Venetian blinds | TwinLine

Models 09-7080, 09-7180

Model 09-7080 with 16 mm slats
Model 09-7180 with 25 mm slats

Particularly suitable for glazing bead installation for tilt/turn windows. Hanging individually adjustable by freely moveable upper and lower rail. Slat tilting by means of thumbwheel in the operating handle. Upper and lower rail each with inserted plastic cover. Slat colours according to MHZ collection. Colour of cords and ladder cords match the slats. Operation rod not possible.

Technical data

**Dimensions:**

<table>
<thead>
<tr>
<th>Model</th>
<th>Min. width</th>
<th>Max. width</th>
<th>Max. height</th>
<th>Max. surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>09-7080</td>
<td>above 33.6 cm up to 150 cm</td>
<td>250 cm</td>
<td>approx. 1.6 m²</td>
<td></td>
</tr>
<tr>
<td>09-7180</td>
<td>above 33.6 cm up to 150 cm</td>
<td>250 cm</td>
<td>approx. 2.0 m²</td>
<td></td>
</tr>
</tbody>
</table>

**Profiles:**

- Head/Bottom rail: Width 25 mm, height 19 mm

**Hardware colour:**

- 100 silver anodized (ES/EV1)
- 171 white powder-coated (RAL 9016)

**Slats:**

- Width 16 and 25 mm, aluminium 0.22 mm, elastic, enamelled, see the collection for surfaces and colours. Detailed information can be found in the material properties brochure. Perforated slats not available.

**Operation:**

- Hanging height adjusted by moving the head or bottom rail. Rails secured in desired position. Slat tilting via rotating disc in the operating grip at the head rail. 1 operating grip per rail up to 90 cm width; 2 operating grips per rail from 90.1 cm. Tumbwheel left and right operation.

**Optional equipment:**

- Aluminium grip
- Side guide, perlon cord ø 1 mm, the hanging width is reduced by 6 mm
- Tension cord extension (symmetrical or asymmetrical)
- Multicoloured hanging p. 90
- Surcharges p. 87
- Additional accessories p. 93
- Adhesive-Set p. 88+119

**Bundle height:**

<table>
<thead>
<tr>
<th>Unit height up to (cm)</th>
<th>50</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundle height 16 mm slat approx. to (cm)</td>
<td>5.5</td>
<td>6.5</td>
<td>8.0</td>
<td>9.5</td>
<td>11.0</td>
</tr>
<tr>
<td>Bundle height 25 mm slat approx. to (cm)</td>
<td>5.5</td>
<td>6.5</td>
<td>7.5</td>
<td>8.5</td>
<td>9.5</td>
</tr>
</tbody>
</table>

**Installation:**

- Glazing bead installation (min. glazing bead depth 17 mm) with footplates
- Bracket for window sash installation and accessories p. 87
- Additional installation accessories p. 87
- Use levelling chock the fits with the glazing bead bracket p. 94
- Use mounting template p. 94
- Adhesive-Set p. 88+119

Subject to technical changes | Edition 09.2014
Technical information

Venetian blinds | TwinLine

Models 09-7081, 09-7181

Model 09-7081 with 16 mm slats
Model 09-7181 with 25 mm slats


Technical data

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Model</th>
<th>Min. width</th>
<th>Max. width</th>
<th>Max. height</th>
<th>Max. surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>09-7081</td>
<td>above 33.6 cm</td>
<td>up to 150 cm</td>
<td>250 cm</td>
<td>approx. 1.6 m²</td>
<td></td>
</tr>
<tr>
<td>09-7181</td>
<td>above 33.6 cm</td>
<td>up to 150 cm</td>
<td>250 cm</td>
<td>approx. 2.0 m²</td>
<td></td>
</tr>
</tbody>
</table>

Profiles: Head/Bottom rail: Width 25 mm, height 19 mm

Hardware colour: 100 silver anodized (E6/EV1)
171 white powder-coated (RAL 9016)

Slats: Width 16 and 25 mm, aluminium 0.22 mm, elastic, enamelled, see the collection for surfaces and colours. Detailed information can be found in the material properties brochure. Perforated slats not available.

Operation: Hanging height adjusted by moving the head or bottom rail. Rails secured in desired position. 1 operating grip per rail up to 90 cm width; 2 operating grips per rail from 90.1 cm. Slat tilting via cord at the head rail, can be operated from left or right.

Unit height (cm) 50-75 75-100 100-125 125-150 150-175 175-200 200-250
Operating length Cord (cm) 50 75 100 125 150 175 200 250
Other operating lengths available on request at extra cost

Optional equipment:
- Aluminium grip
- Side guide, perlon cord ø 1 mm, the hanging width is reduced by 6 mm
- Tension cord extension (symmetrical or asymmetrical)
- Multicoloured hanging p. 90
- Surcharges p. 87
- Additional accessories p. 93
- Adhesive-Set p. 88+119

Bundle heights:

Unit height up to (cm) 50 100 150 200 250
Bundle height 16 mm slat approx. to (cm) 5.5 6.5 8.0 9.5 11.0
Bundle height 25 mm slat approx. to (cm) 5.5 6.5 7.5 8.5 9.5

Installation:
- Glazing bead installation (min. glazing bead depth 17 mm) with footplates
- Bracket for window sash installation and accessories p. 87
- Additional accessories p. 87
- Use levelling chock the fits with the glazing bead bracket p. 94
- Use mounting template p. 94
- Adhesive-Set p. 88+119
Venetian blinds | *TwinLine*

**Models 09-7082, 09-7182**

![Diagram of Venetian blinds](image)

1. Slats
2. Head rail
3. Cord exit
4. Cord (slat tilting)
5. Grip
6. Bottom rail
7. Tension cord
8. Ladder cord
9. Side guide (optional)
10. Footplate
11. Tangle-free tassel
12. Operation rod (not included)

**Model 09-7082** with 16 mm slats

**Model 09-7182** with 25 mm slats


**Technical data**

**Dimensions:**

<table>
<thead>
<tr>
<th>Model</th>
<th>Min. width</th>
<th>Max. width</th>
<th>Max. height</th>
<th>Max. surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>09-7082</td>
<td>above 33.6 cm</td>
<td>up to 150 cm</td>
<td>250 cm</td>
<td>approx. 1.6 m²</td>
</tr>
<tr>
<td>09-7182</td>
<td>above 33.6 cm</td>
<td>up to 150 cm</td>
<td>250 cm</td>
<td>approx. 2.0 m²</td>
</tr>
</tbody>
</table>

**Profiles:**

Head/Bottom rail: width 25 mm, height 19 mm

**Hardware colour:**

- 100 silver anodized (E6/EV1)
- 171 white powder-coated (RAL 9016)

**Slats:**

Width 16 and 25 mm, aluminium 0.2 mm, elastic, enamelled, see the collection for surfaces and colours. Detailed information can be found in the material properties brochure. Perforated slats not available.

**Operation:**

Hanging height is adjusted by using the operation rod to move the head or bottom rail. Rails secured in desired position. 1 operating grip per rail up to 90 cm width; 2 operating grips per rail from 90.1 cm. Slat tilting via cord at the head rail, can be operated from left or right.

**Unit height (cm) | Operating length (cm)**

<table>
<thead>
<tr>
<th>50-75</th>
<th>75-100</th>
<th>100-125</th>
<th>125-150</th>
<th>150-175</th>
<th>175-200</th>
<th>200-250</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>75</td>
<td>100</td>
<td>125</td>
<td>150</td>
<td>175</td>
<td>200</td>
</tr>
</tbody>
</table>

Other operating lengths available on request at extra cost

**Optional equipment:**

- Operation rod with hinged adapter possible up to unit width of 90 cm
  - Side guide, perlon cord ø 1 mm, the hanging width is reduced by 6 mm
  - Tension cord extension (symmetrical or asymmetrical)
  - Multicoloured hanging p. 90
  - Surcharges p. 87
  - Additional accessories p. 93
  - Adhesive-Set p. 89+119

**Bundle heights:**

<table>
<thead>
<tr>
<th>Unit height up to (cm)</th>
<th>Bundle height 16 mm slat approx. to (cm)</th>
<th>Bundle height 25 mm slat approx. to (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 100 150 200 250</td>
<td>5.5 6.5 8.0 9.5 11.0</td>
<td>5.5 6.5 7.5 8.5 9.5</td>
</tr>
</tbody>
</table>

**Installation:**

- Glazing bead installation (min. glazing bead depth 17 mm) with footplates
- Bracket for window sash installation and accessories p. 87
- Additional accessories p. 87
- Use levelling chock the fits with the glazing bead bracket p. 94
- Use mounting template p. 94
- Adhesive-Set p. 89+119

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106 Subject to technical changes | *Edition 09.2014*
Venetian blinds | Chain operation

Models 09-1067, 09-1167, 09-4467, 09-1267

Lateral gear with chain operation, chain exit at front. Extruded aluminium head rail with an inserted, colour matching 25 mm front slat.

Hanging width corresponds to upper rail including gear. Lower rail made of extruded aluminium with slat in colour of the hanging inserted underneath. Slat colours according to the MHZ collection. Colour of cords and ladder cords match the slats. For safety tensioner installation see p. 116.

Technical data

Dimensions:

<table>
<thead>
<tr>
<th>Model</th>
<th>Min. width</th>
<th>Max. width</th>
<th>Max. height</th>
<th>Max. surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>09-1067</td>
<td>above 44 cm up to 54 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>above 54.1 cm up to 270 cm</td>
<td>360 cm</td>
<td>8 m²</td>
<td></td>
</tr>
<tr>
<td>09-1167</td>
<td>above 44 cm up to 54 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>above 54.1 cm up to 390 cm</td>
<td>360 cm</td>
<td>8 m²</td>
<td></td>
</tr>
<tr>
<td>09-4467*</td>
<td>above 46 cm up to 54 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>above 54.1 cm up to 390 cm</td>
<td>360 cm</td>
<td>8 m²</td>
<td></td>
</tr>
<tr>
<td>09-1267</td>
<td>above 44 cm up to 54 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>above 54.1 cm up to 450 cm</td>
<td>360 cm</td>
<td>8 m²</td>
<td></td>
</tr>
</tbody>
</table>

Profiles:

- Head rail: width 29 mm, height 29 mm
- Bottom rail for 16 mm slats: Width 21 mm, height 8.5 mm
- Bottom rail for 25 + 35 mm slats: Width 30 mm, height 10 mm

Hardware colour:

- 100 silver anodized (E6/EV1)
- 171 white powder-coated (RAL 9016)

Slats:

- Width 16, 25 and 35 mm, aluminium 0.22 mm, elastic, enamelled, see the collection for surfaces and colours. Detailed information can be found in the material properties brochure.

Operation:

- Lifting, lowering and tilting via operation chain (transparent). Curtain latches automatically. Operation side optionally left or right. Chain secured by safety tensioner.

Note:

- Operation length from 50 cm - 150 cm in 10 cm steps, operation length from 150 cm - 300 cm in 25 cm steps
- Delivery with the exact or next smaller operation length. Other operating lengths available on request at extra cost.
- Planetary gears 3:1 for larger unit dimensions p. 11-19.

Optional equipment:

- Metal chain chrome-plated (not suitable for damp locations)
- Side guide, steel wire ø 1 mm, plastic coated
- Multicoloured hanging p. 90
- Surcharges p. 87
- Additional accessories p. 93
- * Invisible punched holes p. 91

Bundle heights:

<table>
<thead>
<tr>
<th>Bundle height 16 mm slat approx. to (cm)</th>
<th>50</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
<th>350</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundle height 25 mm slat approx. to (cm)</td>
<td>5.0</td>
<td>6.0</td>
<td>7.5</td>
<td>9.0</td>
<td>10.5</td>
<td>12.0</td>
<td>13.5</td>
</tr>
<tr>
<td>Bundle height 25 mm slat approx. to (cm) with invisible punched holes</td>
<td>5.0</td>
<td>6.0</td>
<td>7.0</td>
<td>7.5</td>
<td>8.5</td>
<td>9.5</td>
<td>10.5</td>
</tr>
</tbody>
</table>

Installation:

- Wall and ceiling installation with tension lever brackets
- Additional accessories p. 87
- Bracket quantity table p. 95

Subject to technical changes | edition 09.2014
Models 09-1065, 09-1165, 09-4465, 09-1265

Model 09-1065 with 16 mm slats
Model 09-1165 with 25 mm slats
Model 09-4465 with 25 mm slats, invisible punched holes
Model 09-1265 with 35 mm slats

Electric drive 24 V, mounted centrally or at the side in the upper rail, with automatic end position switch-off. Not suitable for damp locations. Single or group operation. Upper rail made of extruded aluminium with 25 mm slat in colour of the hanging inserted at front side. Lower rail made of extruded aluminium with slat in colour of the hanging inserted underneath. Slat colours according to the MHZ collection. Colour of cords and ladder cords match the slats.

Technical data

Dimensions:

<table>
<thead>
<tr>
<th>Model</th>
<th>Min. width</th>
<th>Max. width</th>
<th>Max. height</th>
<th>Max. surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>09-1065</td>
<td>up to 59 cm</td>
<td>up to 63 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
</tr>
<tr>
<td></td>
<td>above 59 cm</td>
<td>above 63 cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>up to 63 cm</td>
<td>up to 270 cm</td>
<td>360 cm</td>
<td>9 m²</td>
</tr>
<tr>
<td>09-1165</td>
<td>up to 59 cm</td>
<td>up to 63 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
</tr>
<tr>
<td></td>
<td>above 59 cm</td>
<td>above 63 cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>up to 63 cm</td>
<td>up to 380 cm</td>
<td>360 cm</td>
<td>9 m²</td>
</tr>
<tr>
<td>09-4465*</td>
<td>up to 59 cm</td>
<td>up to 63 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
</tr>
<tr>
<td></td>
<td>above 59 cm</td>
<td>above 63 cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>up to 63 cm</td>
<td>up to 380 cm</td>
<td>360 cm</td>
<td>9 m²</td>
</tr>
<tr>
<td>09-1265</td>
<td>up to 59 cm</td>
<td>up to 63 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
</tr>
<tr>
<td></td>
<td>above 59 cm</td>
<td>above 63 cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>up to 63 cm</td>
<td>up to 450 cm</td>
<td>360 cm</td>
<td>9 m²</td>
</tr>
</tbody>
</table>

Profiles:

Head rail: width 29 mm, height 29 mm
Bottom rail for 16 mm slats: width 21 mm, height 8.5 mm
Bottom rail 25 + 35 mm slats: width 30 mm, height 10 mm

Hardware colour:

- 100 silver anodized (E6/EV1)
- 171 white powder-coated (RAL 9016)

Slats:

Width 16, 25 and 35 mm, aluminium 0.22 mm, elastic, enamelled, see the collection for surfaces and colours. Detailed information can be found in the material properties brochure.

Operation:

Lifting, lowering and tilting via 24 V electric drive. Various control options due to switch, radio remote control, sun control or timer. Prices for electrical accessories p. 98.

Optional equipment:

- Side guide, steel wire ø 1 mm, plastic coated
- Multicoloured hanging p. 90
- Surcharges p. 87
- Additional accessories p. 93
- * Invisible punched holes p. 91

Bundle heights:

<table>
<thead>
<tr>
<th>Unit height up to (cm)</th>
<th>50</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
<th>350</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundle height 16 mm</td>
<td>5.0</td>
<td>6.0</td>
<td>7.5</td>
<td>9.0</td>
<td>10.5</td>
<td>11.5</td>
<td>13.5</td>
</tr>
<tr>
<td>Bundle height 25 mm</td>
<td>5.0</td>
<td>6.5</td>
<td>7.5</td>
<td>8.5</td>
<td>9.5</td>
<td>10.0</td>
<td>11.0</td>
</tr>
<tr>
<td>Bundle height 25 mm</td>
<td>6.0</td>
<td>7.0</td>
<td>8.0</td>
<td>9.0</td>
<td>10.0</td>
<td>11.0</td>
<td>12.0</td>
</tr>
<tr>
<td>with punched holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bundle height 25 mm</td>
<td>6.0</td>
<td>8.0</td>
<td>10.0</td>
<td>11.0</td>
<td>12.0</td>
<td>13.0</td>
<td>14.0</td>
</tr>
<tr>
<td>with invisible punched holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bundle height 35 mm</td>
<td>5.0</td>
<td>6.0</td>
<td>7.5</td>
<td>8.5</td>
<td>9.5</td>
<td>10.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Bundle height 35 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with invisible punched holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Installation:

- Wall and ceiling installation with tension lever brackets
- Additional accessories p. 87
- Bracket quantity table p. 95

Subject to technical changes | Edition 09.2014
Venetian blinds | Crank handle

Models 09-1064, 09-1164, 09-4464, 09-1294

Model 09-1064 with 16 mm slats
Model 09-1164 with 25 mm slats
Model 09-4464* with 25 mm slats, invisible punched holes
Model 09-1294 with 35 mm slats

Crank gear in the upper rail, crank exit at front in case of Model 09-1064, 09-1164, hanging width corresponds to upper rail including gear. Crank exit vertical at the side in case of model 09-1294, hence upper rail 4.5 cm wider than the hanging. Extruded aluminium head rail with an inserted, colour matching 25 mm front slat. Lower rail made of extruded aluminium with slat in colour of the hanging inserted underneath. Slat colours according to the MHZ collection. Colour of cords and ladder cords match the slats.

Technical data

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>Model</th>
<th>Min. width</th>
<th>Max. width</th>
<th>Max. height</th>
<th>Max. surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>09-1064</td>
<td>above 36 cm</td>
<td>up to 45 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>above 45.1 cm</td>
<td>up to 280 cm</td>
<td>360 cm</td>
<td>9 m²</td>
<td></td>
</tr>
<tr>
<td>09-1164</td>
<td>above 36 cm</td>
<td>up to 45 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>above 45.1 cm</td>
<td>up to 380 cm</td>
<td>360 cm</td>
<td>9 m²</td>
<td></td>
</tr>
<tr>
<td>09-4464*</td>
<td>above 50 cm</td>
<td>up to 63.4 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>above 63.5 cm</td>
<td>up to 380 cm</td>
<td>360 cm</td>
<td>9 m²</td>
<td></td>
</tr>
<tr>
<td>09-1294</td>
<td>above 31 cm</td>
<td>up to 40 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>above 40.1 cm</td>
<td>up to 450 cm</td>
<td>360 cm</td>
<td>9 m²</td>
<td></td>
</tr>
</tbody>
</table>

Profiles:
- Head rail: width 29 mm, height 29 mm
- Bottom rail for 16 mm slats: width 21 mm, height 8.5 mm
- Bottom rail 25 + 35 mm slats: width 30 mm, height 10 mm

Hardware:
- 100 silver anodized (E6/EV1)
- 171 white powder-coated (RAL 9016)

Slats:
- Width 16, 25 and 35 mm, aluminium 0.22 mm, elastic, enamelled, see the collection for surfaces and colours. Detailed information can be found in the material properties brochure.

Operation:
- Lifting, lowering and tilting via crank handle. Hanging secured automatically. Operation side left or right. For Model 09-1294, crank exit is found on the side; the head rail is 4.5 cm wider than the hanging.

Optional equipment:
- Side guide, steel wire ø 1 mm, plastic coated
- Multicoloured hanging p. 90
- Surcharges p. 87
- Additional accessories p. 93
- * Invisible punched holes p. 91

Bundle heights:
<table>
<thead>
<tr>
<th>Unit height up to (cm)</th>
<th>50</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
<th>350</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundle height 16 mm slat approx. to (cm)</td>
<td>5.0</td>
<td>6.0</td>
<td>7.5</td>
<td>8.0</td>
<td>10.0</td>
<td>11.0</td>
<td>13.0</td>
</tr>
<tr>
<td>Bundle height 25 mm slat approx. to (cm)</td>
<td>5.0</td>
<td>6.0</td>
<td>7.0</td>
<td>7.5</td>
<td>8.5</td>
<td>9.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Bundle height 25 mm slat approx. to (cm) with invisible punched holes</td>
<td>6.0</td>
<td>8.0</td>
<td>10.0</td>
<td>11.0</td>
<td>12.0</td>
<td>13.0</td>
<td>14.0</td>
</tr>
<tr>
<td>Bundle height 35 mm slat approx. to (cm)</td>
<td>5.0</td>
<td>6.0</td>
<td>7.5</td>
<td>8.5</td>
<td>9.0</td>
<td>10.0</td>
<td>11.5</td>
</tr>
</tbody>
</table>

Installation:
- Wall and ceiling installation with tension lever brackets
- Additional accessories p. 87
- Bracket quantity table p. 95

Subject to technical changes | edition 09.2014
Venetian blinds | InLine

Models 09-1055, 09-1056, 09-1155, 09-1156

Specific to front mounting on the window sash of tilt/turn windows. L-shaped upper rail made of extruded aluminium, with 25 mm slats in the colour of the hanging inserted at the front side; hardware and hanging in the glazing rebate, directly in front of the pane. Chain operation, chain exit in front of the window frame. Standard equipment with side guide (nylon cord ø 0.6 mm). Lower rail made of extruded aluminium with slat in colour of the hanging inserted underneath. Slat colours according to MHZ collection. Cords and ladder cords colour-matched to slats. For safety tensioner installation see p. 116.

Technical data

Dimensions:

<table>
<thead>
<tr>
<th>Model</th>
<th>Min. width</th>
<th>Max. width</th>
<th>Max. height</th>
<th>Max. surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>09-1055,</td>
<td>37 cm</td>
<td>up to 50 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
</tr>
<tr>
<td>09-1056</td>
<td>50.1 cm</td>
<td>up to 250 cm</td>
<td>360 cm</td>
<td>4 m²</td>
</tr>
<tr>
<td>09-1155,</td>
<td>37 cm</td>
<td>up to 50 cm</td>
<td>180 cm</td>
<td>approx. 1 m²</td>
</tr>
<tr>
<td>09-1156</td>
<td>50.1 cm</td>
<td>up to 250 cm</td>
<td>360 cm</td>
<td>4 m²</td>
</tr>
</tbody>
</table>

Profiles:

- Head rail: width 29 mm, height 29 mm
- Cover profile: width 10 mm, height 54.5 mm
- Bottom rail: For 16 mm slats: width 21 mm, height 8.5 mm
- Bottom rail: For 25 mm slats: width 30 mm, height 10 mm

Hardware colour:

- 100 silver anodized (E6/EV1)
- 171 white powder-coated (RAL 9016)

Slats:

Width 16 and 25 mm, aluminium 0.22 mm, elastic, enamelled, see the collection for surfaces and colours. Detailed information can be found in the material properties brochure.

Operation:

Lifting, lowering and tilting via operation chain (transparent). Hanging secured automatically. Operation side left or right. Chain secured by chain retainer.

Note: Operation length from 50 cm - 150 cm in 10 cm steps,
operation length from 150 cm - 300 cm in 25 cm steps

Delivery with the exact or next smaller operation length.
Other operating lengths available on request at extra cost.

Optional equipment:

- Application of planetary gear 3:1 for larger unit dimensions;
  see highlighted section on p. 45–49.
- Multicoloured hanging p. 90
- Surcharges p. 87
- Additional accessories p. 93

Bundle heights:

<table>
<thead>
<tr>
<th>Unit height up to (cm)</th>
<th>50</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
<th>350</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundle height 16 mm slat approx. to (cm)</td>
<td>7.5</td>
<td>8.5</td>
<td>10.0</td>
<td>11.5</td>
<td>13.0</td>
<td>14.5</td>
<td>16.0</td>
</tr>
<tr>
<td>Bundle height 25 mm slat approx. to (cm)</td>
<td>7.5</td>
<td>8.5</td>
<td>9.5</td>
<td>10.5</td>
<td>11.0</td>
<td>12.0</td>
<td>13.0</td>
</tr>
</tbody>
</table>

Installation:

Front installation, directly on the window sash. For glazing bead depth of less than 22 mm, use 5 mm spacer (installation kit); p. 96.
Venetian blinds | MINI

Models 09-1091, 09-1191, 09-4491, 09-1291

Model 09-1091 with 16 mm slats
Model 09-1191 with 25 mm slats
Model 09-4491* with 25 mm slats, invisible punched holes
Model 09-1291 with 35 mm slats

Slat tilting with wand, opening and the closing of the hanging with pull cord. Pull cord exit and tilt rod at the front. Flat, extruded aluminium head and bottom rail. Bottom rail with an inserted, colour matching slat. Slat colours according to the MHZ collection. Colour of cords and ladder cords match the slats. With safety tassel and cord cleat p. 116.

Technical data

Dimensions:

<table>
<thead>
<tr>
<th>Model</th>
<th>Min. width</th>
<th>Max. width</th>
<th>Max. height</th>
<th>Max. surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>09-1091</td>
<td>above 33 cm</td>
<td>up to 180 cm</td>
<td>300 cm</td>
<td>approx. 5 m²</td>
</tr>
<tr>
<td>09-1191</td>
<td>above 33 cm</td>
<td>up to 260 cm</td>
<td>300 cm</td>
<td>approx. 5 m²</td>
</tr>
<tr>
<td>09-4491*</td>
<td>above 33 cm</td>
<td>up to 260 cm</td>
<td>300 cm</td>
<td>approx. 5 m²</td>
</tr>
<tr>
<td>09-1291</td>
<td>above 45 cm</td>
<td>up to 270 cm</td>
<td>300 cm</td>
<td>approx. 5 m²</td>
</tr>
</tbody>
</table>

Profiles:

- Head rail: width 27 mm, height 16 mm
- Bottom rail for 16 mm slats: width 21 mm, height 8.5 mm
- Bottom rail 25 + 35 mm slats: width 30 mm, height 10 mm

Hardware colour:

- 100 silver anodized (E6/EV1)
- 171 white powder-coated (RAL 9016)

Slats:

- Width 16, 25 and 35 mm, aluminium 0.22 mm, elastic, enamelled, see the collection for surfaces and colours. Detailed information can be found in the material properties brochure.

Operation:

- Hanging is lifted and lowered with a pull cord, secured in position by the cord connector. Slat tilting with wand (acrylic). Operation side left or right. Tilt rod up to 3 m² unit surface without handle element, above 3 m² unit surface with handle element.

<table>
<thead>
<tr>
<th>Unit height (cm)</th>
<th>50</th>
<th>75-100</th>
<th>100-125</th>
<th>125-150</th>
<th>150-175</th>
<th>175-200</th>
<th>200-250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pull cord / Wand length (cm)</td>
<td>50</td>
<td>75</td>
<td>100</td>
<td>125</td>
<td>150</td>
<td>175</td>
<td>200</td>
</tr>
</tbody>
</table>

Other wand lengths available on request at extra cost.

Optional equipment:

- Side guide, steel wire ø 1 mm, plastic coated
- Multicoloured hanging p. 90
- Surcharges p. 87, additional accessories p. 93
- * Invisible punched holes p. 91

Bundle heights:

<table>
<thead>
<tr>
<th>Bundle height up to (cm)</th>
<th>50</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 mm slat approx. to (cm)</td>
<td>4.0</td>
<td>5.0</td>
<td>6.0</td>
<td>8.0</td>
<td>9.5</td>
<td>11.0</td>
</tr>
<tr>
<td>25 mm slat approx. to (cm)</td>
<td>4.0</td>
<td>5.0</td>
<td>6.0</td>
<td>6.5</td>
<td>7.5</td>
<td>8.5</td>
</tr>
<tr>
<td>25 mm slat approx. to (cm) with invisible punched holes</td>
<td>5.0</td>
<td>6.5</td>
<td>8.5</td>
<td>9.0</td>
<td>10.0</td>
<td>10.5</td>
</tr>
</tbody>
</table>

Installation:

- Wall and ceiling installation with tension lever brackets
- Additional accessories p. 87
- Bracket quantity table p. 95
Venetian blinds | 50 mm Interior blinds

Models 09-1353, 09-1354, 09-1355

Model 09-1353 with 50 mm slats, chain operation
Model 09-1354 with 50 mm slats, Crank handle
Model 09-1355 with 50 mm slats, Electric drive 230 V

Upper and lower rail made of aluminium. Slat colours according to the MHZ collection. Lifting tapes in grey and white, ladder cords in white or grey, matched to the slat colour. With safety tensioner system (only 09-1353) p. 116.

Technical data

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>Model</th>
<th>Min. width</th>
<th>Max. width</th>
<th>Max. height</th>
<th>Max. surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>09-1353</td>
<td>above 46 cm</td>
<td>up to 450 cm</td>
<td>450 cm</td>
<td>approx. 8 m²</td>
<td></td>
</tr>
<tr>
<td>09-1354</td>
<td>above 46 cm</td>
<td>up to 450 cm</td>
<td>450 cm</td>
<td>approx. 16 m²</td>
<td></td>
</tr>
<tr>
<td>09-1355</td>
<td>above 68.5 cm</td>
<td>up to 450 cm</td>
<td>450 cm</td>
<td>approx. 20 m²</td>
<td></td>
</tr>
</tbody>
</table>

Profiles:
- Head rail: Width 59 mm, height 53/56 mm
- Bottom rail: width 52 mm, height 20 mm

Hardware
- Colour: 100 silver anodized (E6/EV1)
- 171 white powder-coated (RAL 9016)

Slats:
- Width 50 mm, aluminium 0.28 mm, elastic, enamelled, see the collection for surfaces and colours. Detailed information can be found in the material properties brochure.

Operation:
- Model 09-1353: Lifting (front chain), lowering and tilting with operation chain (transparent). Curtain latches automatically. Operation side left or right. Chain secured by safety tensioner.
- Note: Operation length from 50 cm – 150 cm in 10 cm steps, operation length from 150 cm – 300 cm in 25 cm steps. Delivery with the exact or next smaller operation length. Other operating lengths available on request at extra cost.
- Model 09-1354: Lifting, lowering and tilting via crank handle (can be removed if desired, at extra cost). Crank exit at the front, 54 mm from the outside. Hanging secured automatically. Operation side left or right. Crank handle secured via crank clip.
- Unit height (cm) 50-75 75-100 100-125 125-150 150-175 175-200 200-250 250-300 > 300
- Operating length (cm) 50 75 100 125 150 175 200 250 300

Model 09-1355: Lifting, lowering and tilting via 230 V electric drive (cable length approx. 90 cm) integrated on the side or in the middle of the head rail, with adjusted end position switch-off. Various control options due to switch, radio remote control, sun control or timer. Electric accessories and prices p. 100.

Optional equipment:
- Side guide, steel wire ø 1 mm, plastic coated
- Leader tapes
- Multicoloured hanging p. 90
- Surcharges p. 87
- Additional accessories p. 93

Bundle heights:
- Unit height up to (cm) 50 100 150 200 250 300 400 450
- Bundle height up to approx. (cm) 10.0 11.0 12.0 14.0 15.0 16.0 17.5 19.0 20.0

Installation:
- Installation with wall and ceiling brackets.
- Additional installation accessories p. 87
- Bracket quantity table p. 95
Venetian blinds | Special shapes MINI

Models 09-6191, 09-8111, 09-8112

Model 09-6191 with 25 mm slats for sloping windows up to 45°
Model 09-8111 with 25 mm slats for pentagon windows up to 45°
Model 09-8112 with 25 mm slats for triangular windows up to 30°

Slat tilting with wand, opening and the closing of the hanging with pull cord only in the rectangular area. Pull cord exit and tilt rod at the front. Flat, extruded aluminium head and bottom rail. Bottom rail with an inserted, colour matching slat. Slat colours according to the MHZ collection. Colour of cords and ladder cords match the slats. With safety tassel and cord cleat p. 116.

Technical data

Dimensions:

<table>
<thead>
<tr>
<th>Model</th>
<th>Min. width</th>
<th>Max. width</th>
<th>Max. height</th>
<th>Max. surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>09-6191</td>
<td>above 33 cm</td>
<td>up to 250 cm</td>
<td>300 cm</td>
<td>approx. 4 m²</td>
</tr>
<tr>
<td>09-8111</td>
<td>above 33 cm</td>
<td>up to 250 cm</td>
<td>300 cm</td>
<td>approx. 4 m²</td>
</tr>
<tr>
<td>09-8112</td>
<td>above 33 cm</td>
<td>up to 250 cm</td>
<td>300 cm</td>
<td>approx. 4 m²</td>
</tr>
</tbody>
</table>

Profiles:

Head rail: width 27 mm, height 16 mm
Bottom rail: width 30 mm, height 10 mm

Hardware colour:

100 silver anodized (E6/EV1)
171 white powder-coated (RAL 9016)

Slats:

Width 25 mm, aluminium 0.22 mm, elastic, enamelled, see the collection for surfaces and colours. Detailed information can be found in the material properties brochure.

Operation:

Lifting and lowering of the rectangular area with pull cord, secured in position via cord connector. Slat tilting with tilt rod (acrylic). Tilt rod up to 3 m² unit surface without handle element, above 3 m² unit surface with handle element.

Operation side only at the lowest height.

<table>
<thead>
<tr>
<th>Unit height (cm)</th>
<th>50</th>
<th>75</th>
<th>100</th>
<th>125</th>
<th>150</th>
<th>175</th>
<th>200</th>
<th>250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating length Cord / Wand (cm)</td>
<td>50</td>
<td>75</td>
<td>100</td>
<td>125</td>
<td>150</td>
<td>175</td>
<td>200</td>
<td>240</td>
</tr>
</tbody>
</table>

Other wand lengths available on request at extra cost.

Optional equipment:

- Side guide, steel wire ø 1 mm, plastic coated
- Multicoloured hanging p. 90
- Surcharges p. 87
- Additional accessories p. 93

Installation:

- Wall and ceiling installation with tension lever brackets
- Additional installation accessories p. 87
- Bracket quantity table p. 95

Subject to technical changes | edition 09.2014

113
**Venetian blinds | Partition walls**

**Models 09-7118, 09-4418***

**Model 09-7118** with 25 mm slats, Rotary knob operation
**Model 09-4418*** with 25 mm slats, Rotary knob operation, invisible punched holes

Fixed hanging, slat tilting with rotary knob, 2 perforations per slat for slat mount. Extruded aluminium head rail with an inserted, colour matching 25 mm front slat. Lower rail made of extruded aluminium with slat in colour of the hanging inserted underneath. Slat colours according to the MHZ collection. Colour of cords and ladder cords match the slats.

### Technical data

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>Model</th>
<th>Min. width</th>
<th>Max. width</th>
<th>Max. height</th>
<th>Max. surface</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>09-7118</td>
<td>above 37.5 cm</td>
<td>up to 210 cm</td>
<td>300 cm</td>
<td>approx. 4 m²</td>
</tr>
<tr>
<td></td>
<td>09-4418*</td>
<td>above 37.5 cm</td>
<td>up to 210 cm</td>
<td>300 cm</td>
<td>approx. 4 m²</td>
</tr>
</tbody>
</table>

**Profiles:**
- Head rail: width 29 mm, height 29 mm
- Bottom rail: width 30 mm, height 10 mm

**Hardware colour:**
- 100 silver anodized (E6/EV1)
- 171 white powder-coated (RAL 9016)

**Slats:**
- Width 25 mm, aluminium 0.22 mm, elastic, enamelled, see the collection for surfaces and colours.
- Detailed information can be found in the material properties brochure.

**Operation:**
- Rotary knob on the frame for slat tilting.
- Flexible shaft between rotary knob and head rail (150 cm, can be cut to length).
- Rotary knob on left or right.

**Optional equipment:**
- Side guide, steel wire ø 1 mm, plastic coated
- Multicoloured hanging p. 90
- Surcharges p. 87
- Additional accessories p. 93
- * Invisible punched holes p. 91

**Installation:**
- Ceiling fitting with tension lever brackets
- Additional installation accessories p. 87
- Bracket quantity table p. 95
## Technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>Min. width</th>
<th>Max. width</th>
<th>Max. height</th>
<th>Max. surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>09–3118</td>
<td>above 30 cm</td>
<td>up to 120 cm</td>
<td>160 cm</td>
<td>approx. 1.9 m²</td>
</tr>
<tr>
<td>09–3218</td>
<td>above 30 cm</td>
<td>up to 160 cm</td>
<td>160 cm</td>
<td>approx. 2.4 m²</td>
</tr>
<tr>
<td>09–3115</td>
<td>above 30 cm</td>
<td>up to 120 cm</td>
<td>160 cm</td>
<td>approx. 1.9 m²</td>
</tr>
<tr>
<td>09–3215</td>
<td>above 30 cm</td>
<td>up to 160 cm</td>
<td>160 cm</td>
<td>approx. 2.4 m²</td>
</tr>
</tbody>
</table>

### Model 09–3118
- 25 mm slats, Rotary knob for slat tilting

### Model 09–3218
- 35 mm slats, Rotary knob for slat tilting

### Model 09–3115
- 25 mm slats, Tilting motor for slat tilting

### Model 09–3215
- 35 mm slats, Tilting motor for slat tilting

Hanging movable by operable lower rail. With side guiding profiles. Slat tilting by means of rotary knob or tilting motor with infrared remote control. All profiles made of extruded aluminium. Slat colours according to the MHZ collection. Note: For technical reasons the MHZ Skylight Blind is not suitable for the following window models: BRAAS Atelier, DELTA Galeria Atelier/Smart, DÖRKEN Atelier/Galeria Smart.

### Hardware colour:
- 100 silver anodized (E6/EV1)
- 171 white powder-coated (RAL 9016)

### Slats:
- Width 25 and 35 mm, aluminium 0.22 mm, elastic, enamelled, see the collection for surfaces and colours. Detailed information can be found in the material properties brochure. Perforated slats not available.

### Operation:
- Hanging can be adjusted via the bottom rail. Bottom rail secured in desired position.

#### Models 09–3118, 09–3218:
- Slat tilting via rotary knob at the head rail, on left or right. Operation rod can be used to operate rotary knob for difficult to reach units.

#### Models 09–3115, 09–3215:
- Slat tilting via battery-operated tilting motor and infrared remote control.

### Optional equipment:
- Operation rod with tilting adapter
- Infrared remote control for Model 09–3115 and 09–3215
- Multicoloured hanging p. 90
- Surcharges p. 87
- Additional accessories p. 93

### Installation:
- Installation with universal plastic brackets (depending on the skylight model); p. 95.