

VERTICAL BLINDS



BENTHIN



THE VERTICAL BLINDS SYSTEM

Benthin Vertical Blinds are suitable for a wide range of applications and are characterised by their flexibility, durability and the efficient, versatile solar protection they provide. The louvres can be adjusted to follow the course of the sun and are an excellent way to control and direct the light.

Verticals can be used to create a variety of very different lighting effects, as there are almost infinite possibilities for regulating the incoming light depending on the position of the louvres.

For private homes the focus is on the decorative aspect, as well as the solar protection. The vertical blind is an almost unique product that has its own distinct character and yet leaves a great deal of scope for architectural design.

Verticals are particularly suitable for use in office buildings, as they comply with all the requirements of the Construction or Thermal Insulation Ordinance and with the guidelines for VDU workstations.

Louvre widths of 89 and 127 mm are standard, but alternative options of 63, 70, 100 and 250 mm are available.

For large projects, if requested the rails can be supplied in special colours so they can be colour co-ordinated with existing architectural elements of the building.

More than 20 different system shapes, various stacking versions and control systems that can be placed on the left or right permit a synthesis of decoration and sun protection.



VERTICALS IN EVERY SHAPE

For many years now, the verticals system from Benthin has been the most complete and most reliable system on the market, covering all areas of use.

Modular system components and the most efficient production equipment in the industry are available from a single supplier.

We aim for variety

Whether straight, curved, slope or top and bottom track, we can offer the appropriate solution for every shape, in any desired application.

The smooth-running monogear (180° rotation) with ball chain operation, the motor version and the standard version all provide optimal operating comfort.

The newly developed and child-safe control rod can be used on lengths up to 7.0 m and heights up to 3.0 m.

Rapid production – the key to success

- in large and small quantities.
- for the production of both louvres and head rails.
- for standard products and special requests.



A RANGE OF CONTROL OPTIONS

The IQ2 motor [1]

Our motor solution offers greater intelligence. In addition to the well-known function of sideways blind travel and 180° rotation, the IQ2 motor is equipped with a decorative setting and an intermediate stop function. Overload detection offers maximum safety.

The version with an integrated RTS receiver optimises Somfy compatibility. Convenient tilting with a scroll wheel and the MY function provide further operating options.

Chain/cord [2], operating comfort as standard

A bead chain (Ø4.5 x 6 mm) to tilt the louvres and a cord pull to move the blinds sideways.

One wand [3] that can do everything

Tilt the louvres and draw them across the blind with one hand by simply using the traversing wand.

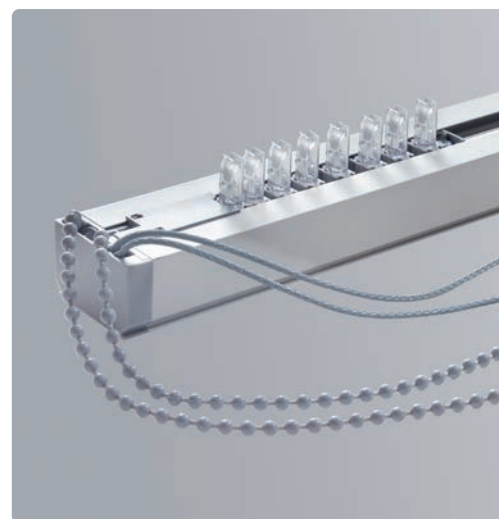
The wand is also a good choice when it comes to child safety.

The monogear [4] for ease of operation

The monogear guarantees convenient and child safety 180° tilting and movement by way of continuous loop chain operation with chain guard.

Tilt wand/cord [5], a neat alternative option

Tilt the louvres using a tilt wand, and draw them across with a cord pull.



SAFE AND SYSTEMATIC TECHNOLOGY

The Benthin Vertical System, with its tried-and-tested traveller with integrated friction clutch, stainless steel spacers and detachable clear hooks, enables the blinds to be used for a wide range of applications. An open cord channel enables easy assembly.

The end stoppers can be assembled from outside and cover the release mechanism and the louvre stack can be easily moved out of the way to clean the window.

Our verticals are characterised by the fact that the stacking width of the louvres is particularly small when the blinds are pulled back.

Thanks to the adjustable end retainer, the blind can be moved sideways right to the end of the rail if wished.

Automated production as the key to success

Benthin offers an extensive programme of production equipment enabling high quality vertical blinds to be produced in greater quantities.





High-performance machines for producing louvres and rails are vital to secure the company's position in the market.

The new LS 1700/2 louvre machine with the option of processing sealed-in bottom weights demonstrates how our technologies are constantly being developed.

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Vertical Blinds • Vertikaljalousie • Verticalaux •

**Tracks • Schienen • Rails
Shaft • Nutwelle • Axe rainuré**

Description Beschreibung Description	Part No. Art.-Nr. Ref. n°	Flange - Mètre Stück - Meter Rilln. - Mètre	Delivery Time Lieferzeit Délai de livraison	V.01
Track • Schiene • Rail				
anodized • elassiert • anodisé	6.0 m	90500000	96 m	A
silver • silber • argenté (EV1)	6.0 m	90500005	96 m	C
white • weiß • blanc	6.0 m	90501000	96 m	A
brown • braun • brun	6.0 m	90502000	96 m	B
black • schwarz • noir	6.0 m	90503000	96 m	B
DB 703 / dark grey • dunkelgrau • gris foncé	6.0 m	92411690	96 m	C
				
Track • Schiene • Rail				
anodized • elassiert • anodisé	7.0 m	90504000	112 m	A
silver • silber • argenté (EV1)	7.0 m	90504006	112 m	A
white • weiß • blanc	7.0 m	90505000	112 m	A
brown • braun • brun	7.0 m	90510000	112 m	B
black • schwarz • noir	7.0 m	92536000	112 m	B
DB 703 / dark grey • dunkelgrau • gris foncé	7.0 m	92411691	112 m	C
				
Shaft • Nutwelle • Axe rainuré				
6.03 m	92421000	723 m	A	
7.00 m	92719000	840 m	A	
Bulk • Großverpackung • En vrac				
6.03 m	92421001	6030 m	B	
7.00 m	99485000	7000 m	B	
				
Speed rail • Sprengling • Anneau Senger				
for shafts • für Nutwellen • pour axes rainurés	95812000	500	A	
				

Version 23-11-2017

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Type V010

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V010 - Standard unit with free hanging leashes.

• **Child safety:**
for further
information
please refer
to page 69

Dimensions/Measures

- **Blind width:** max. 7,80 m (track length incl. end caps)
- **Blind height:** max. 5,00 m (from the top of the track to the lower corner of the leashes)
- **Fabric:** max. 35,00 m²
- **Fabric weight and blind size** are depending on the control option

Gear Hardware

- **Free-hanging leashes with manual operation**
Chain and cord (optionally with planetary gear 4:1),
Traversing wand,
Motor gear,
Tilt wand Cord
or
free-hanging leashes with motor operation
IG2 motor system.
- **Track** (60 x 25 mm, max. length 7,00 m) is made of extruded aluminium (Al Mg Si 0.5 F22), technically anodised according to EN1671 or powder-coated white (RAL 9016), brown (RAL 8077), black (RAL 9005), special colors are possible.
- **Shaft** (Ø6,0 mm) is made of extruded aluminium (Al Mg Si 0.5 F22).
- **Traverser** with anti-stall (traversing wand without arm).
- **Wear resistant plastic (polyacetal) roller bearing mounted integrated safety clutch**, self-lubricating over the product life span.
- **Replaceable wear leashes (polycarbonate).**
- **Stainless steel standoff brackets (material 1.4310).**
- **Visible Plastic parts** are matching the colour of the track in grey, white, brown and black.

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Type V010

V010 - Standard unit with free hanging louvers.

Operation

- **Manual operation** optional left or right.
Operation length: *they're selectable* (in compliance with child safety according to EN 132014).
Fixation: Operating chains/Opening cord to Chain/Chain's safety device in transparent.
Control options are made of wear resistant plastic (POM - polycarbonate) matching the colour of the track.

Chain/cord

- 180° rotation of the louvers via plastic ball-chain. (Ø4.5 x 6.0 mm).
- Plastic balls on a polyester cord (Ø1.4 mm) in grey, white, brown or black.
- Movement by pull cord (Ø2.1 mm) made of polyester in grey, white, brown or black.

Optionally with planetary gear 4:1.

Traversing wand

- 180° rotation and movement of the louvers via aluminium wand.
- Length max. 1.50 m in anodized, white and black.
- Blind width max. 7.00 m / Blind height max. 3.00 m / Fabric weight max. 6.00 kg for one-piece louvers packing on the left or right side.
- Blind width max. 5.00 m / Blind height max. 3.00 m / Fabric weight max. 6.00 kg for splitted or control louvre package position (with one aluminium wand).

Motor gear

- 180° rotation and movement of the louvers via endless ball chain (Ø4.5 x 6.0 mm).
- Plastic balls on a polyester cord (Ø1.4 mm) in grey, white, brown or black.
- Blind width max. 6.00 m / Blind height max. 5.00 m / Fabric weight max. 10.00 kg.

Tilt wand Cord

- 180° rotation of the louvers via tilt wand (Pneugalon SW 7) in transparent (PC - polycarbonate).
- Movement by pull cord (Ø2.1 mm) made of polyester in grey, white, brown or black.
- Blind width max. 4.50 m / Blind height max. 5.00 m / Fabric weight max. 10.00 kg.

• **Motor operation**

- The I02-Motor serves to move the louvers sideways and to tilt them.
- It is fitted with 4 functions (open the hanging, close the hanging, tilt the louvers left and tilt the louvers right and additional functions (door position and intermediate stop).
- Blind functions are controlled by an operating button.

The I02-Motor is optionally available with an RTS module for controlling a drive using a Somfy RTS radio transmitter.

The motor can be installed using a variety of fasteners behind the track to the left, behind the track to the right, above the track to the left, or above the track to the right.
Colour: anodized according to RAL 9011 or powder-coated white (RAL 9016), brown (RAL 8077), black (RAL 9005).

Further information can be obtained from **Electrical planning I02-Motor**.

Louvre

- **Louvre width:** 127 mm (standard), 89 mm, 63.5 mm (other louver widths on request).
- **Louvre package** can be provided with window cleaning.
- Left, right, control or split louvre package position as desired.
- Welded louvre holder (PC - polycarbonate).
- Full plastic weight plates (aluminium sulphate) and spacing chains (plastic clips on a polyester cord Ø0.8 mm in grey, white, brown or black).
- Option: Full plastic weight plates to be welded in (without spacing chains).

Mounting

- **Top Fix brackets** in V2A, white or black.
- **Face Fix brackets** (adjustable) anodized, in white, brown or black.
- Distances from the wall: 60-108 mm, 108-156 mm, 156-204 mm.
- **Recesses profile** enables to mount the track in the ceiling cut-out.
- Technically anodized according to RAL 9011, non-anodized or white.

For measures, see section **Mounting dimensions** from page 46 to 61.

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5

Production manuals: Vertical Blinds*
Chain/cord right - Louvre stacking right

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Press Shaft (B) into the deflection side end piece (E).

Shaft terminates with end piece (1).

Slide operating side end piece (E) onto the Shaft and introduce the first cord end in marking (2).

Pull the last traveller (1) with the cord terminal (D) away from the traveller track (C).

Place cord in the traveller track (2) and thread into the first chamber from the cord terminal (3).

Introduce the second cord end into the second chamber (4) from the operating side end piece (E).

Place this cord in the traveller track (2) and thread it through the second chamber (1) from the cord terminal (3).

Run this cord into chamber (2) from the deflection side end piece (E).

then back through the chamber (3) of the deflection side.

Fuse both cord ends and press together (4).

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Electrical documentation – Vertical Blinds Components

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Components – IQ2-Motor

IQ2-100

IQ2-Motor

The IQ2-Motor serves to move the louvers sideways and to tilt them. It is fitted with a "Motor Function" so that control elements with 2 switching functions can be used. The IQ2-Motor is optionally available with an RTS module for controlling a drive using a Somfy RTS radio transmitter. Up to 16 transmitters can be programmed into an RTS module, enabling control as a single unit, as a group, or centrally. The motor can be installed using a variety of fastenings behind the rail to the left, behind the rail to the right, above the rail to the left, or above the rail to the right.

- Voltage supply : 180-264 V AC 50/60 Hz
- Power consumption : max. 0,35 A at 180 V AC
- Starting current : < 10 A
- Section of protective housing: IP 20
- Index of protection : II
- Type of current : Low-voltage
- Control voltage : Low-voltage
- Control current : 10 mA
- Tractive power : 80 Nm on the sprocket
- Travel speed : electronically through programming
- End-position sensing : 0-70 °C
- Operating temperature : approx. 10 % on the ON period
- Continuous loading : capacity
- Weight : 650 g
- Dimensions : 33,5 x 27,4 x 430 mm
incl. end caps and cover cap

- X1: Power voltage
- X2: Connections (CLOSE/OPEN)
- X3: Multifunction interface

X1		X2		Comment
Pos.	Function	Pos.	Function	
1	230 V	1	24 V or 0 volt	V
2	0 V	2	0V (white)	
3	230 V	3	0V (brown)	V
4	0 V	4	0V (blue)	
5	0 V	5	0V (green)	Control signal
6	0 V	6	0V (yellow)	
7	0 V	7	0V (red)	Control signal
8	0 V	8	0V (black)	

- Pos. 1 : Connection X2/1 to X2/3
- Ground as control signal
- No connection
- Pole reversal (control)

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4

Version 29.11.2017

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DOCUMENTATION FOR ALL NEEDS

Benthin provides a comprehensive range of documentary material to make it easy for you to get started with a product. Detailed in-depth reference documents enable our customers to build strong product knowledge on all models.

Component Catalogue

Lists all **components** with information about article numbers, delivery times and order quantities.

Additional **exploded drawings** with item numbers help with ordering and provide an overview.

Data sheets and Electrical planning

Contain detailed information about each model. These may be used for general information purposes or when compiling order documents. They provide information for architects, as well as for manufacturers.

Production manual

A guide to assembling your blinds, with detailed step-by-step illustrations and descriptions.

Installation instructions

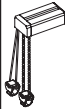
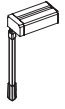
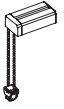
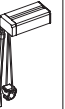
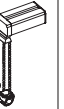
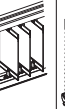

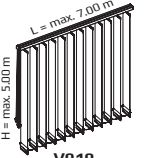
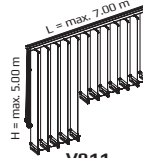
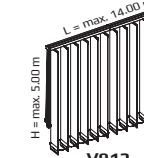
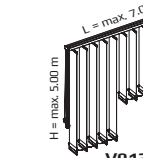
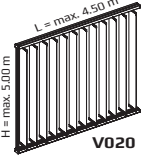
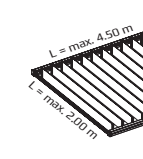
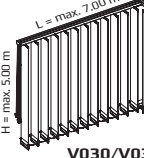

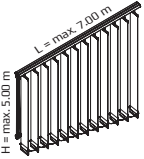
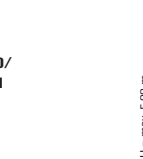
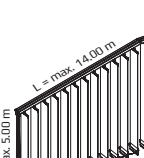
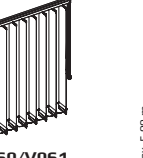
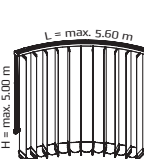
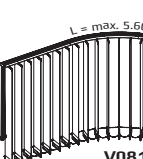
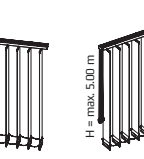

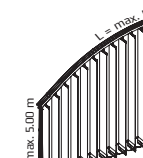

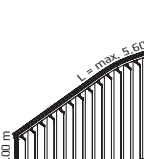
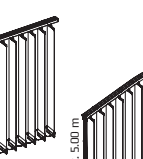

A helpful guide describing, in words and pictures, how to install, operate and care for vertical blinds.

Worksheet Program

A software tool to configure the models with bill of materials and pricing.



TYPEOVERVIEW VERTICAL BLINDS

								
Standard units	 V010  V011  V012  V013	V010 V011 V012 V013	V010 V011 V012	V010 V011 V012	V010 V011 V012 V013			V010 V011 V012
Top and bottom track units	 V020  V025					V020 V025	V025 (4:1)	V020 V025
Bay window units	 V030/V031  V032	V030 V031 V032	V030 V031 V032	V030 V031 V032	V030 V031 V032			V030 V031 V032
Slope units	 V040/V041  V050					V040 V041 V050		V040 V041 V050
	 V060/V061  V070					V060 V061 V070		V060 V061 V070
Horizontally curved units	 V080  V081  V082	V080 V081 V082 (4:1)						V080* V081 V082
Vertically curved units	 V090  V091  V096					V090 V091 V096 (4:1)		V090* V091 V096*
	 V092/V094  V093  V095					V092 V093 V094 V095 (4:1)		V092 V093 V094 V095



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