The new WAREMA external venetian blind

PROVEN THINGS IN PERFECTION
Experience the external venetian blind 80 S in action!
www.warema.com/80S
The WAREMA external venetian blind with 80 mm beaded slat in standard version is the most popular external venetian blind on the market. However, also proven things should develop constantly and strive for perfection. The new WAREMA external venetian blind 80 S is the best example how this way of thinking can work. Proven details have been perfected and the product has been adapted to the current needs of the market.
EXPRESSIVE BUT STILL TIMELESS

The new slat size of the 80 S with a reduced diameter of the beading increases the stability and strength of the slat. The guide nipple with high-grade 2 point welding and big counter plate transfers the stability through to the guide rails. The external venetian blinds have a dynamic and expressive effect in classic and timeless design.
DELICATE AND STILL STABLE

The clearly reduced diameter of the beading sustainably reduces the slat stack height and ensures a more delicate look during view out. The new cable guide eyelet has a positive effect on the slat stack height and simultaneously facilitates a tilting angle as big as possible.
JUST MORE SHADING

The optimised lift tape eyelets with the smallest outlet openings ensure minimised light points in the interior.
DISCREET AND HIGH-GRADE

The optimised bottom rail is convincing due to its surface with constant stability. At the same time it captivates with its modern and timeless delicate design.
POSITIVE EFFECT ON THE ENERGY BALANCE

Thanks to the new slat geometry and the optimised bottom rail the new WAREMA external venetian blind 80 S in standard design offers the smallest external venetian blind package on the market. The lower slat stack height has a positive effect on the energy balance of buildings in the case of shafts which are integrated into the facade. When using visible cover panels there is little influence on the facade view.
The new WAREMA external venetian blind
Venetian blind facade system with beaded slats
E 80 A2 S, E 80 A6 S, C 80 A2 S, C 80 A6 S

External venetian blind E 80 A6 S
External venetian blind C 80 A2 S

1  Top rail
2  Tilt shaft
3  Bearing
4  Slats
5  Tilting tape and lifting tape
6  Lateral guidance
6.1 Rail
6.2 Tension cable
7  Bottom rail
Application
For mounting on transom and mullion facades or conservatories, in the reveal or in ventilated facades, in double skin facades, in front of the facade or indoors.

Operation
Motor
The slats are raised and lowered as well as tilted by actuating an operating switch.
Voltage: 230 V AC, other voltages optional
Frequency: 50 Hz, other frequencies optional
Degree of protection: IP 54
Plug connector: Hirschmann coupling
The drive switches off upon reaching the upper or lower limit position using built-in, adjustable limit switches.

Crank
The slats are raised and lowered as well as tilted with the crank.
Crank rod with collapsible crank; sealed joint plate and square with patented thermal separation.
Material: Aluminium
Surface: C0 anodised
Crank holder: plastic, grey, white or brown, crank holder with magnet optional

Top rail
Material: aluminium, extruded
Material thickness: 1.5 mm
Dimensions (w x h): 59 x 51 mm
Profile: C profile
Surface: plain, optionally powder-coated or anodised
Fixing: with noise-optimised top rail brackets made of plain aluminium.

Tilt shaft
Material: Galvanised steel
Material thickness: 1 mm
Dimensions (w x h): 12 x 12 mm
Profile: Square tube
Surface: plain

Bearing
Maintenance-free, enclosed
Enclosure: plastic, with Teflon
Tilting reel: Plastic
Tape reel: Plastic
Segment tilting to prevent self-acting adjustment of slats.
**Slats**
on both sides optimally beaded with regard to slat stack height, curved
Material: aluminium, special alloy
Material thickness: approx. 0.44 mm
Dimensions (W): 80 mm
Installation: convex
Surface: enamel finish resistant to corrosion using a special process
Colour: according to WAREMA colour chart for external venetian blinds
All cutouts in the slats have black protection eyelets, with an outlet size of 5 x 8 mm, to guide the lift tapes (reduction of wear) and fix the webs of the ladder tape. The blind moves down with the slats closed to the outside and moves up with the slats closed to the inside.

**Tilting tape and lifting tape**

**Tilting tapes**
In special heavy-duty version with double cross ladders
Material: polyester with Kevlar core
Colour: black, optionally grey or white
Each slat is fixed to the top web of the tilting tape and threaded through the double webs.

**Lifting tapes**
Material: polyester, with special coating
Colour: black, optionally grey or white

**Lateral guidance**

**Rail – A6**
With black sealing strips inserted for noise reduction
Material: aluminium, extruded
Dimensions (w x d): 25 x 18 mm, optionally other rail variants
Profile: C profile
Surface: powder-coated, optionally anodised
Fixing: 2-piece guide rail bracket H1, aluminium and plastic
End cap: plastic, black, optionally grey or white
Sealing strip: weather-proof, UV stable, black
Guiding nipple: Polyamide, glass fibre reinforced, impact-resistant connection with the slats, alternatively nippled
**Tension cable - A2**

Strand wire
Material: Steel, resistant to corrosion
Coating: polyamide
Dimensions (Ø): 3.3 mm
Colour: black or transparent coating
Fixing: tension cable bracket S01, aluminium

The cable guides are fixed with a special spring tension device to compensate for thermal changes in the length of the top rail. Cable guidings run trough oblong holes in the slats and the bottom rail. They are fixed to the window or the wall using tension cable brackets.

**Bottom rail**

With end caps
Material: aluminium, extruded
Dimensions (w x h): 80 x 15 mm
Surface: powder-coated, optionally anodised
End caps: plastic, black

Bottom rail for rail guidance A6 with sliding guiding nipples with slotted end caps to prevent the external venetian blind from unhinging.

**Colours**

Powder coating of aluminium parts with chrome-free pre-treatment according to valid RAL CLASSIC colour chart (except camouflage and luminous colours) or in six DB colours as well as eight textured colours (W4914 - W4921), four anodized-look colours (WC31 - WC34) and further colours according to WAREMA standard colour fan (in WAREMA colour specification).

Other colour specifications and special colours are available upon request and at a surcharge.
Construction limit values/Measuring instructions
Venetian blind facade system
Beaded slats with cable or rail guidance

Construction limit values in mm
For external venetian blinds with equipment variant vivamatic® (VM), slowturn (ST) or work setting (AS) the construction limit values of the corresponding basic type should be assumed. Max. 3 curtains are possible here as a coupled unit with one drive.

<table>
<thead>
<tr>
<th>Types</th>
<th>Construction limit values</th>
<th>Types</th>
<th>Construction limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individual unit</td>
<td>Coupled units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Width²)</td>
<td>Height</td>
<td>Surface³) in m²</td>
</tr>
<tr>
<td></td>
<td>min.¹⁾</td>
<td>max.</td>
<td>Height</td>
</tr>
<tr>
<td>C 80 A2 S</td>
<td>450</td>
<td>5000</td>
<td>4000</td>
</tr>
<tr>
<td>C 80 A6 S</td>
<td>600</td>
<td>5000</td>
<td>4000</td>
</tr>
</tbody>
</table>

1) Cable force: 450 N per tension cable.
2) Width = slat size, slat size + 65 mm = back edge of the guide rail for FSCH types 1 and 2.
3) The maximum surfaces indicated depend on the height in each case.
4) Sloped running of the slats cannot be prevented for small widths.
Measuring instructions
Slat stack height from the table
Slat stack height with work setting (AS) + 7 mm
Recess height = slat stack height + 15 mm
Cover panel height = slat stack height + 20 mm

<table>
<thead>
<tr>
<th>Types</th>
<th>Min. recess width</th>
<th>Cover panel depth min.</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 A2 S/A6 S</td>
<td>120</td>
<td>130</td>
</tr>
</tbody>
</table>

Number of guide cables for 80 A2 S

<table>
<thead>
<tr>
<th>Order width</th>
<th>Cable guidances</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 3 m</td>
<td>2</td>
</tr>
<tr>
<td>from 3 m</td>
<td>3</td>
</tr>
<tr>
<td>from 4 m to 5 m</td>
<td>4</td>
</tr>
</tbody>
</table>

When ordering, please indicate positioning of additional cable guiding (starting inside from the left)!
For model A6 we recommend an additional cable guide at the centre of the blind for external venetian blind widths > 3000 mm.
## Slat stack heights in mm

Slat stack height determined using external venetian blind height

<table>
<thead>
<tr>
<th>Types</th>
<th>External venetian blind height in mm</th>
<th>1000</th>
<th>1200</th>
<th>1400</th>
<th>1600</th>
<th>1800</th>
<th>2000</th>
<th>2200</th>
<th>2400</th>
<th>2600</th>
<th>2800</th>
<th>3000</th>
<th>3200</th>
<th>3400</th>
<th>3600</th>
<th>3800</th>
<th>4000</th>
<th>4200</th>
<th>4400</th>
<th>4600</th>
<th>4800</th>
<th>5000</th>
</tr>
</thead>
</table>

Slat stack height determined using clear shading height

<table>
<thead>
<tr>
<th>Types</th>
<th>Clear shading height in mm</th>
<th>1000</th>
<th>1200</th>
<th>1400</th>
<th>1600</th>
<th>1800</th>
<th>2000</th>
<th>2200</th>
<th>2400</th>
<th>2600</th>
<th>2800</th>
<th>3000</th>
<th>3200</th>
<th>3400</th>
<th>3600</th>
<th>3800</th>
<th>4000</th>
<th>4200</th>
<th>4400</th>
<th>4600</th>
<th>4800</th>
<th>5000</th>
</tr>
</thead>
<tbody>
<tr>
<td>E 80 A2 S / E 80 A6 S</td>
<td></td>
<td>159</td>
<td>169</td>
<td>180</td>
<td>191</td>
<td>201</td>
<td>212</td>
<td>222</td>
<td>233</td>
<td>243</td>
<td>254</td>
<td>264</td>
<td>275</td>
<td>285</td>
<td>296</td>
<td>306</td>
<td>317</td>
<td>327</td>
<td>338</td>
<td>348</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Slat stack heights are approximate values. For technical reasons, they might be higher or lower.

**External venetian blinds with crank drive:** Slat stack height is reduced by 20 mm.

**External venetian blinds with work setting:** Stack 7 mm higher, top rail support Art. No. 551012
### Construction limit values for venetian blind window system, top-mounted external venetian blinds for new buildings as well as front-mounted external venetian blinds in mm

<table>
<thead>
<tr>
<th>Types</th>
<th>Cover panel / Box height</th>
<th>Width</th>
<th>Individual units</th>
<th>Combination</th>
<th>Surface in m²</th>
<th>Number of curtains</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Width</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Surface in m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Number of curtains</td>
<td></td>
</tr>
<tr>
<td>Venetian blind window system 1 - 4</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E 80 A6 S</td>
<td>230</td>
<td>680</td>
<td>4000</td>
<td>4000</td>
<td>2200</td>
<td>5</td>
</tr>
<tr>
<td>E 80 A6 S</td>
<td>260</td>
<td>680</td>
<td>4000</td>
<td>4000</td>
<td>2800</td>
<td>5</td>
</tr>
<tr>
<td>E 80 A6 S</td>
<td>300</td>
<td>680</td>
<td>4000</td>
<td>4000</td>
<td>3600</td>
<td>5</td>
</tr>
<tr>
<td>Top-mounted external venetian blinds for new buildings</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E 80 A6 S</td>
<td>300</td>
<td>680</td>
<td>4000</td>
<td>4000</td>
<td>3500</td>
<td>5</td>
</tr>
<tr>
<td>Front-mounted external venetian blinds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R6 without insect screen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E 80 A6 S</td>
<td>16.5</td>
<td>680</td>
<td>4000</td>
<td>4000</td>
<td>2600</td>
<td>5</td>
</tr>
<tr>
<td>E 80 A6 S</td>
<td>18.5</td>
<td>680</td>
<td>4000</td>
<td>4000</td>
<td>3000</td>
<td>5</td>
</tr>
<tr>
<td>R10 without insect screen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E 80 A6 S</td>
<td>16.5</td>
<td>680</td>
<td>4000</td>
<td>4000</td>
<td>2600</td>
<td>5</td>
</tr>
<tr>
<td>E 80 A6 S</td>
<td>18.5</td>
<td>680</td>
<td>4000</td>
<td>4000</td>
<td>3000</td>
<td>5</td>
</tr>
<tr>
<td>R10 with insect screen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E 80 A6 S</td>
<td>16.5</td>
<td>710</td>
<td>2000</td>
<td>2500</td>
<td>2100</td>
<td>5</td>
</tr>
<tr>
<td>E 80 A6 S</td>
<td>18.5</td>
<td>710</td>
<td>2000</td>
<td>2500</td>
<td>2500</td>
<td>5</td>
</tr>
</tbody>
</table>
Venetian blind facade system
Beaded slats with cable guidance
E 80 A2 S with angular cover panel
DIN 7976-A2 C6.3x38 with seal coating
DIN 125-A2 A6.4

min. 60

min. 10

min. 130

approx. 15

80

min. 130

approx. 15

min. 60

approx. 20

External venetian blind height

Cover panel height

Slat stack height

Foam sealing strip as part of mounting on-site

Bracket

Device connection socket

Wisotronic

230V, 50Hz, 10A

H05 RR-F 4G 0.75SW

DIN 9021-A2 A6.4

NYM-J 4x1.5mm²

Push button

DIN 7976-A2 C6.3x38 with seal coating
DIN 125-A2 A6.4

DIN 7976-A2 C6.3x38 with seal coating
DIN 9021-A2 A6.4

DIN 7985-A2 M5x8 Bracket

Foam sealing strip as part of mounting on-site
Venetian blind facade system
Beaded slats with rail guidance E 80 A6 S with U-shaped cover panel at transom and mullion facade
Guide rail length
Bracket

Guide rail bracket

Cover panel console, edge/middle

Min. 20

Internal venetian blind height

Slat stack height

Guide rail

H05 RR-F 4G 0.75SW

Device connection socket

230V, 50Hz, 10A

NYM-J 4x1.5mm²

Push button

Threaded bolt M8 and Drilled hole Ø13 on-site
EPDM sealing washer, WAREMA stop nut M8-A2, washer DIN 9021-A2 A8.4, nut DIN 934-A2 M8
Venetian blind facade system

Beaded slats with rail guidance C 80 A6 S
with angular cover panel
Venetian blind facade system
Beaded slats with rail and cable guidance E 80 A2 S/ A6 S with angular cover panel - corner position
Self-supporting external venetian blinds
Cover panel mounting between the guide rails E 80 A6 S with round-shaped cover panel on transom and mullion facade

Axial dimension = order dimension

Cover panel length

Slat size

See table for further breakdown

Guide rail Ø52

Angle bracket

Plug-in grommet STM 32

Holding profile for cover panel

Bracket Mounting bracket
External venetian blind height
Guide rail length
Guide rail bracket
Bracket 1)
Guide panel height
Slat stack height
approx. 15
30
min. 90
80
Threaded bolt M8 and Drilled hole Ø13 on-site EPDM sealing washer, WAREMA stop nut M8-A2, washer DIN 9021-A2 A8.4 nut DIN 934-A2 M8

230V, 50Hz, 10A

Device connection socket

NYM-J 4x1.5mm²

Push button

Guide rail

H05 RR-F 4G 0.75SW

1) for external venetian blinds with work setting
Self-supporting external venetian blinds
Cover panel mounting on the guide rails E 80 A6 S with U-shaped cover panel at transom and mullion facade

See table for further breakdown
for external venetian blinds with work setting

1) min. 90

Threaded bolt M8 and Drilled hole Ø13 on-site EPDM sealing washer, WAREMA stop nut M8-A2, washer DIN 9021-A2 A8.4 nut DIN 934-A2 M8

Guide rail length

External venetian blind height

Guide rail bracket

Guide rail

Bracket

Cover panel height

Slat stack height

approx. 15

13 (19)

150

32

40

H05 RR-F 4G 0.75SW

Device connection socket

230V, 50Hz, 10A

NYM-J 4x1.5mm²

Push button

1) for external venetian blinds with work setting
The new WAREMA external venetian blind

80 S

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