTOSTOP**

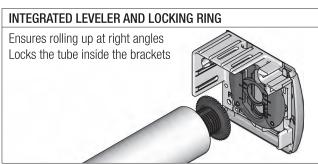
Optional; 3:1 gear without autostop.

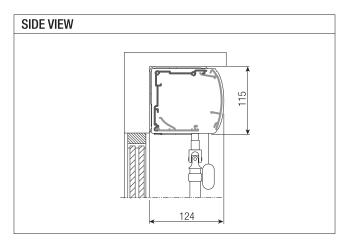


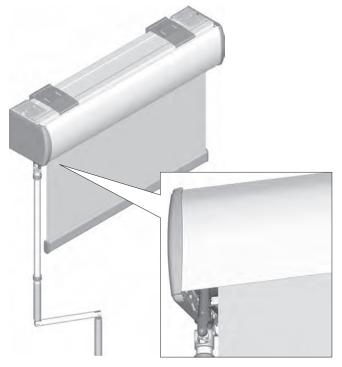
### CRANK OPERATED ROLLER BLIND FRONT ROLLING WITH DESIGN CASSETTE L

- Die cast brackets with plastic covers in white, grey or black
- 3-part extruded design cassette with closed bottom and complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Crank drive with mounting plate for easy and secure installation in white, grey or black
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- High quality fabric according to technical specifications





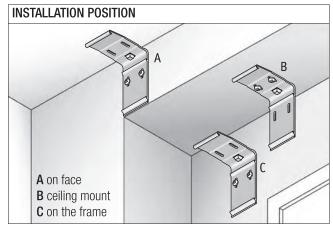




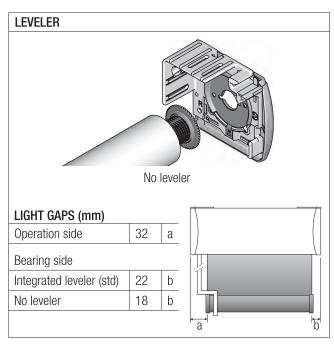
LIGHT GAPS (mm)			⊬width
Operation side	32	a	
Bearing side	22	b	
			t theight

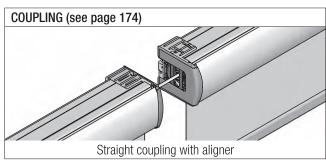
SIZE LIMITATIONS*				
Min. width	300 mm			
Max. width	4000 mm			
Min. height	500 mm			
Max. height	6000 mm			
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 32 m <sup>2</sup>			

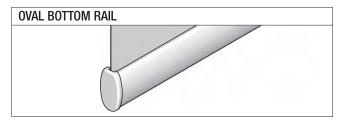
MAXIMUM LOAD (KG)*					
Туре	Tube 50	Tube 62			
Gear 3:1 13.1 10.6					
Maximum load = bottom rail + (optional) additional weight + fabric					

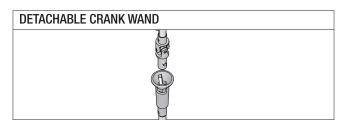


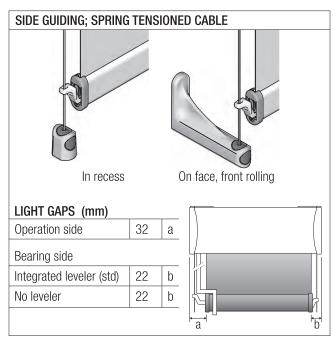
The technical terms on this page are clarified in the glossary in the back.





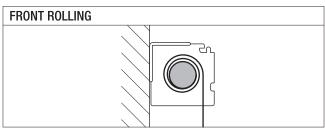


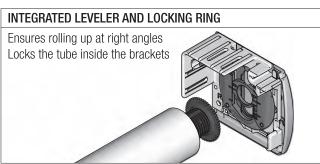


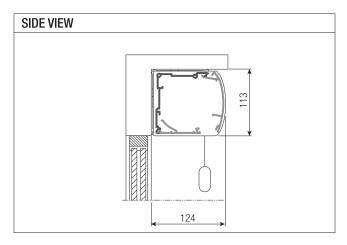


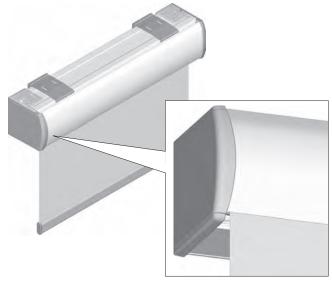
### MOTOR OPERATED ROLLER BLIND FRONT ROLLING WITH DESIGN CASSETTE L

- Die cast brackets with plastic covers in white, grey or black
- 3-part extruded design cassette with closed bottom and complete maintenance access
  - In natural anodised, or powder coated black or white finish
- Pre-assembled blind installed on hidden aluminium clip-in brackets
- Integrated leveling function to limit skewing
  - Optional no leveler
- Range of 230V motors depending on requirements
  - Force up to 37.5 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Front rolling
- UV stable parts
- High quality fabric according to technical specifications





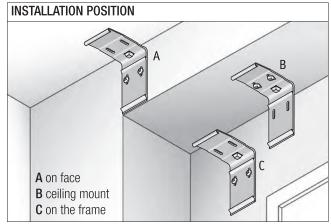




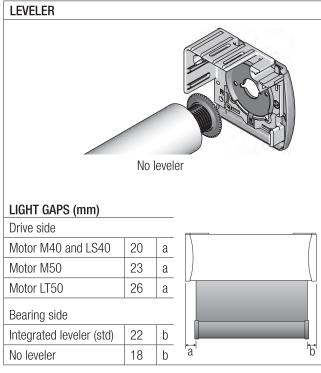
LIGHT GAPS (mm)			
Drive side			⊬—— width ———
Motor M40 and LS40	20	а	
Motor M50	23	а	
Motor LT50	26	а	height
Bearing side	22	b	
			ha h

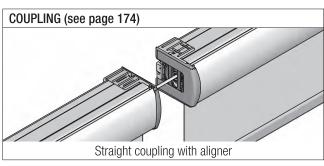
	т.
SIZE LIMITATIONS	*
Min. width	575 - 675 mm (depending on motor size)
Max. width	4000 mm
Min. height	500 mm
Max. height	6000 mm
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>

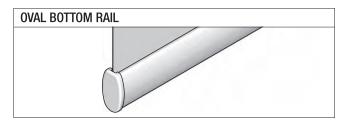
MAXIMUM LOAD (KG)*				
Туре	U	Tube 50	Tube 62	
Motor M40 and LS40	230 V	33.8	27.2	
Motor M50 and LT50 230 V 37.5 30.3				
Maximum load = bottom rail + (optional) additional weight + fabric				

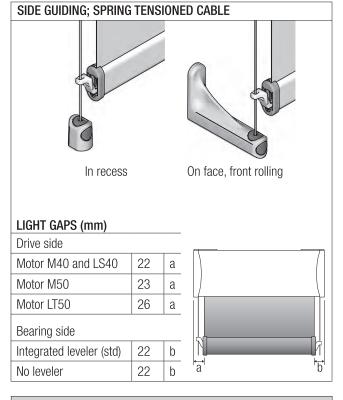


The technical terms on this page are clarified in the glossary in the back.



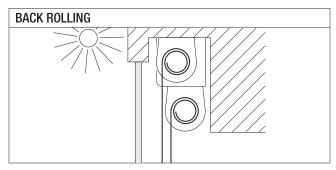


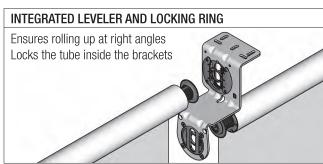


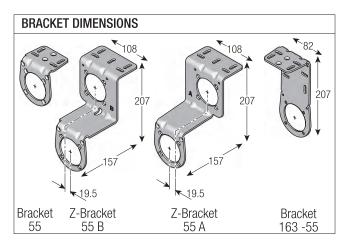


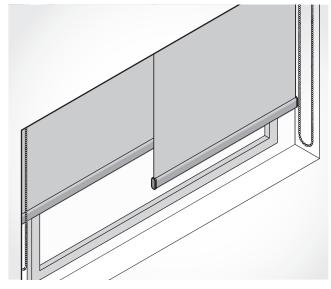
### CHAIN OPERATED ROLLER BLIND INSTALLED ON Z-BRACKETS

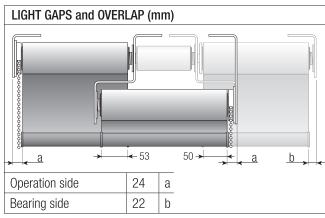
- Heavy-duty powder coated steel brackets in grey
- Integrated leveling function to limit skewing
- Patented clutch with mounting plate for easy and secure installation in white, grey or black
- Universal 3:1 clutch, with integrated autostop, for left and right hand operation
- 1:1 Clutch with patented Counter Balance System (CBS) for large and heavy or coupled blinds
- High tensile stainless steel chain (ø 6.4 mm)
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back or front rolling
- UV stable parts
- High quality fabric according to technical specifications





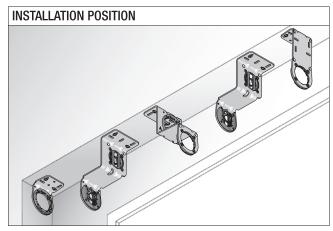




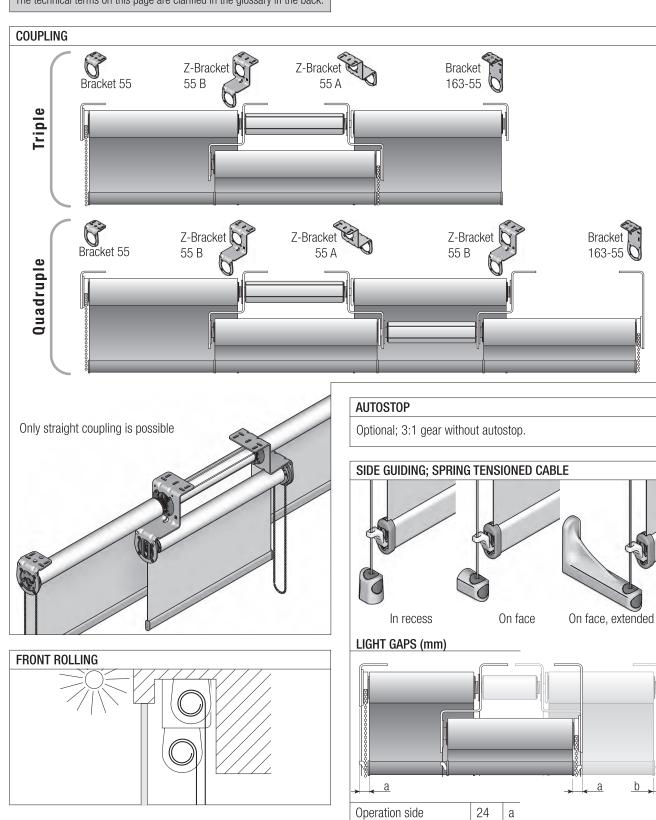


SIZE LIMITATIONS*	
Min. width	220 mm (depending on CBS size)
Max. width	4000 mm
Min. height	500 mm
Max. height	6000 mm
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>

MAXIMUM LOAD (KG)*				
Туре	Tube 50	Tube 62		
Gear 1:1, Counter Balance System	20	20		
Gear 3:1 6.0 4.8				
Maximum load = bottom rail + (optional) additional weight + fabric				



The technical terms on this page are clarified in the glossary in the back.



\*Size limitations and maximum load depend on operation type and are further calculated on the basis of a fabric with; weight =  $345 \text{ gr/m}^2$ , thickness = 0.44 mm. Maximum deflection of tube 50 = 5 mm and tube 62 = 6 mm.

а

b

22

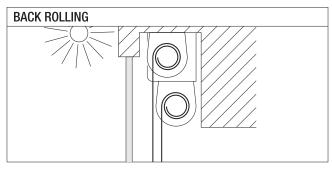
Bearing side

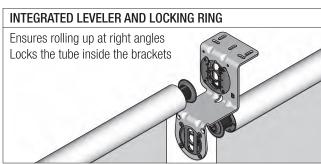
**OVAL BOTTOM RAIL** 

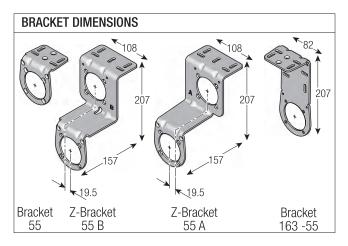
b

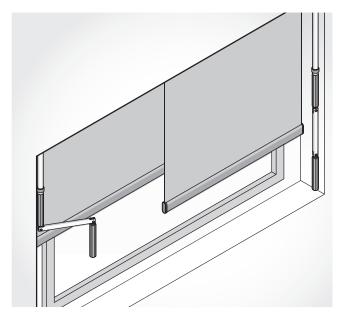
### CRANK OPERATED ROLLER BLINDS INSTALLED ON Z-BRACKETS

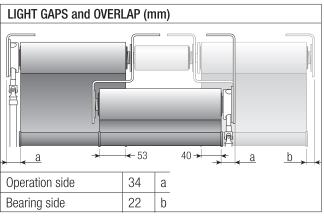
- Heavy-duty powder coated steel brackets in grey
- In bracket integrated leveling function to limit skewing
  - Optional no leveler
- Crank drive with mounting plate for easy and secure installation in white, grey or black
- Fixed crank for left or right hand operation
  - Optional detachable crank wand
- Anodized aluminium 15 mm crank rod
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back or front rolling
- UV stable parts
- High quality fabric according to technical specifications





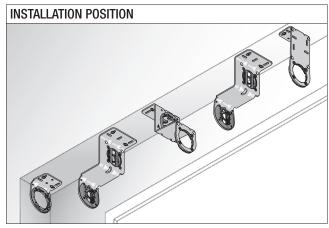




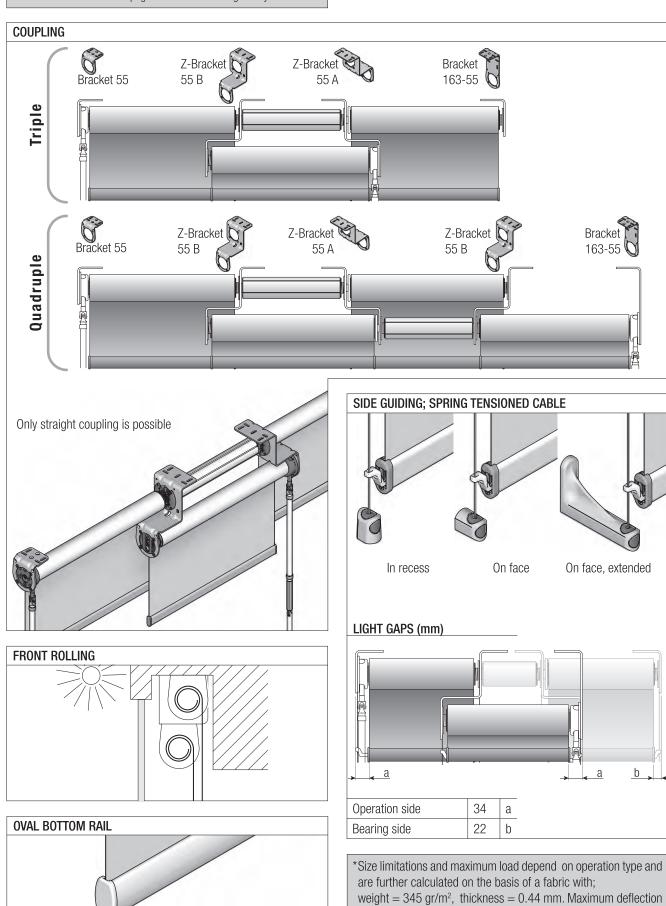


SIZE LIMITATIONS*			
Min. width	300 mm		
Max. width	4000 mm		
Min. height	500 mm		
Max. height	6000 mm		
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 32 m <sup>2</sup>		

MAXIMUM LOAD (KG)*				
Туре	Tube 50	Tube 62		
Crank 13.1 10.6				
Maximum load = bottom rail + (optional) additional weight + fabric				



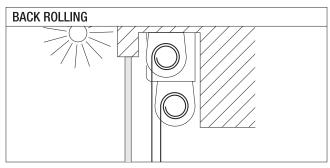
The technical terms on this page are clarified in the glossary in the back.

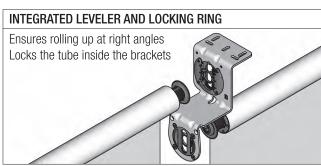


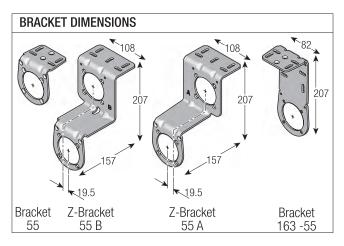
of tube 50 = 5 mm and tube 62 = 6 mm.

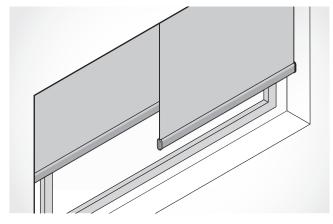
### MOTOR OPERATED ROLLER BLIND INSTALLED ON Z-BRACKETS

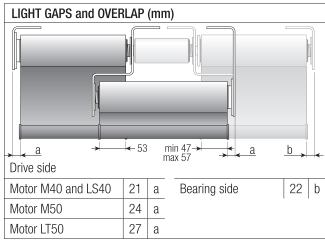
- Heavy-duty powder coated steel brackets in grey
- Integrated leveling function to limit skewing
  - Optional no leveler
- Range of 230V motors depending on requirements
  - Force up to 37.5 kg
  - Noise standard or quiet
  - Wired control (recommended) or remote
- Spring loaded end plug with locking ring for safe use and easy maintenance
- Aluminium extruded tubes
- Aluminium extruded bottomrail in white, natural anodized or black
  - Optional oval shaped bottom rail
- Back or front rolling
- UV stable parts
- High quality fabric according to technical specifications





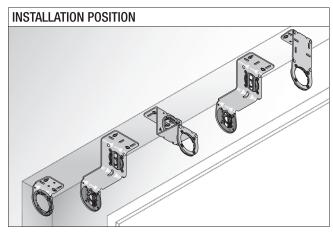




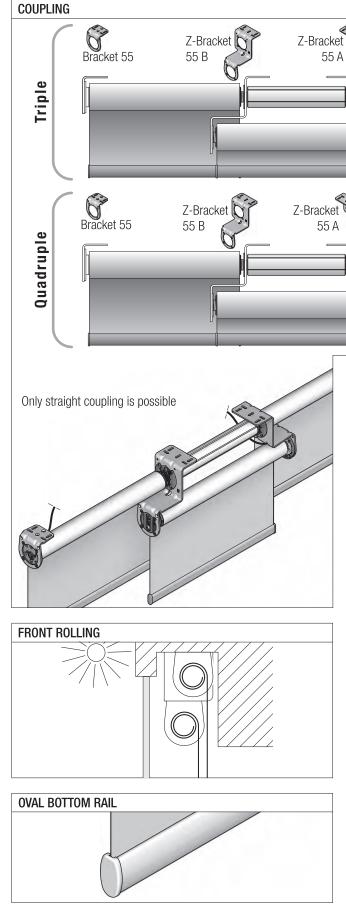


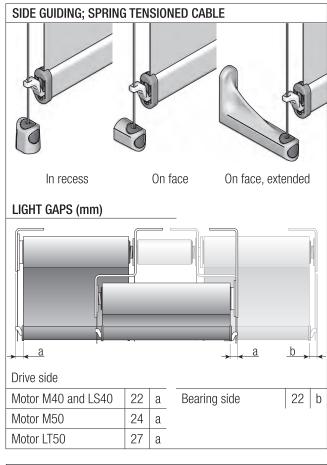
SIZE LIMITATIONS*	
Min. width	575 - 675 mm (depending on motor size)
Max. width	4000 mm
Min. height	500 mm
Max. height	6000 mm
Max. surface	single blind; 16 m <sup>2</sup> coupled blinds; 48 m <sup>2</sup>

MAXIMUM LOAD (KG)*				
Туре	U	Tube 50	Tube 62	
Motor M40 and LS40	230 V	33.8	27.2	
Motor M50 and LT50 230 V 37.5 30.3				
Maximum load = bottom rail + (optional) additional weight + fabric				



The technical terms on this page are clarified in the glossary in the back.





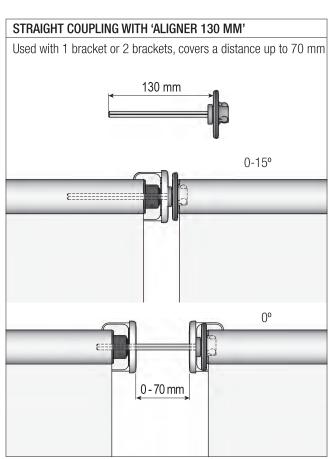
Bracket 163-55

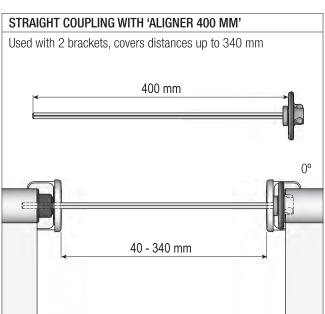
Z-Bracket

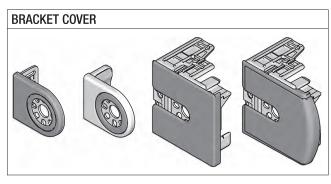
55 B

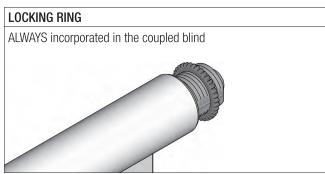
# **Coupling**

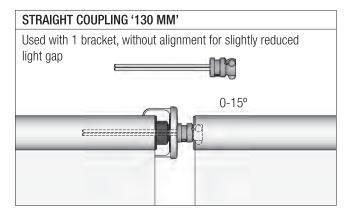
- The coupled blind is slave blind to the master, a chain, crank or motor operated blind.
  - Maximum 2 slave blinds to a master blind
- Various coupling possibilities
  - Straight direct 0-15°, straight at max 340 mm distance 0-15°, bay windows 45° up to corners with 90° angle
- Patented aligner to adjust the height of the slave to the master

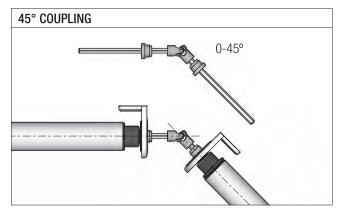


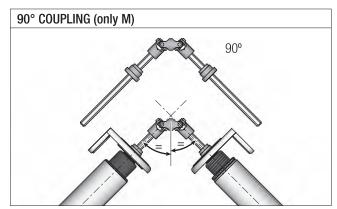






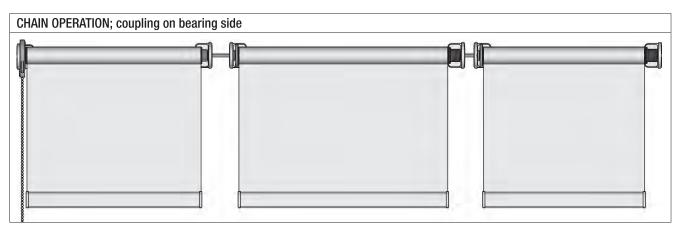


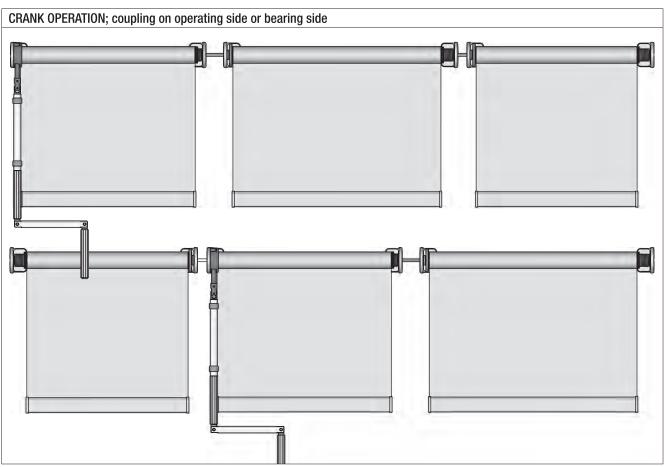


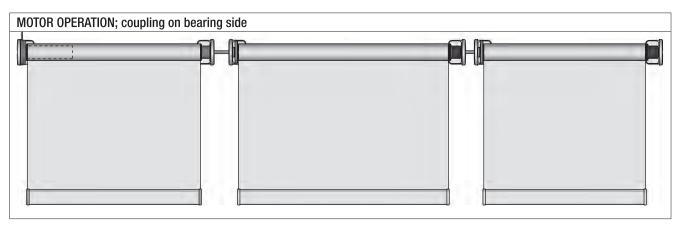


# **Coupling**

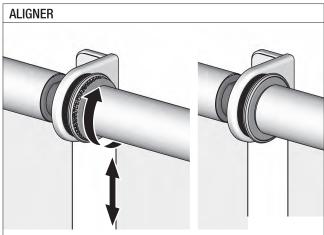
The technical terms on this page are clarified in the glossary in the back.







# **Glossary**

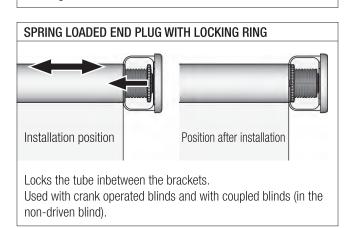


The aligner can adjust the bottom rails of coupled blinds very simply to a common height.

# 

The leveler is used to adjust the height on the bearing side of the blind. This adjusts the light gap to be parallel, particularly important with coupled blinds.

Skewing can also be corrected to an extent.



# Glossary

# **Indoor Environmental Quality & Productivity**

### **PRODUCTIVITY**

Energy saving strategies and natural resources like daylight can create a comfortable and productive environment for occupants. Smart, sustainable design that provides good indoor environmental quality is a proven and profitable investment.

Seemingly small increases of as little as 1% in productivity could result in a much higher payback than the reduced cost of energy.

### COMFORT

Comfort can be described as the state of mind that expresses satisfaction with the surrounding environment.

Indoor environmental quality has four dimensions:

- 1. Thermal comfort
- 2. Visual comfort
- 3. Acoustic comfort
- 4. Indoor air quality



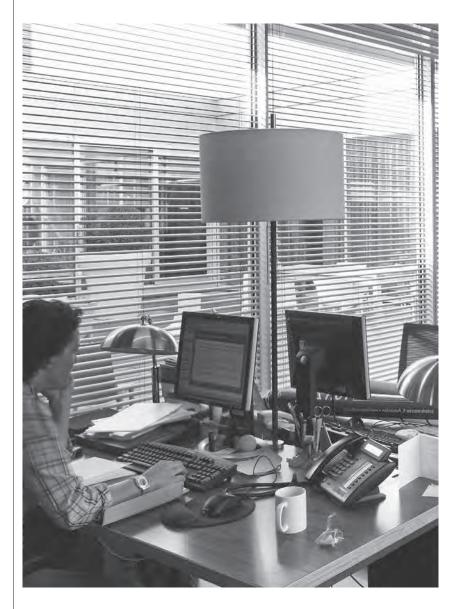
Daylight experienced through visual contact with the outside world is generally recognized as an important factor in influencing people's positive emotional state.

Situations that cause visual discomfort can frequently arise when light, glare or reflection levels are just too bright and contrasts too large for optimal working conditions.

Workspaces which are comfortable, naturally lit and allow occupants to connect with outdoor space can improve productivity and reduce absenteeism. Research on the relationship between daylighting and productivity shows that the use of daylight without glare resulted in productivity gains in the order of 4%. To fully optimise the benefits of daylight, control systems can be integrated with a sun control solution.

### SUSTAINABILITY & INDOOR ENVIRONMENTAL QUALITY

The environmental footprint of a building includes such factors as the use of energy, water, materials and resources. Hunter Douglas Sun Control systems and Window Covering products can play an excellent role in reducing the environmental footprint, whilst enhancing the thermal and visual dimensions of indoor environmental quality.



# **Energy and Light Tool**

The Hunter Douglas Energy Tool helps find an optimum solution by quantifying the effects of various external window coverings. The pay-off will be reduced energy costs and often reduced investment cost, as well as reduced greenhouse gas emission during the operation phase of the building.

The primary function of interior window coverings is to reduce glare levels and diffuse daylight, thereby providing visual comfort. The primary function of external window coverings is heat control.

# 

Indoor and outdoor temperature without external window covering

### THERMAL COMFORT

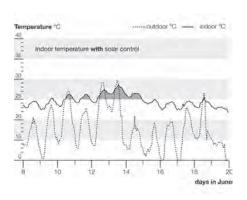
External window coverings will prevent excessive solar heat gain and reduce the need for cooling in the summer.

Moreover, they will also reduce - if not eliminate - the high capacity of cooling equipment needed, resulting in a reduction in the initial investment cost.

In colder climates, external window coverings will enable the use of

solar energy to help heat the building in winter. This is often overlooked when solar control glass is selected for heat control.

Thermal comfort at a minimal environmental impact calls for a careful matching of window glazing, sun control and HVAC equipment.



Indoor and outdoor temperature with external window covering

### **VISUAL COMFORT**

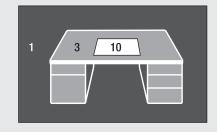
Interior window coverings enable the use of free renewable daylight to the maximum extent, significantly reducing the need for artificial lighting and avoiding the associated cooling loads.

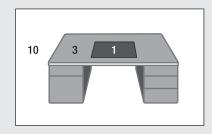
The accepted factor in creating visual comfort states that the contrast within the field of view should not exceed a factor of 10. The contrast between the central visual task and its direct surroundings should not exceed a factor of 3.

When designing an office space, questions often arise around what measures should be considered to guarantee the right level of visual comfort.

The Hunter Douglas Light Tool makes the assessment of visual comfort tangible by calculating luminance levels for a model office with and without window coverings. The amount and type of glass, the orientation of the façade, the geographical location, weather, season and time of day are all taken into account before recommendations are made.

The Light Tool helps clients assess which window coverings provide the aesthetic and performance levels needed to create visual comfort for their particular project.





Contrast factor 1:3:10

### **HUNTER DOUGLAS ARCHITECTURAL PRODUCTS**

In the last 50 years, we've been fortunate enough to help turn countless innovative sketches into innovative buildings.







Architects, designers, investors and contractors from around the world have taken advantage of Hunter Douglas' unmatched product development, service and support. Chances are, you've seen more of Hunter Douglas than you think.

With major operation centres in Europe, North America, Latin America, Asia and Australia, we've contributed to thousands of high-profile projects, from retail and commercial facilities to major transit centres and government buildings.

Not only are the world's architects and designers our partners, they're our inspiration. They continue to raise the bar for excellence. We create products that help bring their visions to life: Window Coverings, Ceilings, Sun Control Systems and Façades.



Promoting sustainable forest management www.pefc.org



Hunter Douglas products and solutions are designed to improve indoor environmental quality and conserve energy, supporting built environments that are comfortable, healthy, productive, and sustainable.



Our paint and aluminium melting processes are considered to be one of the industry standards in terms of clean production processes. All aluminium products are 100% recyclable at the end of their lifecycle.

### ARCHITECTURAL SERVICES

We support our business partners with a wide range of technical consulting and support services for architects, developers and installers. We assist architects and developers with recommendations regarding materials, shapes and dimensions and colours and finishes. We also help creating design proposals, visualisations and mounting drawings. Our services to installers range from providing detailed installation drawings and instructions to training installers and advising on the building site.



# Innovative Products Make Innovative Projects

### **HunterDouglas**

CEILINGS



**HUNTER DOUGLAS** is a publicly traded company with activities in more than 100 countries with over 150 companies.

The origin of our company goes back to 1919, in Düsseldorf, Germany. Throughout our history, we have introduced innovations that have shaped the industry, from the invention of the continuous aluminium caster, to the creation of the first aluminium Venetian Blinds, to the development of the latest high-quality building products.

Today we employ more than 16,500 people in our companies with major operation centres in Europe, North America, Latin America, Asia and Australia.

# **Learn More**

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Plissé & Duette® Shades



Vertical Venetian Blinds





External Venetian Blinds



External Roller Blinds

Belgium

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Germany

Hungary

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