

R_03 roller blind technical data



04-3302 bracket | operating chain
Page 116-117



04-3303 bracket | Soft
Page 118-119



04-3304 bracket | electric drive
Page 120-121



04-3305 bracket | battery-operated radio drive
Page 122-123



04-3342 cassette | operating chain
Page 124-125



04-3352 cassette | operating chain
side guide profile
Page 126-127



04-3343 cassette | Soft
Page 128-129



04-3344 cassette | electric drive
Page 130-131



04-3354 cassette | electric drive
side guide profile
Page 132-133



04-3345 cassette | battery-operated radio drive
Page 134-135



04-3355 cassette | battery-operated radio drive
side guide profile
Page 136-137



04-3346 cassette | crank
Page 138-139

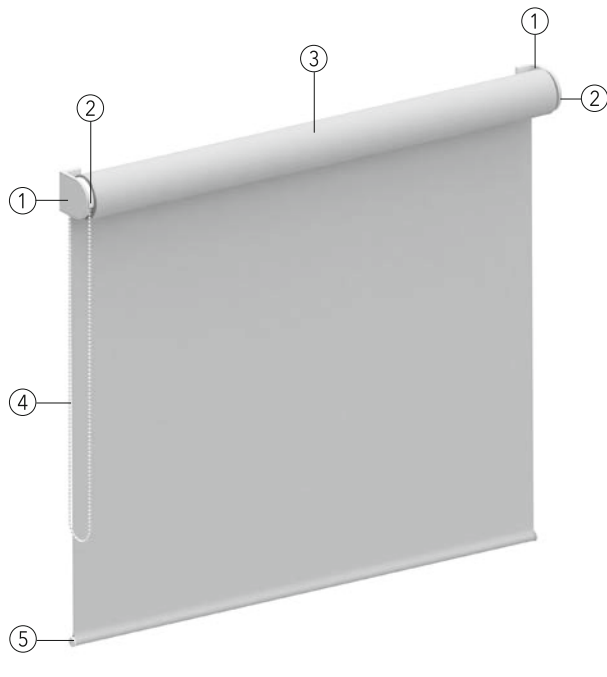


04-3356 cassette | crank
side guide profile
Page 140-141

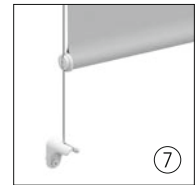
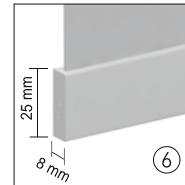
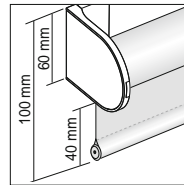
Technical data

04-3302 R_03 bracket | operating chain

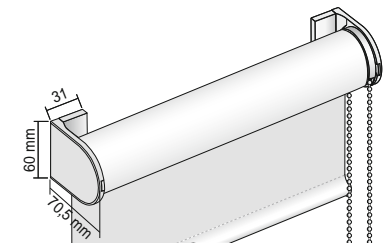
Hardware



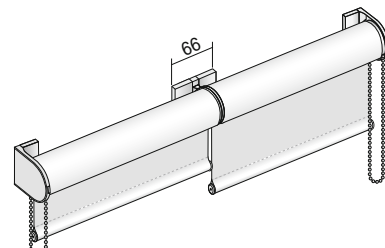
- ① Basic bracket
- ② Clamp
- ③ Roller blind tube with fabric
- ④ Child safety bead chain
- ⑤ Internal weighted rod
- ⑥ External weighted rod, square
- ⑦ Side guide



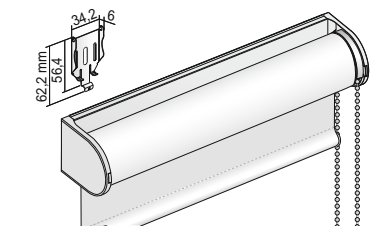
Installation options



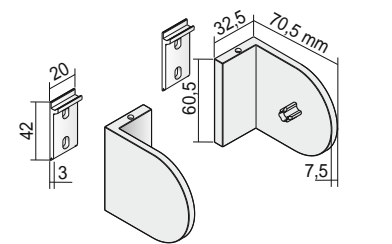
Wall/ceiling installation with bracket



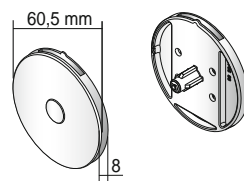
Bracket mounting of non-linked blind fabric (2 drives)



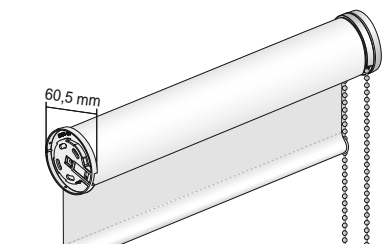
Wall/ceiling installation with mounting rail and clip



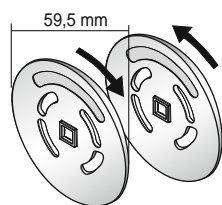
Aluminium wall bracket



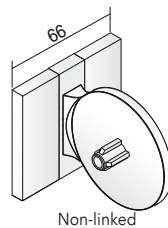
Mount, adjustable, for bracket/mounting rail bracket, adjustable



Bracket for recess installation



Compensating shim for recess installation with angle specification, 1 x 2.5°, 2 x 5°, size can be adjusted by 3.5 mm



Centre bracket for non-linked blind fabric

04-3302 R_03 bracket | operating chain

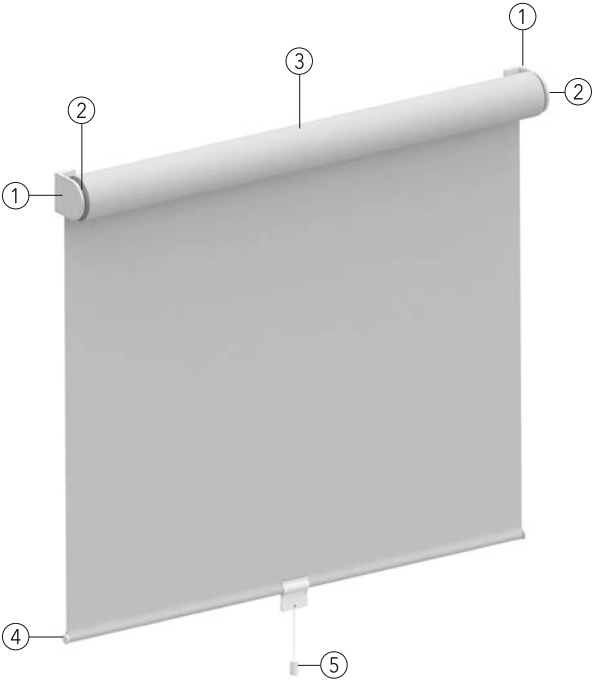
Technical data

Model:	04-3302																									
Operation options:	- Operating chain																									
Equipment:	- Bracket																									
Description:	<p>Operating chain: Chain operation roller blind with integrated smooth-running chain gear and spring support, depending on the blind fabric weight. Chain sprocket cover and brake, adjustable top end position, transparent child safety bead chain. Extruded aluminium roller blind tube, Ø 27.4 mm up to width 180 cm, Ø 40 mm up to width 280 cm. Internal steel tube weighted rod Ø 12 mm, white-coated.</p> <p>Optional: Non-linked blind fabric</p>																									
Hardware colours:	172 white (RAL 9016) 611 anthracite grey (RAL 7016) 651 anthracite (DB 703)	671 black (RAL 9005) 901 silver coloured (RAL 9006)																								
	All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request.																									
Dimensions:	<table border="1"> <thead> <tr> <th rowspan="2">Operation/Function</th> <th colspan="3">Blind unit sizes</th> </tr> <tr> <th>Min. width</th> <th>Max. width</th> <th>Max. height</th> </tr> </thead> <tbody> <tr> <td>Operating chain with safety breaking system</td> <td>From 19 cm</td> <td>Up to 280 cm</td> <td>300 cm*</td> </tr> <tr> <td>Metal chain/operation chain without safety breaking system/antibacterial operating chain</td> <td>From 19 cm</td> <td>Up to 280 cm</td> <td>300 cm</td> </tr> <tr> <td>Operating chain with safety breaking system Non-linked blind fabric</td> <td>From 40 cm</td> <td>Up to 2 x 280 cm</td> <td>300 cm*</td> </tr> <tr> <td>Metal chain/operation chain without safety breaking system/antibacterial operating chain Non-linked blind fabric</td> <td>From 40 cm</td> <td>Up to 2 x 280 cm</td> <td>300 cm</td> </tr> </tbody> </table> <p style="text-align: right;">* From 250.1 cm with operation chain without safety breaking system/metal chain only</p>			Operation/Function	Blind unit sizes			Min. width	Max. width	Max. height	Operating chain with safety breaking system	From 19 cm	Up to 280 cm	300 cm*	Metal chain/operation chain without safety breaking system/antibacterial operating chain	From 19 cm	Up to 280 cm	300 cm	Operating chain with safety breaking system Non-linked blind fabric	From 40 cm	Up to 2 x 280 cm	300 cm*	Metal chain/operation chain without safety breaking system/antibacterial operating chain Non-linked blind fabric	From 40 cm	Up to 2 x 280 cm	300 cm
Operation/Function	Blind unit sizes																									
	Min. width	Max. width	Max. height																							
Operating chain with safety breaking system	From 19 cm	Up to 280 cm	300 cm*																							
Metal chain/operation chain without safety breaking system/antibacterial operating chain	From 19 cm	Up to 280 cm	300 cm																							
Operating chain with safety breaking system Non-linked blind fabric	From 40 cm	Up to 2 x 280 cm	300 cm*																							
Metal chain/operation chain without safety breaking system/antibacterial operating chain Non-linked blind fabric	From 40 cm	Up to 2 x 280 cm	300 cm																							
	<p>Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing. If in doubt, please enquire in advance. For recess installation: Width = recess dimension - 2 mm.</p>																									
Fabrics:	<p>See MHZ Collection. MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top. Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.</p>																									
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.																									
Additional equipment:	<ul style="list-style-type: none"> - Antibacterial operating chain - Transparent plastic chain with black cord (standard with 611 and 671) - Metal chain/operation chain without safety breaking system (with safety tensioner) - External aluminium weighted rod (172, 611, 651, 671, 901): square, 8 x 25 mm - Mounting rail with clip - Recess bracket (172, 651, 901) - Side guide only for internal weighted rod and single units - Non-linked blind fabric - Bracket/mounting rail bracket and sun protection carrier - Aluminium wall bracket 																									
Non-linked blind fabric:	The two roller blinds are calculated individually according to size and PG plus the specified surcharge. Light gap of 1.6 cm between the blind fabrics. Not for mounting rail.																									
Installation:	<table border="1"> <thead> <tr> <th>Bracket:</th> <th>Mounting rail:</th> <th>Recess installation:</th> </tr> </thead> <tbody> <tr> <td>- Bracket for wall and ceiling installation</td> <td>- Mounting clip for wall and ceiling installation</td> <td>- Bracket for recess installation</td> </tr> <tr> <td>- Clamp bracket</td> <td>- Up to 100 cm width: 2 clips</td> <td>- Size can be adjusted by 3.5 mm with 2 compensating shims or 2.5° per compensating shim</td> </tr> <tr> <td>- Extension pieces for larger wall clearances</td> <td>- Up to 200 cm width: 4 clips</td> <td></td> </tr> <tr> <td></td> <td>- Up to 250 cm width: 5 clips</td> <td></td> </tr> <tr> <td></td> <td>- Up to 280 cm width: 6 clips</td> <td></td> </tr> </tbody> </table>	Bracket:	Mounting rail:	Recess installation:	- Bracket for wall and ceiling installation	- Mounting clip for wall and ceiling installation	- Bracket for recess installation	- Clamp bracket	- Up to 100 cm width: 2 clips	- Size can be adjusted by 3.5 mm with 2 compensating shims or 2.5° per compensating shim	- Extension pieces for larger wall clearances	- Up to 200 cm width: 4 clips			- Up to 250 cm width: 5 clips			- Up to 280 cm width: 6 clips								
Bracket:	Mounting rail:	Recess installation:																								
- Bracket for wall and ceiling installation	- Mounting clip for wall and ceiling installation	- Bracket for recess installation																								
- Clamp bracket	- Up to 100 cm width: 2 clips	- Size can be adjusted by 3.5 mm with 2 compensating shims or 2.5° per compensating shim																								
- Extension pieces for larger wall clearances	- Up to 200 cm width: 4 clips																									
	- Up to 250 cm width: 5 clips																									
	- Up to 280 cm width: 6 clips																									
Operation:	Transparent operating chain with safety breaking system, metal chain or operation chain without safety breaking system/antibacterial operation chain without safety breaking system (endless chain) with safety tensioner. Chain gear and spring support adapted to the blind unit size and blind fabric weight.																									
Operation lengths:	Operation length from 50 cm to 150 cm in 10 cm increments, operation length from 150.1 cm to 300 cm in 25 cm increments. Delivery with the exact or next smaller operation length. Other operation lengths available on request (surcharge applies).																									
Child safety:	Please see the note on page 185.																									

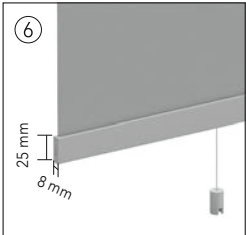
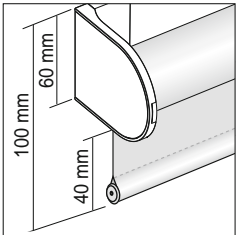
Technical data

04-3303 R_03 bracket | Soft

Hardware



- ① Basic bracket
- ② Clamp
- ③ Roller blind tube with fabric
- ④ Internal weighted rod
- ⑤ Operating tassel
- ⑥ External weighted rod, square



Technical data

Model: 04-3303

Operation options: - Central pull cord with Soft drive

Equipment: - Bracket

Description: Central pull cord roller blind with internal spring drive with adjustable constant roll-up speed and adjustable end stop, extruded aluminium roller blind tube, Ø 27.4 mm up to width 140 cm, Ø 40 mm up to width 200 cm.
Release the lock by pulling the operating tassel briefly. Internal steel tube weighted rod Ø 12 mm, white-coated.
Optional: Non-linked blind fabric

Hardware colours:

172 white (RAL 9016)	671 black (RAL 9005)
611 anthracite grey (RAL 7016)	901 silver coloured (RAL 9006)
651 anthracite (DB 703)	

All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request.

Dimensions:	Operation/Function	Blind unit sizes		
		Min. width	Max. width	Max. height
Central pull cord		From 64 cm	Up to 75.4 cm	165 cm
		From 75.5 cm	Up to 200 cm	250 cm
Non-linked blind fabric		From 128 cm	Up to 2 x 75.4 cm	165 cm
		From 2 x 75.5 cm	Up to 2 x 200 cm	250 cm

Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing.
If in doubt, please enquire in advance. For recess installation: Width = recess dimension - 2 mm.

Fabrics: See MHZ Collection.
MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top.
Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.

Fabric size: See page 160-161 for precise information on how to calculate the fabric size.

Additional equipment:

- External aluminium weighted rod (172, 611, 651, 671, 901): square, 8 x 25 mm
- Mounting rail with clip
- Recess bracket (172, 651, 901)
- Non-linked blind fabric
- Bracket/mounting rail bracket and sun protection carrier
- Aluminium wall bracket

Non-linked blind fabric: The two roller blinds are calculated individually according to size and PG plus the specified surcharge.
Light gap of 1.6 cm between the blind fabrics.

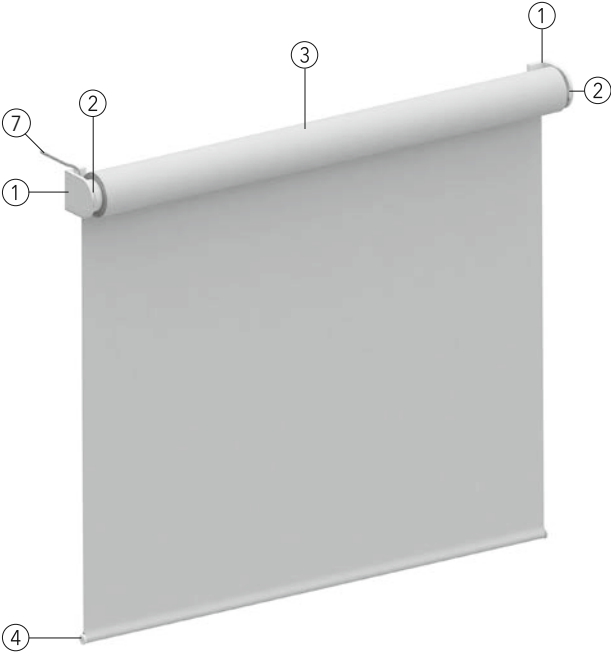
Installation:	Bracket:	Mounting rail:	Recess installation:
	- Bracket for wall and ceiling installation	- Mounting clip for wall and ceiling installation	- Bracket for recess installation
	- Clamp bracket	- Up to 100 cm width: 3 clips	- Size can be adjusted by 3.5 mm with 2 compensating shims or 2.5° per compensating shim
	- Extension pieces for larger wall clearances	- Up to 200 cm width: 4 clips	

Operation lengths: Operation length of 20 cm according to DIN EN 13120, operation length of 80 cm on request.
Other operation lengths available on request (surcharge applies).

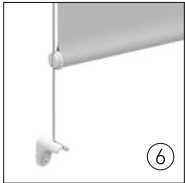
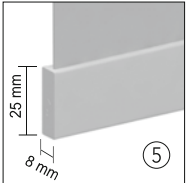
Child safety: Operation length of central pull cord: Unless otherwise specified by specialists, units are manufactured with an operation length of 20 cm.

04-3304 R_03 bracket | electric drive

Hardware



- ① Basic bracket
- ② Clamp
- ③ Roller blind tube with fabric
- ④ Internal weighted rod
- ⑤ External weighted rod, square
- ⑥ Side guide
- ⑦ Cable



04-3304 R_03 bracket | electric drive

Technical data

Model:	04-3304	
Operation options:	- PowerView® radio drive 18 V - Radio/electric drive 24 V	- PowerView® radio drive 230 V - Radio/electric drive 230 V
Equipment:	- Bracket	
Description:	<p>Electric roller blind 18 V with M25T PV 18 V radio electric drive and integrated radio receiver, various control options, smart home compatible.</p> <p>Electric roller blind 24 V with Roll Up 28 WT drive, with adjustable final position switch-off, extruded aluminium roller blind tube Ø 29 mm up to width 180 cm; with Sonesse 30 DCT drive extremely low noise and with adjustable final position switch-off or with Sonesse 30 RTS drive with integrated radio receiver, extremely low noise and with adjustable final position switch-off, extruded aluminium roller blind tube ø 40 mm up to width 280 cm. Internal steel tube weighted rod Ø 12 mm, white-coated.</p> <p>Electric roller blind 230 V with M40T PV 330 radio electric drive and integrated radio receiver, various control options, smart home compatible.</p> <p>Electric roller blind 230 V with LS 40 WT drive with adjustable final position switch-off; with Sonesse 40 WT drive extremely low noise, with adjustable final position switch-off; with Sonesse 40 RTS drive with integrated radio receiver, extremely low noise and with adjustable final position switch-off; with Altus 40 RTS with integrated radio receiver, with adjustable final position switch-off. Aluminium roller blind tube, Ø 44 mm up to width 280 cm, extruded. Internal steel tube weighted rod Ø 12 mm, white-coated.</p> <p>Electrical accessories and various control options, with relevant actuators suitable for BUS systems, see the separate Electrical Price List.</p> <p>Optional: Non-linked blind fabric</p>	
Hardware colours:	172 white (RAL 9016) 611 anthracite grey (RAL 7016) 651 anthracite (DB 703)	671 black (RAL 9005) 901 silver coloured (RAL 9006)
	All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request.	

Dimensions:	Operation/Function	Blind unit sizes		
		Min. width	Max. width	Max. height
	Radio drive 18 V, M25T PV 18 V	From 38 cm	Up to 280 cm	300 cm
	Electric drive 24 V, Roll Up 28 WT	From 38 cm	Up to 180 cm	280 cm
	Radio drive 24 V, Sonesse 30 DCT, Sonesse 30 RTS	From 54 cm	Up to 280 cm	300 cm
	Radio drive 230 V, M40T PV 330	From 70 cm	Up to 280 cm	300 cm
	Electric drive 230 V, Sonesse 40 WT, LS 40 WT	From 56 cm	Up to 280 cm	300 cm
	Radio drive 230 V, Sonesse 40 RTS, Altus 40 RTS	From 60 cm	Up to 280 cm	300 cm
	Radio drive 230 V, Sonesse 40 io	From 60 cm	Up to 280 cm	300 cm
	Non-linked blind fabric	2 x min. width electric drive	Up to 2 x 280 cm	300 cm

Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing.
If in doubt, please enquire in advance. For recess installation: Width = recess dimension - 2 mm.

Fabrics: See MHZ Collection.
MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top.
Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.

Fabric size: See page 160-161 for precise information on how to calculate the fabric size.

Additional equipment:

- External aluminium weighted rod (172, 611, 651, 671, 901): square, 8 x 25 mm
- Mounting rail with clip
- Recess bracket (172, 651, 901)
- Side guide only for internal weighted rod and single units
- Non-linked blind fabric
- Bracket/mounting rail bracket and sun protection carrier. Not suitable for PowerView®.
- Aluminium wall bracket (not suitable for PowerView®)

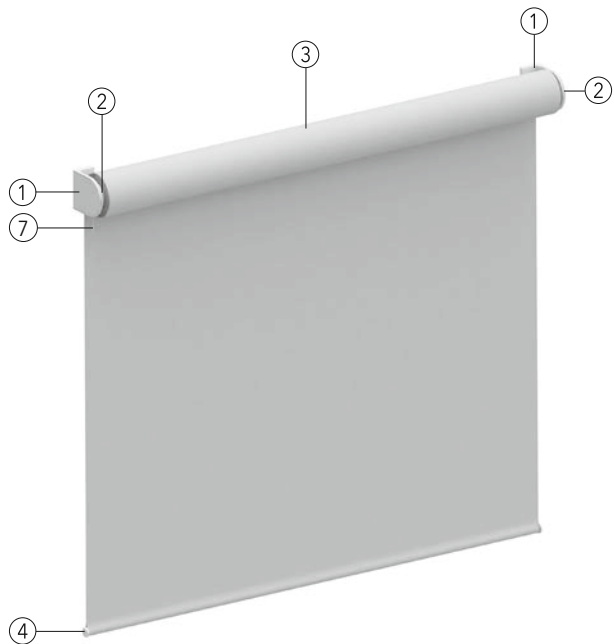
Non-linked blind fabric: The two roller blinds are calculated individually according to size and PG plus the specified surcharge.
Light gap of 1.6 cm between the blind fabrics. Not for mounting rail.

Installation:	Bracket mounting:	Mounting rail:	Recess installation:
	<ul style="list-style-type: none"> - Bracket for wall and ceiling installation - Clamp bracket - Extension pieces for larger wall clearances 	<ul style="list-style-type: none"> - Mounting clip for wall and ceiling installation - Up to 100 cm width: 2 clips - Up to 200 cm width: 4 clips - Up to 250 cm width: 5 clips - Up to 280 cm width: 6 clips 	<ul style="list-style-type: none"> - Bracket for recess installation - Size can be adjusted by 3.5 mm with 2 compensating shims or 2.5° per compensating shim

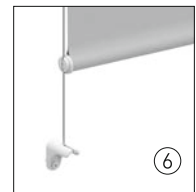
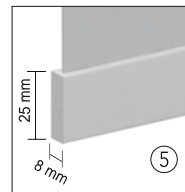
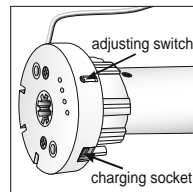
Technical data

04-3305 R_03 bracket | battery-operated radio drive

Hardware

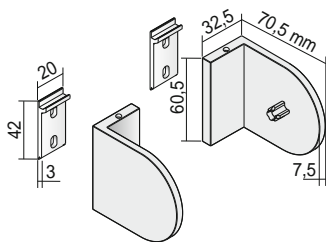


- ① Basic bracket
- ② Clamp
- ③ Roller blind tube with fabric
- ④ Internal weighted rod
- ⑤ External weighted rod, square
- ⑥ Side guide
- ⑦ Antenna

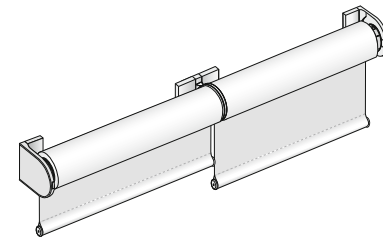


Installation options

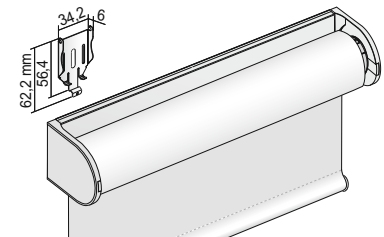
Wall/ceiling installation with bracket



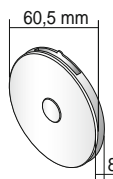
Aluminium wall bracket.
Not suitable for PowerView®.



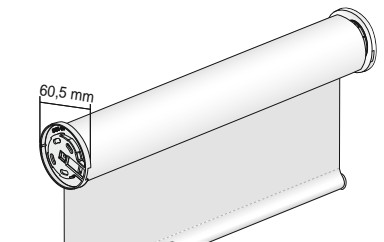
Bracket mounting of non-linked blind fabric
(2 drives)



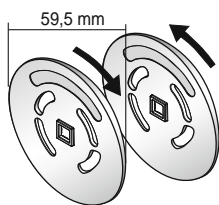
Wall/ceiling installation
with mounting rail and clip



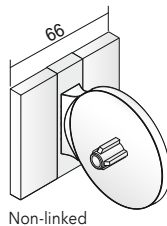
Mount, adjustable, for bracket/mounting rail
bracket, adjustable



Bracket for recess installation



Compensating shim for recess installation with
angle specification, 1 x 2.5°, 2 x 5°, size can be
adjusted by 3.5 mm



Centre bracket for non-linked blind fabric

04-3305 R_03 bracket | battery-operated radio drive

Technical data

Model: 04-3305

Operation options:
 - Battery-operated radio drive 12 V
 - PowerView® battery-operated radio drive 18 V

Equipment: - Bracket

Description:
 Battery-operated roller blind 12 V with integrated radio receiver and adjustable final position switch-off. Extruded aluminium roller blind tube, Ø 40 mm. Internal steel tube weighted rod Ø 12 mm, white-coated.
 Battery-operated roller blind 18 V with M25T PV 18 V radio electric drive and integrated radio receiver, various control options, smart home compatible (external rechargeable battery installation with PowerView® 18 V).
 For electrical accessories, see the separate MHZ Electrical Accessories Price List.
 Optional: Non-linked blind fabric

Hardware colours:
 172 white (RAL 9016) 671 black (RAL 9005)
 611 anthracite grey (RAL 7016) 901 silver coloured (RAL 9006)
 651 anthracite (DB 703)

All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request.

Dimensions:	Operation/Function	Blind unit sizes			
		Min. width	Max. width	Max. height	Max. blind fabric weight*
	Battery-operated radio drive 12 V, Roll Up 28 RTS	From 57.5 cm	Up to 200 cm	200 cm	2 kg
	Battery-operated radio drive 12 V, Sonesse 30 Ultra RTS	From 72 cm	Up to 280 cm	300 cm	3 kg
	Battery-operated radio drive 18 V, M25T PV 18 V	From 38 cm	Up to 280 cm	300 cm	3 kg
	Non-linked blind fabric	From 110 cm	Up to 2 x 280 cm	300 cm	2 x 3 kg

Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing.
 If in doubt, please enquire in advance. For recess installation: Width = recess dimension - 2 mm.

Fabrics: See MHZ Collection.
 MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top.
 Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.

Fabric size: See page 160-161 for precise information on how to calculate the fabric size.

Additional equipment:
 - External aluminium weighted rod (172, 611, 651, 671, 901): square, 8 x 25 mm
 - Mounting rail with clip
 - Recess bracket (172, 651, 901)
 - Side guide only for internal weighted rod and single units
 - Non-linked blind fabric
 - Bracket/mounting rail bracket and sun protection carrier. Not suitable for PowerView®.
 - Aluminium wall bracket (not suitable for PowerView®)

Non-linked blind fabric: The two roller blinds are calculated individually according to size and PG plus the specified surcharge. Light gap of 1.6 cm between the blind fabrics. Not for mounting rail.

Installation:	Bracket mounting:	Mounting rail:	Recess installation:
		- Bracket for wall and ceiling installation - Clamp bracket - Extension pieces for larger wall clearances	- Mounting clip for wall and ceiling installation - Up to 100 cm width: 2 clips - Up to 200 cm width: 4 clips - Up to 250 cm width: 5 clips - Up to 280 cm width: 6 clips

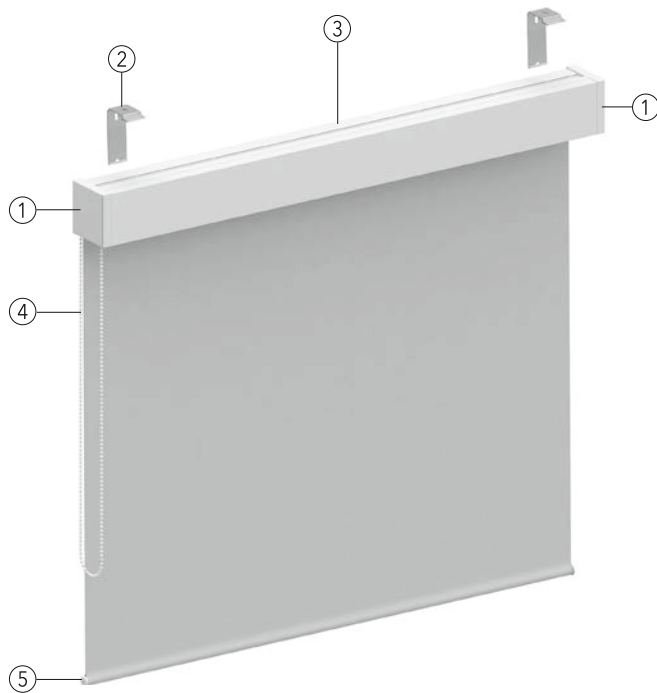
* Sample calculation for blind fabric weight:

	Fabric (weight): MALA 2-1211	Weighted rod (weight)	Area (W x H): 2 m x 1 m	Total weight
Internal weighted rod	200 g/m ²	190 g/m	2 m ²	2 x 200 g + 2 x 190 g = 780 g
Weighted rod, square	200 g/m ²	250 g/m	2 m ²	2 x 200 g + 2 x 250 g = 900 g

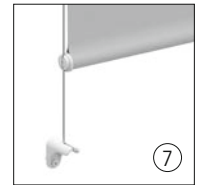
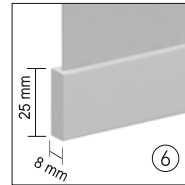
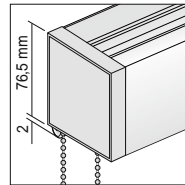
Technical data

04-3342 R_03 cassette | operating chain

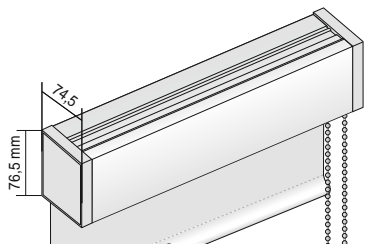
Hardware



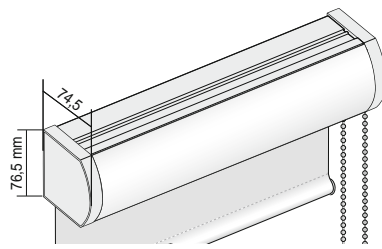
- ① Chain operation housing
- ② Bracket for wall and ceiling
- ③ Cassette, square
- ④ Child safety bead chain
- ⑤ Internal weighted rod
- ⑥ External weighted rod, square
- ⑦ Side guide



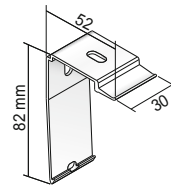
Installation options



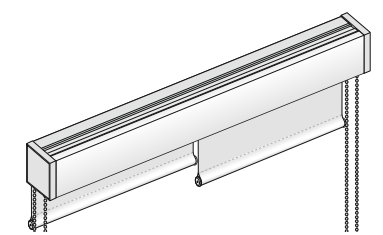
Cassette, square
wall/ceiling installation



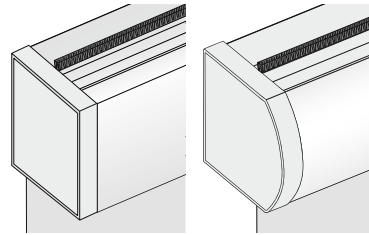
Cassette, round
wall/ceiling installation



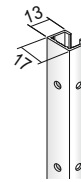
Bracket for wall/ceiling installation



Cassette
non-linked blind fabric (2 drives)



Cassette with brush seal



Elevated track: Side guide profile
(weighted rod guide)

04-3342 R_03 cassette | operating chain

Technical data

Model:	04-3342	
Operation options:	- Operating chain	
Equipment:	- Cassette, round - Cassette, square	
Description:	Chain operation roller blind with integrated smooth-running chain gear and spring support, depending on the blind fabric weight. Adjustable top end position, transparent child safety bead chain. Extruded aluminium roller blind tube, Ø 27.4 mm up to width 180 cm, Ø 40 mm up to width 280 cm. Extruded aluminium cassette. Internal steel tube weighted rod Ø 12 mm, white-coated. Optional: Non-linked blind fabric	
Hardware colours:	172 white (RAL 9016) 611 anthracite grey (RAL 7016) 651 anthracite (DB 703)	671 black (RAL 9005) 901 silver coloured (RAL 9006)
	All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request.	

Dimensions:	Operation/Function	Blind unit sizes		
		Min. width	Max. width	Max. height
	Operating chain with safety breaking system	From 22.5 cm	Up to 280 cm	300 cm*
	Metal chain/operation chain without safety breaking system/antibacterial operation chain without safety breaking system	From 22.5 cm	Up to 280 cm	300 cm
	Operating chain with safety breaking system Non-linked blind fabric	From 45 cm	Up to 2 x 280 cm	300 cm*
	Metal chain/operation chain without safety breaking system/antibacterial operation chain without safety breaking system Non-linked blind fabric	From 45 cm	Up to 2 x 280 cm	300 cm

* From 250.1 cm with operation chain without safety breaking system/metal chain only

Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing.

If in doubt, please enquire in advance. For recess installation: Width = recess dimension - 2 mm.

Fabrics:	See MHZ Collection. MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top. Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.

Additional equipment:	- Antibacterial operating chain - Transparent plastic chain with black cord (standard with 611 and 671) - Metal chain/operation chain without safety breaking system (with safety tensioner) - External aluminium weighted rod (172, 611, 651, 671, 901): square, 8 x 25 mm - Side guide only for internal weighted rod and single units - Non-linked blind fabric - Brush seal (cassette mounting profile) - Side guide profile, weighted rod guide (elevated track)
Non-linked blind fabric:	The two roller blinds are calculated individually according to size and PG plus the specified surcharge. Light gap of 1.6 cm between the blind fabrics.

Installation:	Bracket: - Bracket for wall and ceiling installation. Up to 100 cm width: 2 brackets; up to 150 cm width: 3 brackets; up to 200 cm width: 4 brackets; up to 250 cm width: 5 brackets; up to 280 cm width: 6 brackets.
----------------------	--

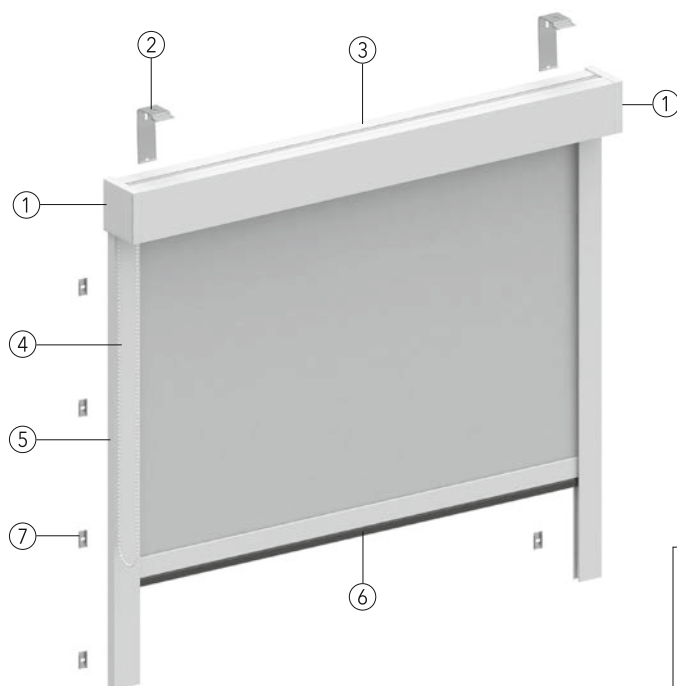
Operation:	Transparent child safety bead chain, metal chain and operation chain without safety breaking system (endless chain) with safety tensioner. Chain gear and spring support adapted to the blind unit size and blind fabric weight.
Operation lengths:	Operation length from 50 cm to 150 cm in 10 cm increments, operation length from 150.1 cm to 300 cm in 25 cm increments. Delivery with the exact or next smaller operation length. Other operation lengths available on request (surcharge applies).
Child safety:	Please see the note on page 185.

Technical data

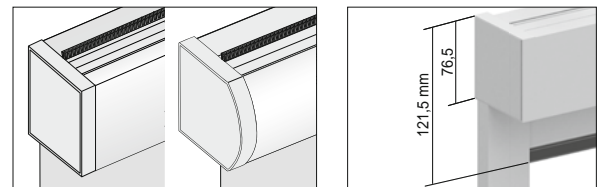
04-3352 R_03 cassette | operating chain

Side guide profile

Hardware

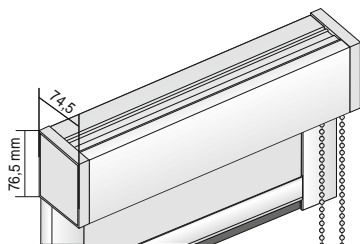


- ① Chain operation housing
- ② Bracket for wall and ceiling
- ③ Cassette, square
- ④ Child safety bead chain
- ⑤ Side guide profile
- ⑥ External weighted rod with sealing lip
- ⑦ Mounting clip for side guide profile
- ⑧ Bottom rail

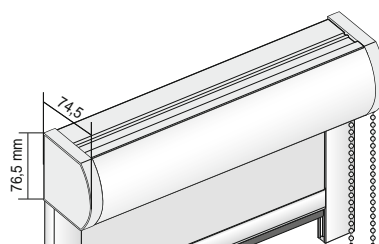


Cassette with brush seal

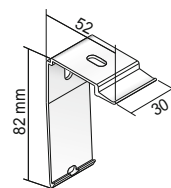
Installation options



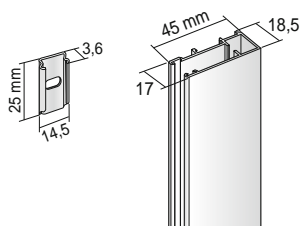
Cassette, square, side guide profile wall/ceiling installation



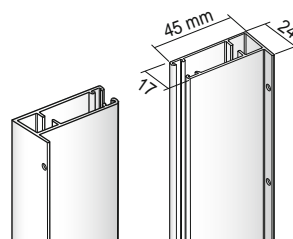
Cassette, round, side guide profile wall/ceiling installation



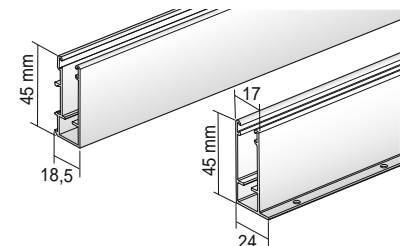
Bracket for wall/ceiling installation



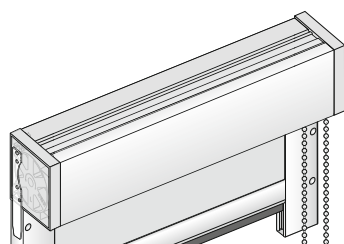
Side guide profile (not for elevated track), wall installation (front)



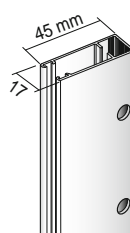
Side guide profile (not for elevated track), recess installation



Bottom rails



Elevated track with side guide profile and fabric guide



Elevated track: Side guide profile fabric guide, bottom rail

04-3352 R_03 cassette | operating chain

Side guide profile

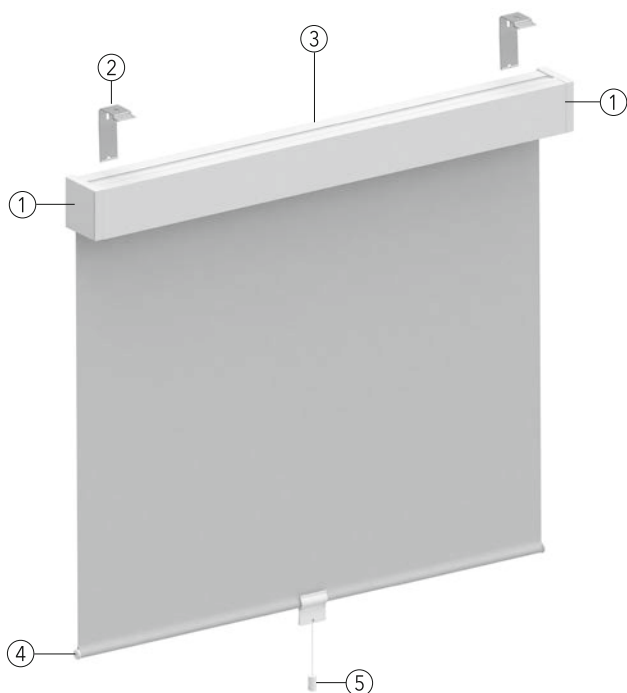
Technical data

Model:	04-3352		
Operation options:	- Operating chain		
Equipment:	- Cassette, round, with side guide profile - Cassette, square, with side guide profile		
Description:	Chain operation roller blind with integrated smooth-running chain gear and spring support, depending on the blind fabric weight. Adjustable top end position, transparent child safety bead chain. Extruded aluminium roller blind tube, Ø 27.4 mm up to width 180 cm, Ø 40 mm up to width 280 cm. Extruded aluminium cassette. Side guide profile and, where applicable, bottom rail with brush seal. External aluminium weighted rod 6 x 31 mm with sealing lip.		
Hardware colours:	172 white (RAL 9016) 611 anthracite grey (RAL 7016) 651 anthracite (DB 703)	671 black (RAL 9005) 901 silver coloured (RAL 9006)	
	All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request.		
Dimensions:	Operation/Function	Blind unit sizes	
		Min. width	Max. width
		Max. height	
	Operating chain with safety breaking system	From 22.5 cm	Up to 280 cm
	Metal chain, operation chain without safety breaking system/antibacterial operation chain without safety breaking system	From 22.5 cm	Up to 280 cm
			300 cm*
			300 cm
	* From 250.1 cm with operation chain without safety breaking system/metal chain only		
	Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing. If in doubt, please enquire in advance.		
Fabrics:	See MHZ Collection. MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top. Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.		
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.		
Additional equipment:	- Antibacterial operating chain - Transparent plastic chain with black cord (standard with 611 and 671) - Metal chain/operation chain without safety breaking system (with safety tensioner) - Side guide profile for recess and elevated track - Bottom rail - Brush seal (cassette mounting profile)		
Elevated track:	Cassette for attaching to side guide profiles. Available with fabric guide.		
Installation:	Bracket:	Side guide profile:	Bottom rail:
	- Bracket for wall and ceiling installation - Up to 100 cm width: 2 brackets - Up to 150 cm width: 3 brackets - Up to 200 cm width: 4 brackets - Up to 250 cm width: 5 brackets - Up to 280 cm width: 6 brackets	- Mounting clip for wall installation (front) - Direct recess installation on straight frame - Up to 100 cm height: 6 clips - Up to 200 cm height: 10 clips - Up to 300 cm height: 14 clips	- Mounting clip - Direct mounting - Up to 200 cm width: 4 clips - From 200.1 cm width: 6 clips
Operation:	Transparent operating chain with safety breaking system, metal chain or operation chain without safety breaking system/antibacterial operation chain without safety breaking system (endless chain) with safety tensioner. Chain gear and spring support adapted to the blind unit size and blind fabric weight.		
Operation lengths:	Operation length from 50 cm to 150 cm in 10 cm increments, operation length from 150.1 cm to 300 cm in 25 cm increments. Delivery with the exact or next smaller operation length. Other operation lengths available on request (surcharge applies).		
Child safety:	Please see the note on page 185.		
Note:	Cassette roller blinds and rail-guided units may only be lowered with the window closed. Otherwise there is the risk of a suction effect developing, which can pull the blind out of its side rails. If the unit is retracted in this condition, it may become damaged. Side guide profiles only have a dim-out effect.		

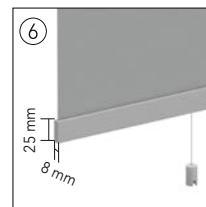
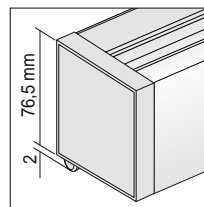
Technical data

04-3343 R_03 cassette | Soft

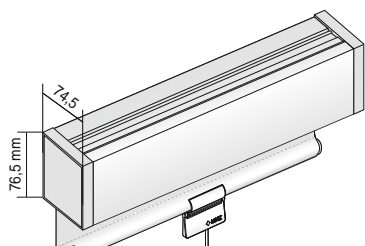
Hardware



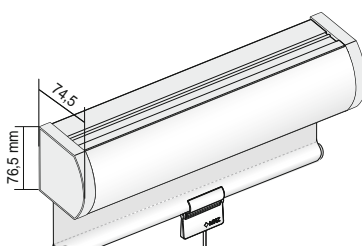
- ① Housing
- ② Bracket for wall and ceiling
- ③ Cassette, square
- ④ Internal weighted rod
- ⑤ Operating tassel
- ⑥ External weighted rod, square



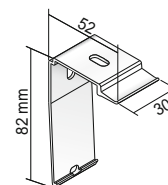
Installation options



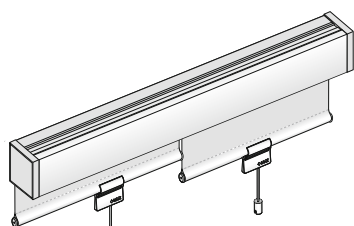
Cassette, square
wall/ceiling installation



Cassette, round
wall/ceiling installation



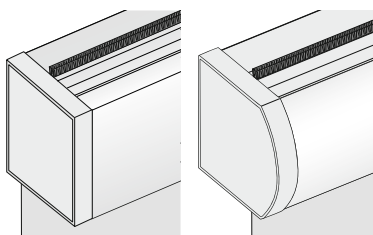
Bracket for wall/ceiling installation



Cassette
non-linked blind fabric (2 drives)



Tassel for external weighted rod



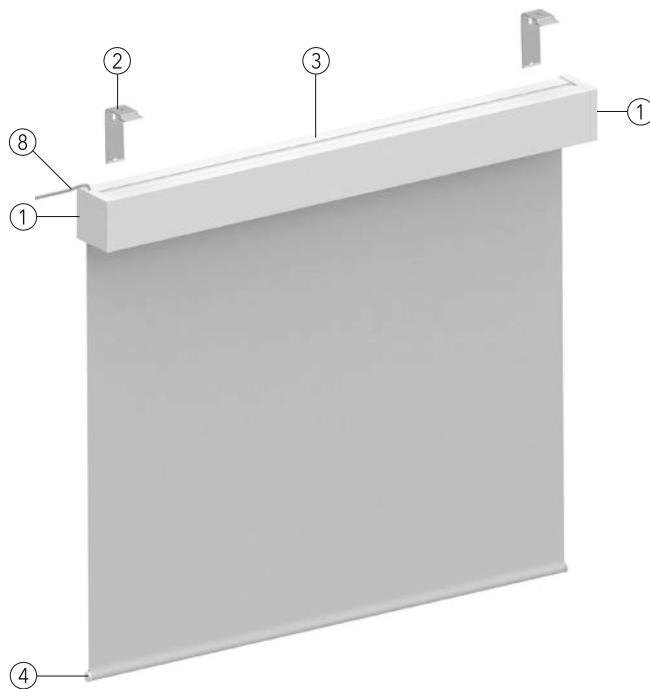
Cassette with brush seal

Technical data

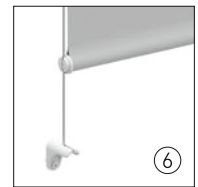
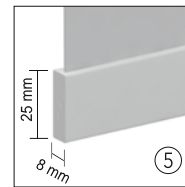
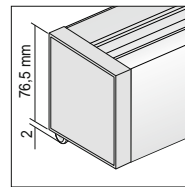
Model:	04-3343		
Operation options:	- Central pull cord with Soft drive		
Equipment:	- Cassette, round - Cassette, square		
Description:	Central pull cord roller blind with internal spring drive with adjustable constant roll-up speed and adjustable end stop, extruded aluminium roller blind tube, Ø 27.4 mm up to width 140 cm, Ø 40 mm up to width 200 cm. Release the lock by pulling the operating tassel briefly. Extruded aluminium cassette. Internal steel tube weighted rod Ø 12 mm, white-coated. Optional: Non-linked blind fabric		
Hardware colours:	172 white (RAL 9016) 611 anthracite grey (RAL 7016) 651 anthracite (DB 703)	671 black (RAL 9005) 901 silver coloured (RAL 9006)	
	All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request.		
Dimensions:	Operation/Function	Blind unit sizes	
		Min. width	Max. width
			Max. height
	Central pull cord	From 67 cm From 78.5 cm	Up to 78.4 cm Up to 200 cm
	Non-linked blind fabric	From 134 cm From 2 x 78.5 cm	Up to 2 x 78.4 cm Up to 2 x 200 cm
	Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing. If in doubt, please enquire in advance.		
Fabrics:	See MHZ Collection. MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top. Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.		
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.		
Additional equipment:	- External aluminium weighted rod (172, 611, 651, 671, 901): square, 8 x 25 mm - Non-linked blind fabric - Brush seal (cassette mounting profile)		
Non-linked blind fabric:	The two roller blinds are calculated individually according to size and PG plus the specified surcharge. Light gap of 1.6 cm between the blind fabrics.		
Installation:	Bracket:		
	- Bracket for wall and ceiling installation. Up to 100 cm width: 2 brackets; up to 150 cm width: 3 brackets; up to 200 cm width: 4 brackets.		
Operation lengths:	Operation length of 20 cm according to DIN EN 13120, operation length of 80 cm on request. Other operation lengths available on request (surcharge applies).		
Child safety:	Operation length of central pull cord: Unless otherwise specified by specialists, units are manufactured with an operation length of 20 cm.		

04-3344 R_03 cassette | electric drive

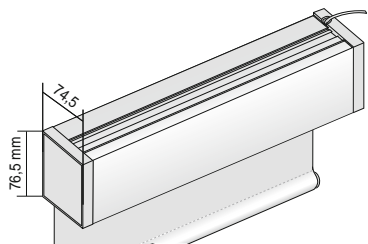
Hardware



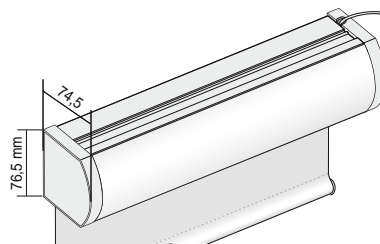
- ① Housing
- ② Bracket for wall and ceiling
- ③ Cassette, square
- ④ Internal weighted rod
- ⑤ External weighted rod, square
- ⑥ Side guide
- ⑦ Cable



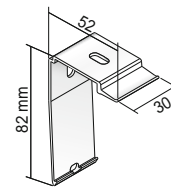
Installation options



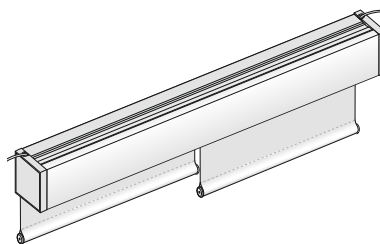
Cassette, square
wall/ceiling installation



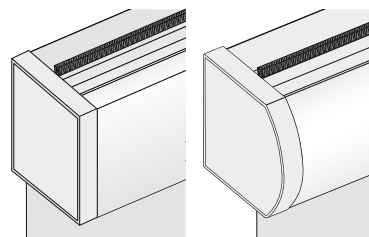
Cassette, round
wall/ceiling installation



Bracket for wall/ceiling installation



Cassette
non-linked blind fabric (2 drives)



Cassette with brush seal



Elevated track: Side guide profile
(weighted rod guide)

04-3344 R_03 cassette | electric drive

Technical data

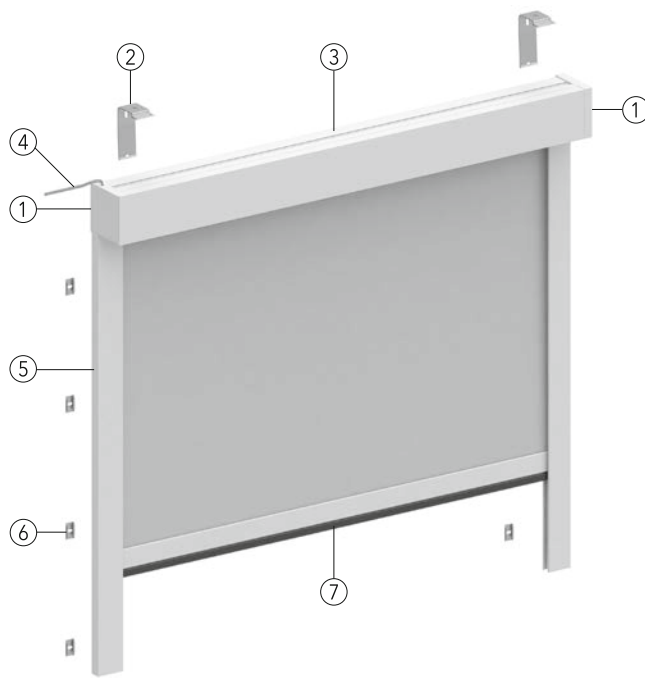
Model:	04-3344		
Operation options:	- PowerView® radio drive 18 V - Electric drive 24 V	- PowerView® electric drive 230 V - Electric drive 230 V	
Equipment:	- Cassette, round - Cassette, square		
Description:	<p>Electric roller blind 18 V with M25T PV 18 V radio electric drive and integrated radio receiver, various control options, smart home compatible.</p> <p>Electric roller blind 24 V with Roll Up 28 WT drive, with adjustable final position switch-off, extruded aluminium roller blind tube Ø 29 mm up to width 180 cm; with Sonesse 30 DCT drive extremely low noise and with adjustable final position switch-off or with Sonesse 30 RTS drive with integrated radio receiver, extremely low noise and with adjustable final position switch-off, extruded aluminium roller blind tube, Ø 40 mm up to width 280 cm. Extruded aluminium cassette. Internal steel tube weighted rod Ø 12 mm, white-coated.</p> <p>Electric roller blind 230 V with M40T PV 330 radio electric drive and integrated radio receiver, various control options, smart home compatible.</p> <p>Electric roller blind 230 V with LS 40 WT drive with adjustable final position switch-off; with Sonesse 40 WT drive extremely low noise, with adjustable final position switch-off; with Sonesse 40 RTS drive with integrated radio receiver, extremely low noise and with adjustable final position switch-off; with Altus 40 RTS with integrated radio receiver, with adjustable final position switch-off. Aluminium roller blind tube, Ø 44 mm up to width 280 cm, extruded. Extruded aluminium cassette. Internal steel tube weighted rod Ø 12 mm, white-coated.</p> <p>Electrical accessories and various control options, with relevant actuators suitable for BUS systems, see the separate Electrical Price List.</p> <p>Optional: Non-linked blind fabric</p>		
Hardware colours:	172 white (RAL 9016) 611 anthracite grey (RAL 7016) 651 anthracite (DB 703)	671 black (RAL 9005) 901 silver coloured (RAL 9006)	
Dimensions:	All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request.		
	Operation/Function	Blind unit sizes	
		Min. width	Max. width
		Max. height	
	Radio drive 18 V, M25T PV 18 V	From 38 cm	Up to 280 cm
	Electric drive 24 V, Roll Up 28 WT	From 38 cm	Up to 180 cm
	Radio drive 24 V, Sonesse 30 DCT, Sonesse 30 RTS	From 54 cm	Up to 280 cm
	Radio drive 230 V, M40T PV 330	From 70 cm	Up to 280 cm
	Electric drive 230 V, Sonesse 40 WT, LS 40 WT	From 56 cm	Up to 280 cm
	Radio drive 230 V, Sonesse 40 RTS, Altus 40 RTS	From 60 cm	Up to 280 cm
	Radio drive 230 V, Sonesse 40 io	From 60 cm	Up to 280 cm
	Non-linked blind fabric	2 x min. width electric drive	Up to 2 x 280 cm
	Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing. If in doubt, please enquire in advance.		
Fabrics:	See MHZ Collection. MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top. Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.		
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.		
Additional equipment:	- Side guide only for internal weighted rod and single units - External aluminium weighted rod (172, 611, 651, 671, 901): square, 8 x 25 mm - Non-linked blind fabric - Brush seal (cassette mounting profile) - Side guide profile, weighted rod guide (elevated track)		
Non-linked blind fabric:	The two roller blinds are calculated individually according to size and PG plus the specified surcharge. Light gap of 1.6 cm between the blind fabrics.		
Installation:	Bracket:		
	- Bracket for wall and ceiling installation. Up to 100 cm width: 2 brackets; up to 150 cm width: 3 brackets; up to 200 cm width: 4 brackets; up to 250 cm width: 5 brackets; up to 280 cm width: 6 brackets.		
Note:	Cable outlet at top for wall installation, rear for ceiling installation		

Technical data

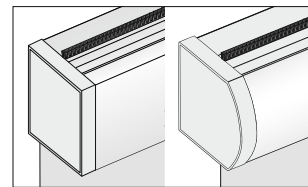
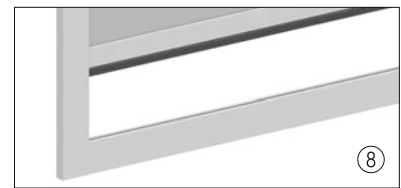
04-3354 R_03 cassette | electric drive

Side guide profile

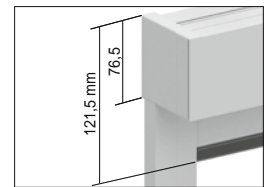
Hardware



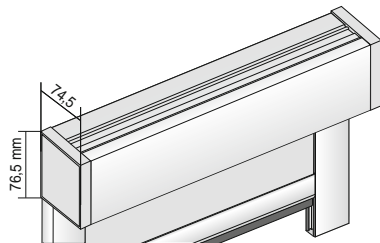
- ① Housing
- ② Bracket for wall and ceiling
- ③ Cassette, square
- ④ Cable
- ⑤ Side guide profile
- ⑥ Mounting clip for side guide profile
- ⑦ External weighted rod with sealing lip
- ⑧ Bottom rail



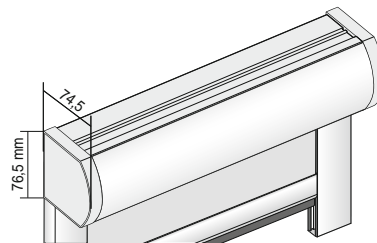
Cassette with brush seal



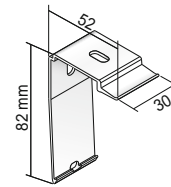
Installation options



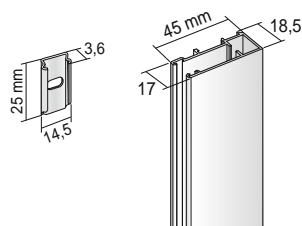
Cassette, square, side guide profile wall/ceiling installation



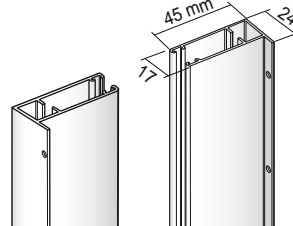
Cassette, round, side guide profile wall/ceiling installation



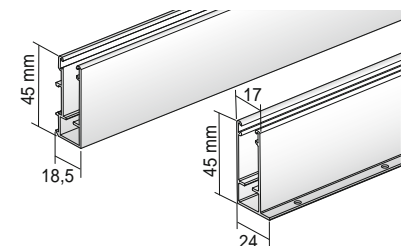
Bracket for wall/ceiling installation



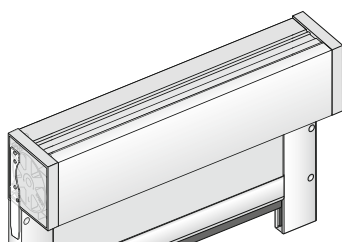
Side guide profile (not for elevated track), wall installation (front)



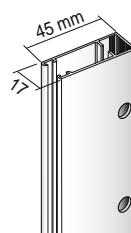
Side guide profile (not for elevated track), recess installation



Bottom rails



Elevated track with side guide profile and fabric guide



Elevated track: Side guide profile fabric guide, bottom rail

04-3354 R_03 cassette | electric drive

Side guide profile

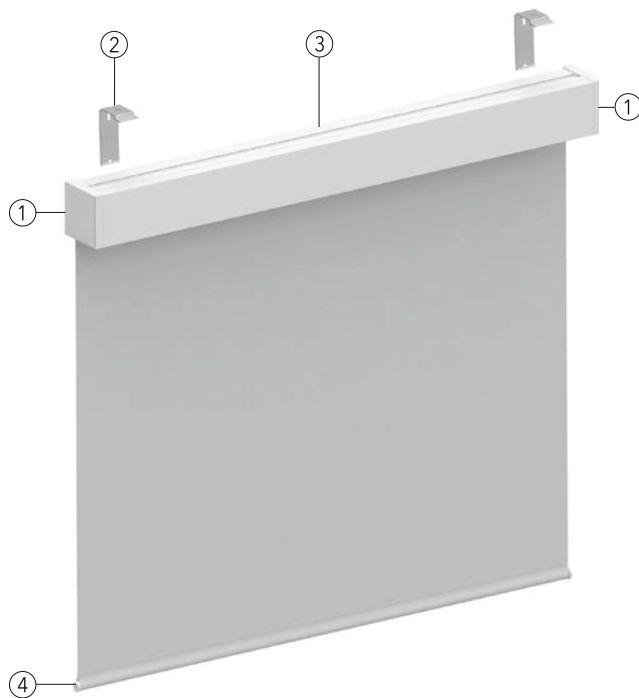
Technical data

Model:	04-3354																																					
Operation options:	- PowerView® radio drive 18 V - Radio/electric drive 24 V	- PowerView® radio drive 230 V - Radio/electric drive 230 V																																				
Equipment:	- Cassette, square, with side guide profile - Cassette, round, with side guide profile																																					
Description:	<p>Electric roller blind 18 V with M25T PV 18 V radio electric drive and integrated radio receiver, various control options, smart home compatible.</p> <p>Electric roller blind 24 V with Roll Up 28 WT drive, with adjustable final position switch-off, extruded aluminium roller blind tube Ø 29 mm up to width 180 cm; with Sonesse 30 DCT drive extremely low noise and with adjustable final position switch-off or with Sonesse 30 RTS drive with integrated radio receiver, extremely low noise and with adjustable final position switch-off, extruded aluminium roller blind tube, Ø 40 mm up to width 280 cm. Extruded aluminium cassette. Side guide profile and, where applicable, bottom rail with brush seal. External aluminium weighted rod 6 x 31 mm with sealing lip.</p> <p>Electric roller blind 230 V with M40T PV 330 radio electric drive and integrated radio receiver, various control options, smart home compatible.</p> <p>Electric roller blind 230 V with LS 40 WT drive with adjustable final position switch-off; with Sonesse 40 WT drive extremely low noise, with adjustable final position switch-off; with Sonesse 40 RTS drive with integrated radio receiver, extremely low noise and with adjustable final position switch-off; with Altus 40 RTS with integrated radio receiver, with adjustable final position switch-off. Aluminium roller blind tube, Ø 44 mm up to width 280 cm, extruded. Extruded aluminium cassette. Side guide profile and, where applicable, bottom rail with brush seal. External aluminium weighted rod 6 x 31 mm with sealing lip.</p> <p>Electrical accessories and various control options, with relevant actuators suitable for BUS systems, see the separate Electrical Price List.</p>																																					
Hardware colours:	172 white (RAL 9016) 611 anthracite grey (RAL 7016) 651 anthracite (DB 703)	671 black (RAL 9005) 901 silver coloured (RAL 9006)	All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request.																																			
Dimensions:	<table border="1"> <thead> <tr> <th rowspan="2">Operation/Function</th> <th colspan="3">Blind unit sizes</th> </tr> <tr> <th>Min. width</th> <th>Max. width</th> <th>Max. height</th> </tr> </thead> <tbody> <tr> <td>Radio drive 18 V, M25T PV 18 V</td> <td>From 38 cm</td> <td>Up to 280 cm</td> <td>300 cm</td> </tr> <tr> <td>Electric drive 24 V, Roll Up 28 WT</td> <td>From 38 cm</td> <td>Up to 180 cm</td> <td>280 cm</td> </tr> <tr> <td>Radio drive 24 V, Sonesse 30 DCT, Sonesse 30 RTS</td> <td>From 54 cm</td> <td>Up to 280 cm</td> <td>300 cm</td> </tr> <tr> <td>Radio drive 230 V, M40T PV 330</td> <td>From 70 cm</td> <td>Up to 280 cm</td> <td>300 cm</td> </tr> <tr> <td>Electric drive 230 V, Sonesse 40 WT, LS 40 WT</td> <td>From 56 cm</td> <td>Up to 280 cm</td> <td>300 cm</td> </tr> <tr> <td>Radio drive 230 V, Sonesse 40 RTS, Altus 40 RTS</td> <td>From 60 cm</td> <td>Up to 280 cm</td> <td>300 cm</td> </tr> <tr> <td>Radio drive 230 V, Sonesse 40 io</td> <td>From 60 cm</td> <td>Up to 280 cm</td> <td>300 cm</td> </tr> </tbody> </table> <p>Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing. If in doubt, please enquire in advance.</p>			Operation/Function	Blind unit sizes			Min. width	Max. width	Max. height	Radio drive 18 V, M25T PV 18 V	From 38 cm	Up to 280 cm	300 cm	Electric drive 24 V, Roll Up 28 WT	From 38 cm	Up to 180 cm	280 cm	Radio drive 24 V, Sonesse 30 DCT, Sonesse 30 RTS	From 54 cm	Up to 280 cm	300 cm	Radio drive 230 V, M40T PV 330	From 70 cm	Up to 280 cm	300 cm	Electric drive 230 V, Sonesse 40 WT, LS 40 WT	From 56 cm	Up to 280 cm	300 cm	Radio drive 230 V, Sonesse 40 RTS, Altus 40 RTS	From 60 cm	Up to 280 cm	300 cm	Radio drive 230 V, Sonesse 40 io	From 60 cm	Up to 280 cm	300 cm
Operation/Function	Blind unit sizes																																					
	Min. width	Max. width	Max. height																																			
Radio drive 18 V, M25T PV 18 V	From 38 cm	Up to 280 cm	300 cm																																			
Electric drive 24 V, Roll Up 28 WT	From 38 cm	Up to 180 cm	280 cm																																			
Radio drive 24 V, Sonesse 30 DCT, Sonesse 30 RTS	From 54 cm	Up to 280 cm	300 cm																																			
Radio drive 230 V, M40T PV 330	From 70 cm	Up to 280 cm	300 cm																																			
Electric drive 230 V, Sonesse 40 WT, LS 40 WT	From 56 cm	Up to 280 cm	300 cm																																			
Radio drive 230 V, Sonesse 40 RTS, Altus 40 RTS	From 60 cm	Up to 280 cm	300 cm																																			
Radio drive 230 V, Sonesse 40 io	From 60 cm	Up to 280 cm	300 cm																																			
Fabrics:	<p>See MHZ Collection.</p> <p>MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top.</p> <p>Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.</p>																																					
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.																																					
Additional equipment:	<ul style="list-style-type: none"> - Side guide profile for recess and elevated track - Bottom rail - Brush seal (cassette mounting profile) 																																					
Elevated track:	Cassette for attaching to side guide profiles. Available with fabric guide.																																					
Installation:	Bracket: <ul style="list-style-type: none"> - Bracket for wall and ceiling installation - Up to 100 cm width: 2 brackets - Up to 150 cm width: 3 brackets - Up to 200 cm width: 4 brackets - Up to 250 cm width: 5 brackets - Up to 280 cm width: 6 brackets 	Side guide profile: <ul style="list-style-type: none"> - Mounting clip for wall installation (front) - Direct recess installation on straight frame - Up to 100 cm height: 6 clips - Up to 200 cm height: 10 clips - Up to 300 cm height: 14 clips 	Bottom rail: <ul style="list-style-type: none"> - Mounting clip - Direct mounting - Up to 200 cm width: 4 clips - From 200.1 cm width: 6 clips 																																			
Note:	<p>Cassette roller blinds and rail-guided units may only be lowered with the window closed. Otherwise there is the risk of a suction effect developing, which can pull the blind out of its side rails. If the unit is retracted in this condition, it may become damaged.</p> <p>Side guide profiles only have a dim-out effect.</p> <p>Cable outlet at top for wall installation, rear for ceiling installation</p>																																					

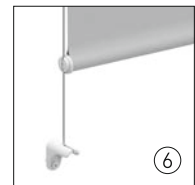
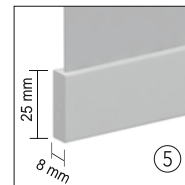
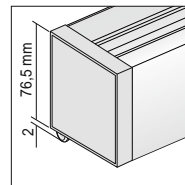
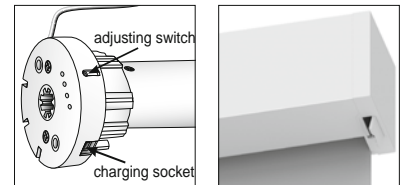
Technical data

04-3345 R_03 cassette | battery-operated radio drive

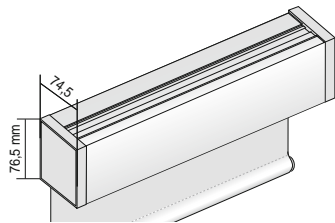
Hardware



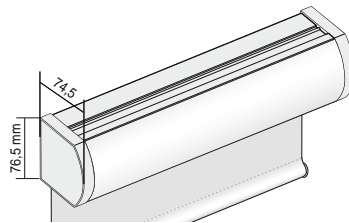
- ① Housing
- ② Bracket for wall and ceiling
- ③ Cassette, square
- ④ Internal weighted rod
- ⑤ External weighted rod, square
- ⑥ Side guide



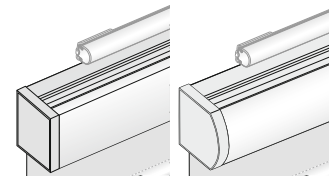
Installation options



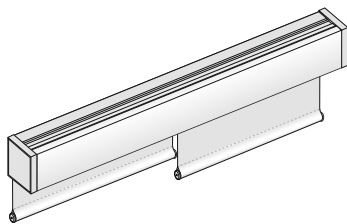
Cassette, square
wall/ceiling installation (12 V)



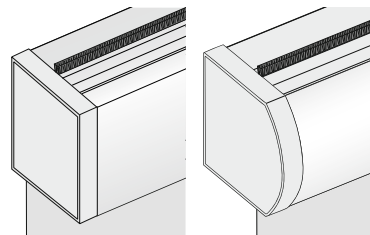
Cassette, round
wall/ceiling installation (12 V)



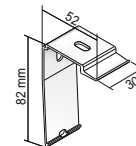
Cassette and side guide profile with external
rechargeable battery (for PowerView® 18 V only)



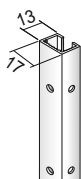
Cassette
non-linked blind fabric (2 drives)



Cassette with brush seal



Bracket for wall/ceiling installation



Elevated track: Side guide profile
(weighted rod guide)

04-3345 R_03 cassette | battery-operated radio drive

Technical data

Model:	04-3345
Operation options:	- Battery-operated radio drive 12 V - PowerView® battery-operated radio drive 18 V
Equipment:	- Cassette, square - Cassette, round
Description:	Battery-operated roller blind 12 V with integrated radio receiver and adjustable final position switch-off. Extruded aluminium roller blind tube, Ø 40 mm. Extruded aluminium cassette. Internal steel tube weighted rod Ø 12 mm, white-coated. Battery-operated roller blind 18 V with M25T PV 18 V radio electric drive and integrated radio receiver, various control options, smart home compatible (external rechargeable battery installation with PowerView® 18 V). For electrical accessories, see the separate Electrical Price List.
Hardware colours:	

Dimensions:	Operation/Function	Blind unit sizes			
		Min. width	Max. width	Max. height	Max. blind fabric weight*
	Battery-operated radio drive 12 V, Roll Up 28 RTS	From 58 cm	Up to 200 cm	200 cm	2 kg
	Battery-operated radio drive 12 V, Sonesse 30 Ultra RTS	From 72.5 cm	Up to 280 cm	300 cm	3 kg
	Battery-operated radio drive 18 V, M25T PV 18 V	From 38 cm	Up to 280 cm	300 cm	3 kg
	Non-linked blind fabric	From 2 x 60 cm	Up to 280 cm	300 cm	2 x 3 kg

Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing. If in doubt, please enquire in advance.

Fabrics:	See MHZ Collection. MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top. Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.
Additional equipment:	- Side guide only for internal weighted rod and single units - External aluminium weighted rod (172, 611, 651, 671, 901): square, 8 x 25 mm - Non-linked blind fabric - Brush seal (cassette mounting profile) - Side guide profile, weighted rod guide (elevated track)
Non-linked blind fabric:	The two roller blinds are calculated individually according to size and PG plus the specified surcharge. Light gap of 1.6 cm between the blind fabrics.
Installation:	Bracket: - Bracket for wall and ceiling installation. Up to 100 cm width: 2 brackets; up to 150 cm width: 3 brackets; up to 200 cm width: 4 brackets; up to 250 cm width: 5 brackets; up to 280 cm width: 6 brackets.

* Sample calculation for blind fabric weight:

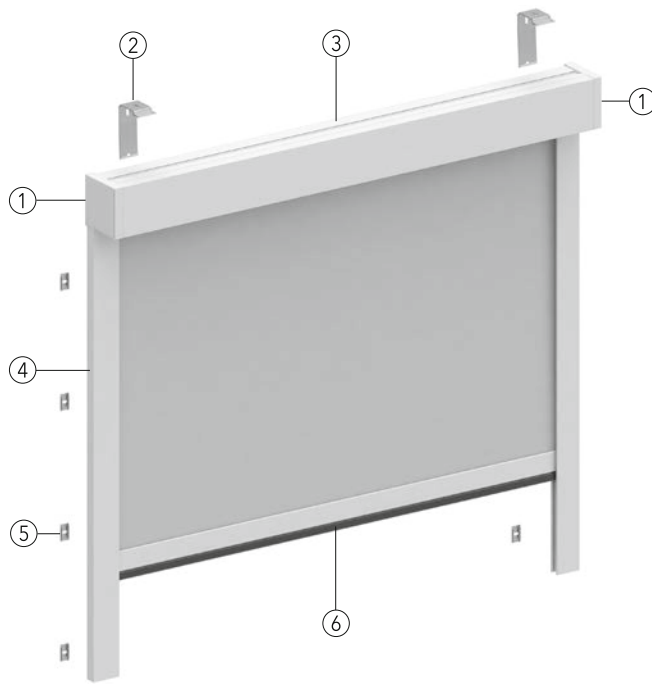
	Fabric (weight): MALA 2-1211	Weighted rod (weight)	Area (W x H): 2 m x 1 m	Total weight
Internal weighted rod	200 g/m ²	190 g/m	2 m ²	2 x 200 g + 2 x 190 g = 780 g
Weighted rod, square	200 g/m ²	250 g/m	2 m ²	2 x 200 g + 2 x 250 g = 900 g

Technical data

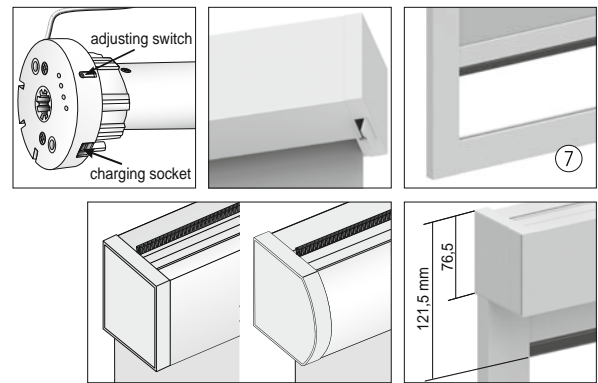
04-3355 R_03 cassette | battery-operated radio drive

Side guide profile

Hardware

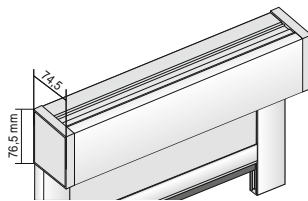


- ① Housing
- ② Bracket for wall and ceiling
- ③ Cassette, square
- ④ Side guide profile
- ⑤ Mounting clip for side guide profile
- ⑥ External weighted rod with sealing lip
- ⑦ Bottom rail

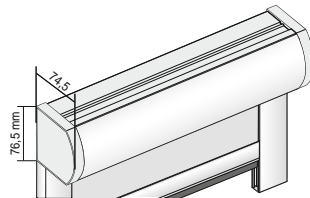


Cassette with brush seal

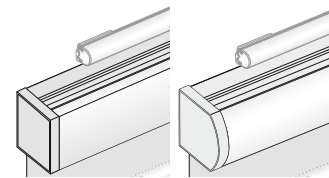
Installation options



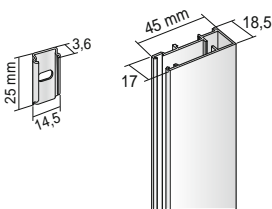
Cassette, square, side guide profile wall/ceiling installation (12 V)



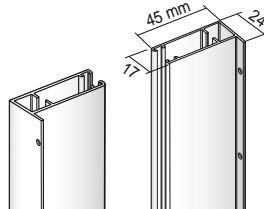
Cassette, round, side guide profile wall/ceiling installation (12 V)



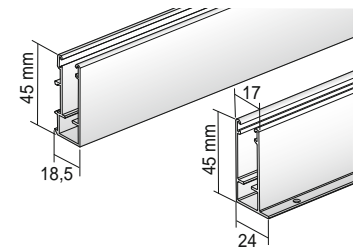
Cassette and side guide profile with external rechargeable battery (for PowerView® 18 V only)



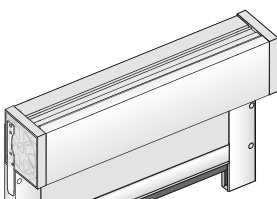
Side guide profile (not for elevated track), wall installation (front)



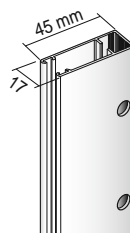
Side guide profile (not for elevated track), recess installation



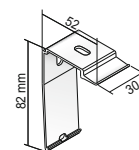
Bottom rails



Elevated track with side guide profile and fabric guide



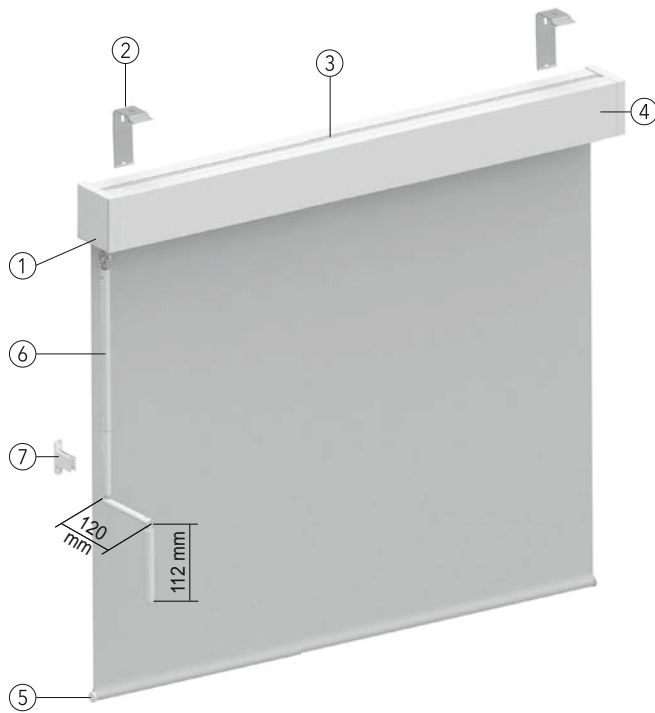
Elevated track: Side guide profile fabric guide, bottom rail



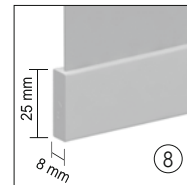
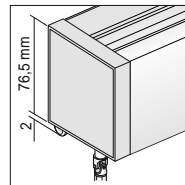
Bracket for wall/ceiling installation

04-3346 R_03 cassette | crank

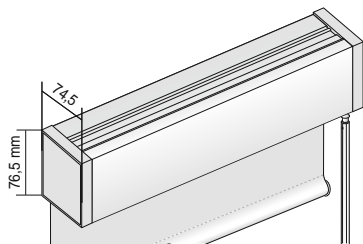
Hardware



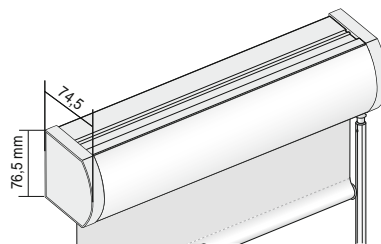
- ① Crank gear
- ② Bracket for wall and ceiling
- ③ Cassette, square
- ④ Housing
- ⑤ Internal weighted rod
- ⑥ Crank
- ⑦ Crank clip
- ⑧ External weighted rod, square
- ⑨ Side guide



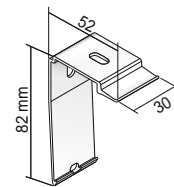
Installation options



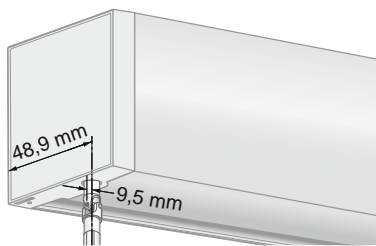
Cassette, square
wall/ceiling installation



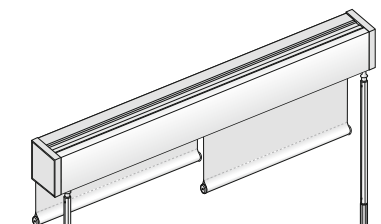
Cassette, round
wall/ceiling installation



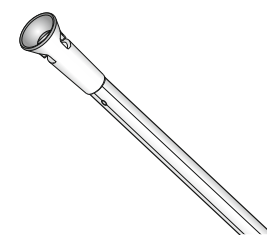
Bracket for wall/ceiling installation



Crank exit



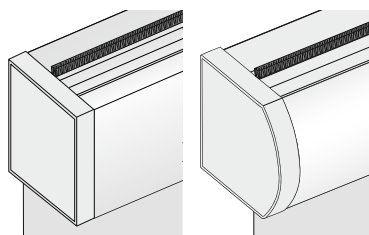
Cassette
non-linked blind fabric (2 drives)



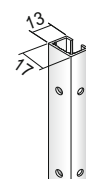
Funnel crank



Crank adapter



Cassette with brush seal



Elevated track: Side guide profile
(weighted rod guide)

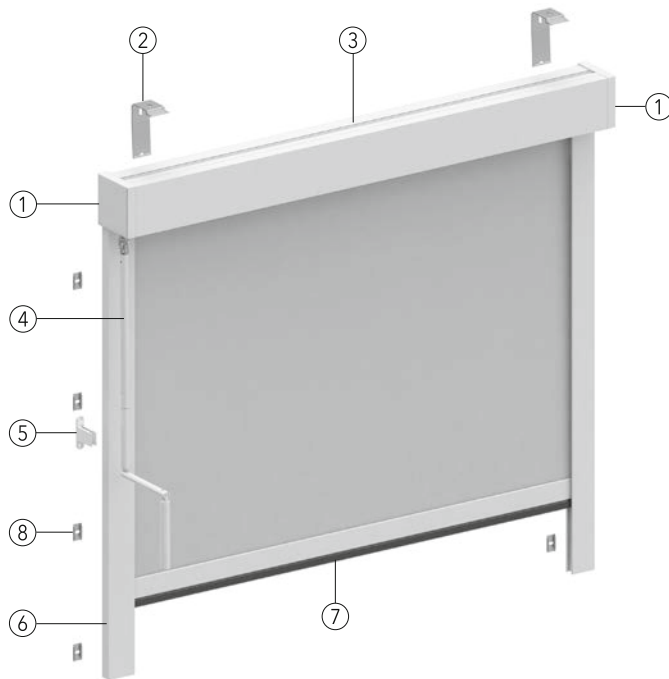
Technical data

Model:	04-3346		
Operation options:	- Crank		
Equipment:	- Cassette, round - Cassette, square		
Description:	Roller blind with crank operation with integrated worm gear, left or right. Extruded aluminium roller blind tube, Ø 27.4 mm up to width 180 cm, Ø 40 mm up to width 280 cm. Extruded aluminium cassette. Internal steel tube weighted rod Ø 12 mm, white-coated. Optional: Non-linked blind fabric		
Hardware colours:	172 white (RAL 9016) 611 anthracite grey (RAL 7016) 651 anthracite (DB 703)	671 black (RAL 9005) 901 silver coloured (RAL 9006)	
	All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request.		
Dimensions:	Operation/Function	Blind unit sizes	
		Min. width	Max. width
			Max. height
	Crank	From 23 cm	Up to 280 cm 300 cm
	Non-linked blind fabric	From 45 cm	Up to 2 x 280 cm 300 cm
	Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing. If in doubt, please enquire in advance.		
Fabrics:	See MHZ Collection. MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top. Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.		
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.		
Additional equipment:	- Removable funnel crank (not suitable for recess installation) - Crank adapter - External aluminium weighted rod (172, 611, 651, 671, 901): square, 8 x 25 mm - Side guide only for internal weighted rod and single units - Non-linked blind fabric - Brush seal (cassette mounting profile) - Side guide profile, weighted rod guide (elevated track)		
Non-linked blind fabric:	The two roller blinds are calculated individually according to size and PG plus the specified surcharge. Light gap of 1.6 cm between the blind fabrics.		
Installation:	Bracket:		
	- Bracket for wall and ceiling installation. Up to 100 cm width: 2 brackets; up to 150 cm width: 3 brackets; up to 200 cm width: 4 brackets; up to 250 cm width: 5 brackets; up to 280 cm width: 6 brackets.		
Operation:	Crank operation (with removable funnel crank on request for a surcharge). Crank exit at bottom, crank fixed with crank clip. Crank grip colours (172, 671, 901).		
Operation lengths:	Order to the exact millimetre (state the extended crank length when ordering).		

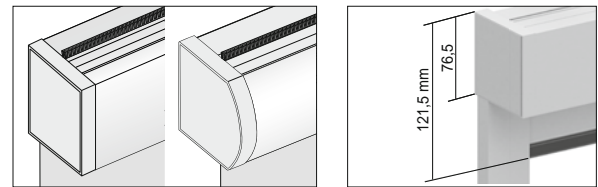
04-3356 R_03 cassette | crank

Side guide profile

Hardware

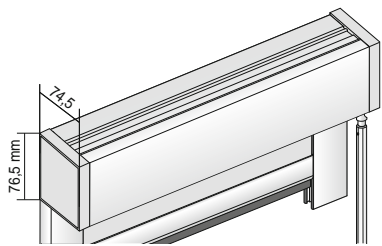


- ① Housing
- ② Bracket for wall and ceiling
- ③ Cassette, square
- ④ Crank
- ⑤ Crank clip
- ⑥ Side guide profile
- ⑦ External weighted rod with sealing lip
- ⑧ Mounting clip for side guide profile
- ⑨ Bottom rail

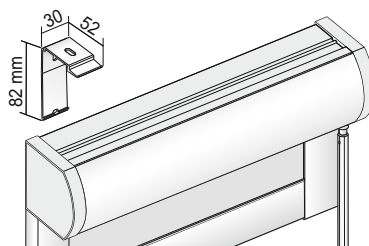


Cassette with brush seal

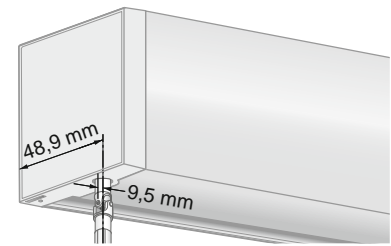
Installation options



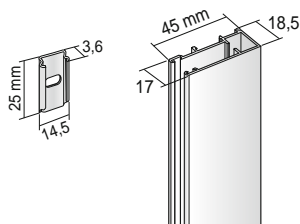
Cassette, square, side guide profile wall/ceiling installation



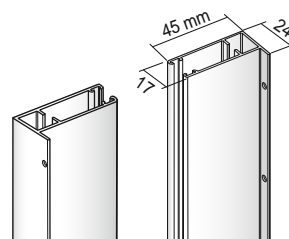
Cassette, round, side guide profile wall/ceiling installation



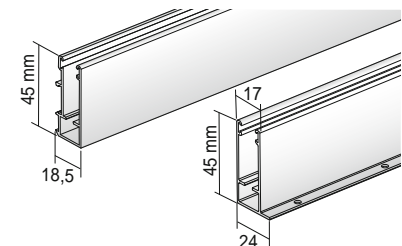
Crank exit



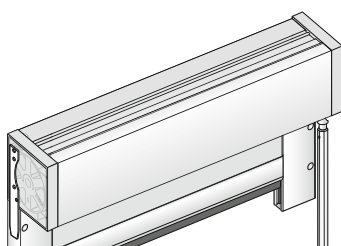
Side guide profile (not for elevated track), wall installation (front)



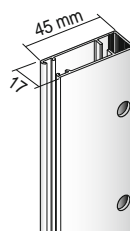
Side guide profile (not for elevated track), recess installation



Bottom rails



Elevated track with side guide profile and fabric guide



Elevated track: Side guide profile fabric guide, bottom rail

Technical data

Model:	04-3356		
Operation options:	- Crank		
Equipment:	- Cassette, round, with side guide profile - Cassette, square, with side guide profile		
Description:	Roller blind with crank operation with integrated worm gear, left or right. Extruded aluminium roller blind tube, Ø 27.4 mm up to width 180 cm, Ø 40 mm up to width 280 cm. Extruded aluminium cassette. Side guide profile and, where applicable, bottom rail with brush seal. External aluminium weighted rod 6 x 31 mm with sealing lip.		
Hardware colours:	172 white (RAL 9016) 611 anthracite grey (RAL 7016) 651 anthracite (DB 703)	671 black (RAL 9005) 901 silver coloured (RAL 9006)	
	All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request.		
Dimensions:	Operation/Function	Blind unit sizes	
		Min. width	Max. width
		Max. height	
	Crank	From 23 cm	Up to 280 cm 300 cm
	Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing. If in doubt, please enquire in advance.		
Fabrics:	See MHZ Collection. MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top. Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.		
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.		
Additional equipment:	- Removable funnel crank - Crank adapter - Side guide profile for recess and elevated track - Bottom rail - Brush seal (cassette mounting profile)		
Elevated track:	Cassette for attaching to side guide profiles. Available with fabric guide.		
Installation:	Bracket:	Side guide profile:	Bottom rail:
	- Bracket for wall and ceiling installation - Up to 100 cm width: 2 brackets - Up to 150 cm width: 3 brackets - Up to 200 cm width: 4 brackets - Up to 250 cm width: 5 brackets - Up to 280 cm width: 6 brackets	- Mounting clip for wall installation (front) - Direct recess installation on straight frame - Up to 100 cm height: 6 clips - Up to 200 cm height: 10 clips - Up to 300 cm height: 14 clips	- Mounting clip - Direct mounting - Up to 200 cm width: 4 clips - From 200.1 cm width: 6 clips
Operation:	Crank operation (with removable funnel crank on request for a surcharge). Crank exit at bottom, crank fixed with crank clip. Crank grip colours (172, 671, 901).		
Operation lengths:	Order to the exact millimetre (state the extended crank length when ordering).		
Note:	Cassette roller blinds and rail-guided units may only be lowered with the window closed. Otherwise there is the risk of a suction effect developing, which can pull the blind out of its side rails. If the unit is retracted in this condition, it may become damaged. Side guide profiles only have a dim-out effect.		

R_04 roller blind technical data



04-3402 bracket | operating chain
Page 144-145



04-3404 bracket | electric drive
Page 146-147



04-3442 cassette | operating chain
Page 148-149



04-3444 cassette | electric drive
Page 150-151



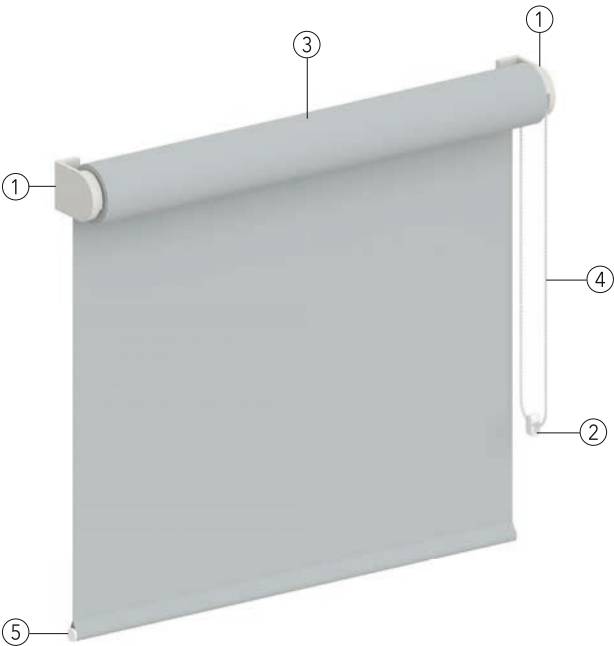
04-3446 cassette | crank
Page 152-153



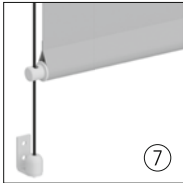
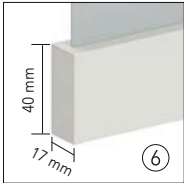
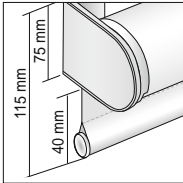
04-3464 ZIP cassette | electric drive
side guide profile
Page 154-155

04-3402 R_04 bracket | operating chain

Hardware

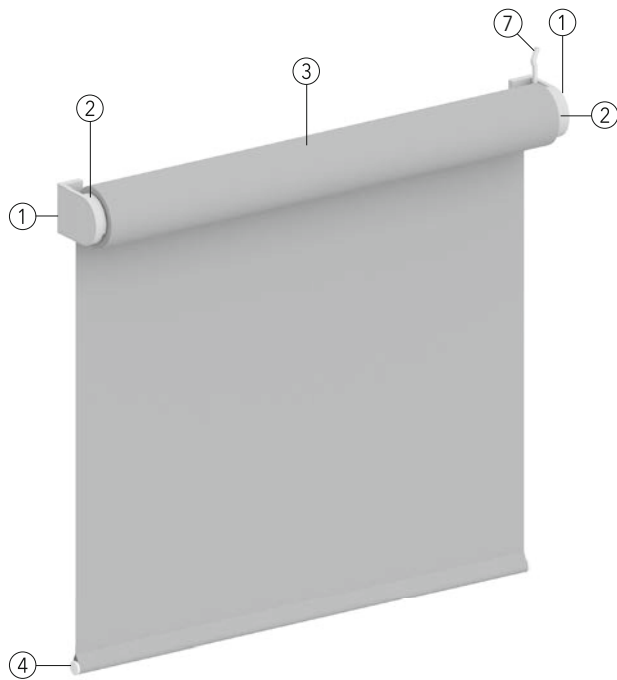


- ① Basic bracket
- ② Safety tensioner
- ③ Roller blind tube with fabric
- ④ Operating chain
- ⑤ Internal weighted rod
- ⑥ External weighted rod, square
- ⑦ Side guide

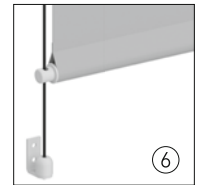
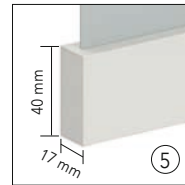
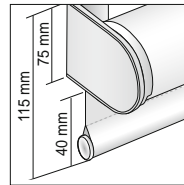


04-3404 R_04 bracket | electric drive

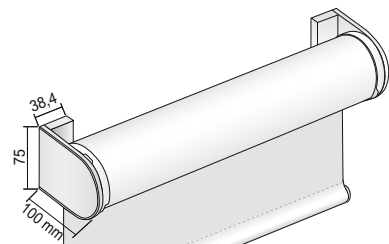
Hardware



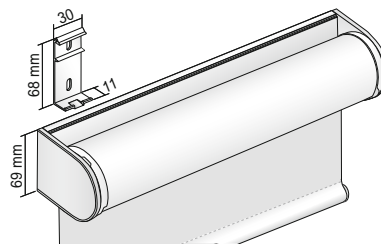
- ① Basic bracket
- ② Clamp
- ③ Roller blind tube with fabric
- ④ Internal weighted rod
- ⑤ External weighted rod, square
- ⑥ Side guide
- ⑦ Cable



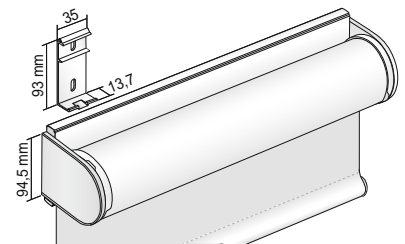
Installation options



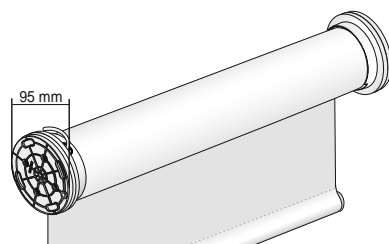
Wall/ceiling installation with bracket



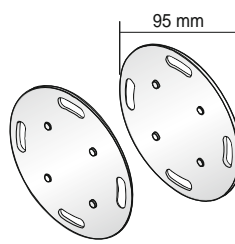
Wall/ceiling installation with mounting rail (size 70) and clip



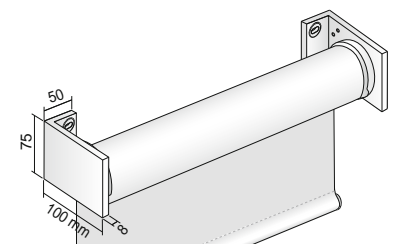
Wall/ceiling installation with mounting rail (size 95) and clip



Bracket for recess installation



Compensating shim for recess installation with angle specification, 1 x 2.5°, 2 x 5°, size can be adjusted by 3.5 mm



Aluminium wall bracket. Not suitable for PowerView®.

04-3404 R_04 bracket | electric drive

Technical data

Model:	04-3404	
Operation options:	- Radio/electric drive 230 V	- PowerView® radio drive 230 V
Equipment:	- Bracket	
Description:	<p>Electric roller blind 230 V with PV M50T-626 radio electric drive and integrated radio receiver, various control options, smart home compatible.</p> <p>Electric roller blind 230 V with LT50 drive with adjustable final position switch-off; with Sonesse 50 drive extremely low noise, with adjustable final position switch-off; with Sonesse 50 RTS drive with integrated radio receiver, extremely low noise and with adjustable final position switch-off; with Altus 50 RTS with integrated radio receiver, with adjustable final position switch-off. Aluminium roller blind tube, Ø 65 mm, extruded.</p> <p>Internal steel tube weighted rod Ø 18 mm, white-coated.</p> <p>Electrical accessories and various control options, with relevant actuators suitable for BUS systems, see the separate MHZ Electrical Price List.</p>	
Hardware colours:	172 white (RAL 9016) 611 anthracite grey (RAL 7016) 651 anthracite (DB 703)	671 black (RAL 9005) 901 silver coloured (RAL 9006)
	All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request	

Dimensions:	Up to a unit width of 400 cm:	Blind unit sizes	Bracket mounting	Mounting rail		
		Min. width	Max. width	Max. width	Max. height	Max. area
	Operation/Function	Min. width	Max. width	Max. width	Max. height	Max. area
	Radio drive 230 V, PowerView® M50T-626	From 74 cm	Up to 400 cm*	Up to 400 cm*	Up to 450 cm	16 m ²
	Electric drive 230 V, LT50 Start 6/17	From 68 cm	Up to 400 cm*	Up to 400 cm*	Up to 450 cm	16 m ²
	Radio drive 230 V, Altus 50 RTS 6/17	From 82 cm	Up to 400 cm*	Up to 400 cm*	Up to 450 cm	16 m ²
	Electric drive 230 V, Sonesse 50 6/28	From 83 cm	Up to 400 cm*	Up to 400 cm*	Up to 450 cm	16 m ²
	Radio drive 230 V, Sonesse 50 RTS 6/28	From 83 cm	Up to 400 cm*	Up to 400 cm*	Up to 450 cm	16 m ²
	Radio drive 230 V, Sunea Screen 50 io 6/32	From 83 cm	Up to 400 cm*	Up to 400 cm*	Up to 450 cm	16 m ²
	From a unit width of 400.1 cm:	Blind unit sizes	Bracket mounting	Mounting rail		
		Min. width	Max. width	Max. width	Max. height	Max. area
	Operation/Function	Min. width	Max. width	Max. width	Max. height	Max. area
	Electric drive 230 V, LT50 CERES 10/17	From 400.1 cm	Up to 450 cm*	Up to 520 cm*	Up to 450 cm	16 m ²
	Radio drive 230 V, Altus 50 RTS 10/17	From 400.1 cm	Up to 450 cm*	Up to 520 cm*	Up to 450 cm	16 m ²
	Electric drive 230 V, Sonesse 50 10/28	From 400.1 cm	Up to 450 cm*	Up to 520 cm*	Up to 450 cm	16 m ²
	Radio drive 230 V, Sonesse 50 RTS 10/28	From 400.1 cm	Up to 450 cm*	Up to 520 cm*	Up to 450 cm	16 m ²
	Radio drive 230 V, Sunea Screen 50 io 10/32	From 400.1 cm	Up to 450 cm*	Up to 520 cm*	Up to 450 cm	16 m ²

Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing.
If in doubt, please enquire in advance. For recess installation: Width = recess dimension - 2 mm.

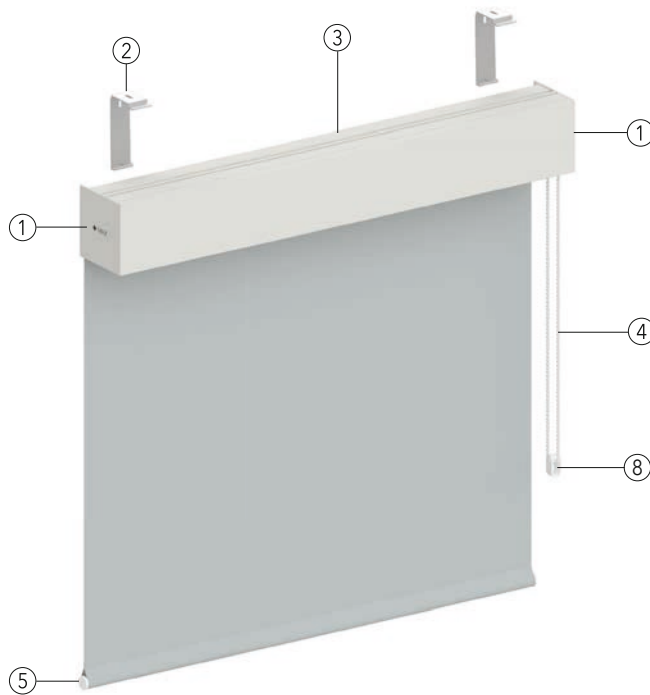
Fabrics:	<p>See MHZ Collection.</p> <p>MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top.</p> <p>Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.</p>
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.
Additional equipment:	<p>- * Compensating device (recommended from a width of 320 cm, standard from 400 cm)</p> <p>- External aluminium weighted rod (172, 611, 651, 671, 901): square, 17 x 40 mm</p> <p>- Mounting rail with clip (size 70 up to width of 3 m, size 95 up to width of 5.2 m)</p> <p>- Recess bracket</p> <p>- Side guide only for internal weighted rod and single units (only for blind fabric at the rear)</p> <p>- Aluminium bracket</p>

Installation:	Bracket:	Mounting rail:	Recess installation:
	<ul style="list-style-type: none"> - Bracket for wall and ceiling installation - Extension pieces for larger wall clearances 	<ul style="list-style-type: none"> - Mounting clip for wall and ceiling installation - Up to 140 cm width: 2 brackets - Up to 270 cm width: 3 brackets - Up to 400 cm width: 4 brackets - Up to 500 cm width: 5 brackets - Up to 520 cm width: 6 brackets 	<ul style="list-style-type: none"> - Bracket for recess installation - Size can be adjusted by 7 mm with 2 compensating shims or 2.5° per compensating shim

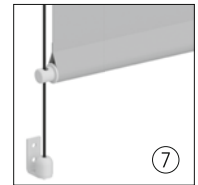
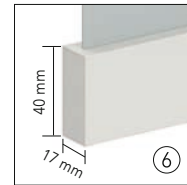
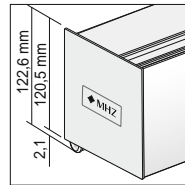
Technical data

04-3442 R_04 cassette | operating chain

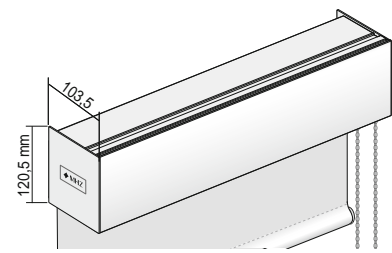
Hardware



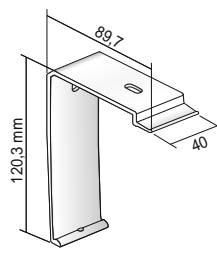
- ① Housing cover
- ② Bracket for wall and ceiling
- ③ Cassette, square
- ④ Operating chain
- ⑤ Internal weighted rod
- ⑥ External weighted rod, square
- ⑦ Side guide
- ⑧ Safety tensioner



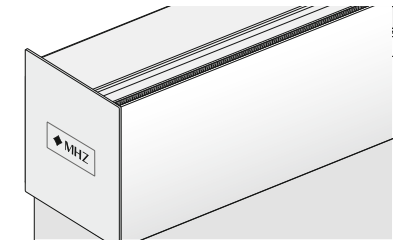
Installation options



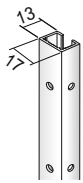
Cassette, square wall/ceiling installation



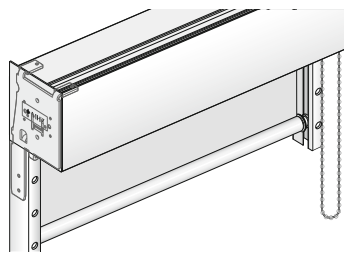
Bracket for wall/ceiling installation



Cassette with brush seal



Side guide profile with weighted rod guide up to width 450 cm



Elevated track with side guide profile and weighted rod guide (up to width 450 cm)

04-3442 R_04 cassette | operating chain

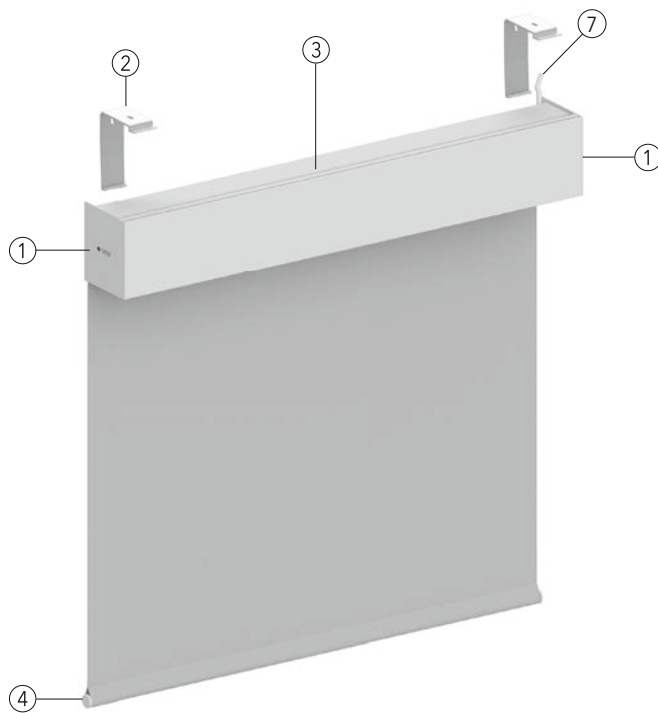
Technical data

Model:	04-3442				
Operation options:	- Operating chain				
Equipment:	- Cassette, square				
Description:	Chain operation roller blind with integrated smooth-running chain gear, depending on the blind fabric weight. Adjustable bottom end position, operation chain without safety breaking system with safety tensioner. Extruded aluminium roller blind tube, Ø 65 mm. Extruded aluminium cassette. Internal steel tube weighted rod Ø 18 mm, white-coated.				
Hardware colours:	172 white (RAL 9016) 611 anthracite grey (RAL 7016) 651 anthracite (DB 703)		671 black (RAL 9005) 901 silver coloured (RAL 9006)		
	All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request.				
Dimensions:	Operation/Function	Blind unit sizes			
		Min. width	Max. width	Max. height	Max. area
	Bead chain	From 27 cm	Up to 450 cm*	450 cm	16 m ²
	Metal chain	From 27 cm	Up to 450 cm*	450 cm	16 m ²
	Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing. If in doubt, please enquire in advance. For recess installation: Width = recess dimension - 2 mm.				
Fabrics:	See MHZ Collection. MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top. Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.				
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.				
Additional equipment:	- Compensating device (recommended from a width of 320 cm, standard from 400 cm) - Antibacterial operation chain without safety breaking system (with safety tensioner) - Transparent operation chain without safety breaking system with black cord (standard with 611 and 671), with safety tensioner - Metal chain (with safety tensioner) - External aluminium weighted rod (172, 611, 651, 671, 901): square, 17 x 40 mm - Brush seal (cassette mounting profile) - Side guide profile, weighted rod guide - Elevated track (Note: From a width of 350 cm, 2 brackets are supplied to support the blind) - Side guide (only for internal weighted rod and blind fabric at the rear)				
Installation:	Bracket:				
	- Bracket for wall and ceiling installation	up to 140 cm width	2 brackets		
		up to 270 cm width	3 brackets		
		up to 400 cm width	4 brackets		
		up to 450 cm width	5 brackets		
Operation:	Transparent bead chain, metal chain (endless chain) with safety tensioner. Chain gear adapted to the blind unit size and blind fabric weight.				
Operation lengths:	Operation length from 50 cm to 150 cm in 10 cm increments, operation length from 150.1 cm to 400 cm in 25 cm increments. Delivery with the exact or next smaller operation length. Other operation lengths available on request (surcharge applies).				
Child safety:	Please see the note on page 185.				

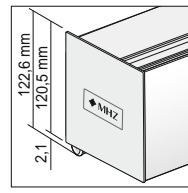
Technical
data

04-3444 R_04 cassette | electric drive

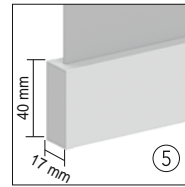
Hardware



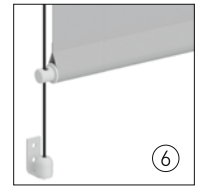
- ① Housing cover
- ② Bracket for wall and ceiling
- ③ Cassette, square
- ④ Internal weighted rod
- ⑤ External weighted rod, square
- ⑥ Side guide
- ⑦ Cable



Weighted rod, round

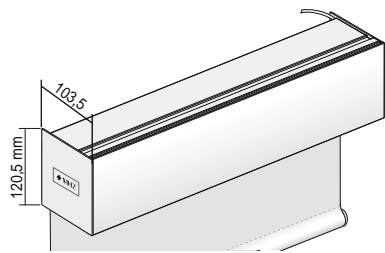


⑤

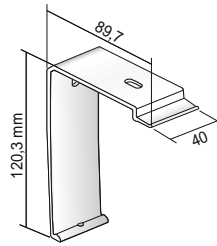


⑥

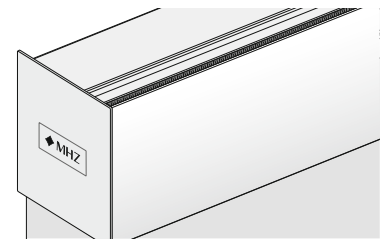
Installation options



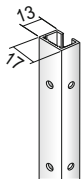
Cassette, square
Wall/ceiling installation



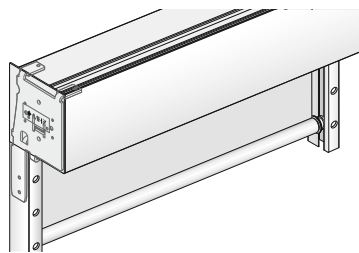
Bracket for wall/ceiling installation



Cassette with brush seal



Side guide profile with weighted rod guide
up to width 450 cm



Elevated track with side guide profile and
weighted rod guide (up to width 520 cm)

04-3444 R_04 cassette | electric drive

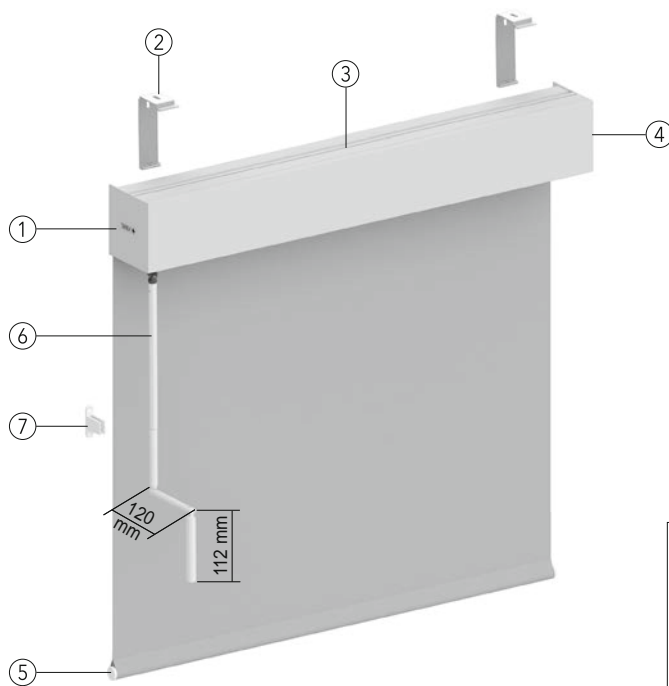
Technical data

Model:	04-3444				
Operation options:	<ul style="list-style-type: none"> - PowerView® radio drive 230 V - Radio/electric drive 230 V 				
Equipment:	- Cassette, square				
Description:	<p>Electric roller blind 230 V with PV M50T-626 radio electric drive and integrated radio receiver, various control options, smart home compatible.</p> <p>Electric roller blind 230 V with LT50 drive with adjustable final position switch-off; with Sonesse 50 drive extremely low noise, with adjustable final position switch-off; with Sonesse Altus 50 RTS drive with integrated radio receiver, extremely low noise and with adjustable final position switch-off; with Altus 50 RTS with integrated radio receiver, with adjustable final position switch-off. Aluminium roller blind tube, Ø 65 mm, extruded. Internal steel tube weighted rod Ø 18 mm, white-coated.</p> <p>Electrical accessories and various control options, with relevant actuators suitable for BUS systems, see the separate MHZ Electrical Price List.</p>				
Hardware colours:	172 white (RAL 9016)		671 black (RAL 9005)		
	611 anthracite grey (RAL 7016)		901 silver coloured (RAL 9006)		
	651 anthracite (DB 703)				
	All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request				
Dimensions:	Up to a unit width of 400 cm:				
		Blind unit sizes	Bracket mounting	Mounting rail	
	Operation/Function	Min. width	Max. width	Max. width	Max. height Max. area
	Radio drive 230 V, PowerView® M50T-626	From 74 cm	Up to 400 cm*	Up to 400 cm*	Up to 450 cm 16 m ²
	Electric drive 230 V, LT50 Start 6/17	From 68 cm	Up to 400 cm*	Up to 400 cm*	Up to 450 cm 16 m ²
	Radio drive 230 V, Altus 50 RTS 6/17	From 82 cm	Up to 400 cm*	Up to 400 cm*	Up to 450 cm 16 m ²
	Electric drive 230 V, Sonesse 50 6/28	From 83 cm	Up to 400 cm*	Up to 400 cm*	Up to 450 cm 16 m ²
	Radio drive 230 V, Sonesse 50 RTS 6/28	From 83 cm	Up to 400 cm*	Up to 400 cm*	Up to 450 cm 16 m ²
	Radio drive 230 V, Sunea Screen 50 io 6/32	From 83 cm	Up to 400 cm*	Up to 400 cm*	Up to 450 cm 16 m ²
	From a unit width of 400.1 cm:				
		Blind unit sizes	Bracket mounting	Mounting rail	
	Operation/Function	Min. width	Max. width	Max. width	Max. height Max. area
	Electric drive 230 V, LT50 CERES 10/17	From 400.1 cm	Up to 450 cm*	Up to 520 cm*	Up to 450 cm 16 m ²
	Radio drive 230 V, Altus 50 RTS 10/17	From 400.1 cm	Up to 450 cm*	Up to 520 cm*	Up to 450 cm 16 m ²
	Electric drive 230 V, Sonesse 50 10/28	From 400.1 cm	Up to 450 cm*	Up to 520 cm*	Up to 450 cm 16 m ²
	Radio drive 230 V, Sonesse 50 RTS 10/28	From 400.1 cm	Up to 450 cm*	Up to 520 cm*	Up to 450 cm 16 m ²
	Radio drive 230 V, Sunea Screen 50 io 10/32	From 400.1 cm	Up to 450 cm*	Up to 520 cm*	Up to 450 cm 16 m ²
	Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing. If in doubt, please enquire in advance.				
Fabrics:	<p>See MHZ Collection.</p> <p>MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top.</p> <p>Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.</p>				
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.				
Additional equipment:	<ul style="list-style-type: none"> - * Compensating device (recommended from a width of 320 cm, standard from 400 cm) - Side guide only for internal weighted rod and blind fabric at the rear - External aluminium weighted rod (172, 611, 651, 671, 901): square, 17 x 40 mm - Brush seal (cassette mounting profile) - Side guide profile, weighted rod guide - Elevated track (Note: From a width of 350 cm, 2 brackets are supplied to support the blind) 				
Installation:	Bracket:				
	- Bracket for wall and ceiling installation	up to 140 cm width	2 brackets		
		up to 270 cm width	3 brackets		
		up to 400 cm width	4 brackets		
		up to 500 cm width	5 brackets		
		up to 520 cm width	6 brackets		

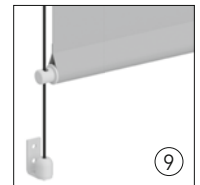
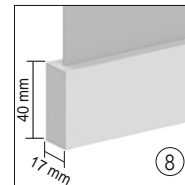
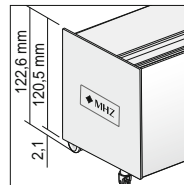
Technical data

04-3446 R_04 cassette | crank

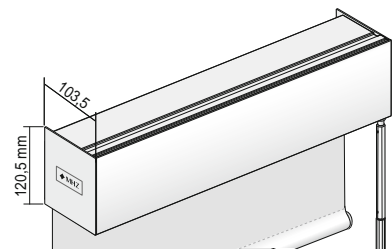
Hardware



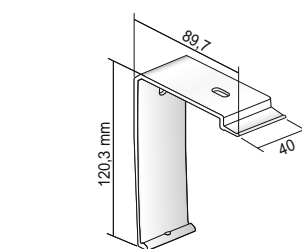
- ① Crank gear
- ② Bracket for wall and ceiling
- ③ Cassette, square
- ④ Housing cover
- ⑤ Internal weighted rod
- ⑥ Crank
- ⑦ Crank clip
- ⑧ External weighted rod, square
- ⑨ Side guide



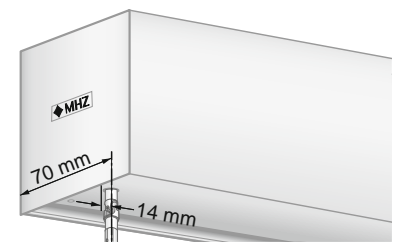
Installation options



Cassette, square wall/ceiling installation



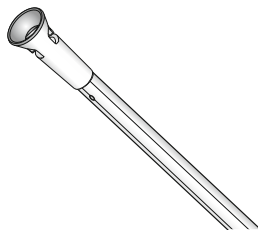
Bracket for wall/ceiling installation



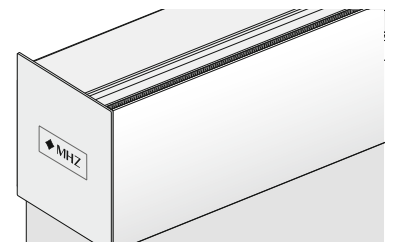
Crank exit



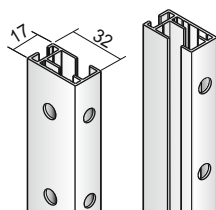
Crank adapter



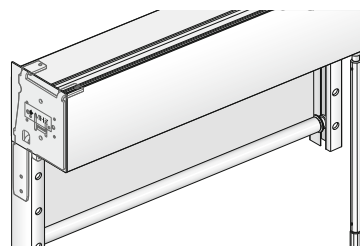
Funnel crank



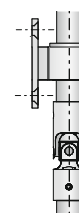
Cassette with brush seal



Side guide profile with weighted rod guide up to width 320 cm



Elevated track with side guide profile and weighted rod guide (up to width 320 cm)

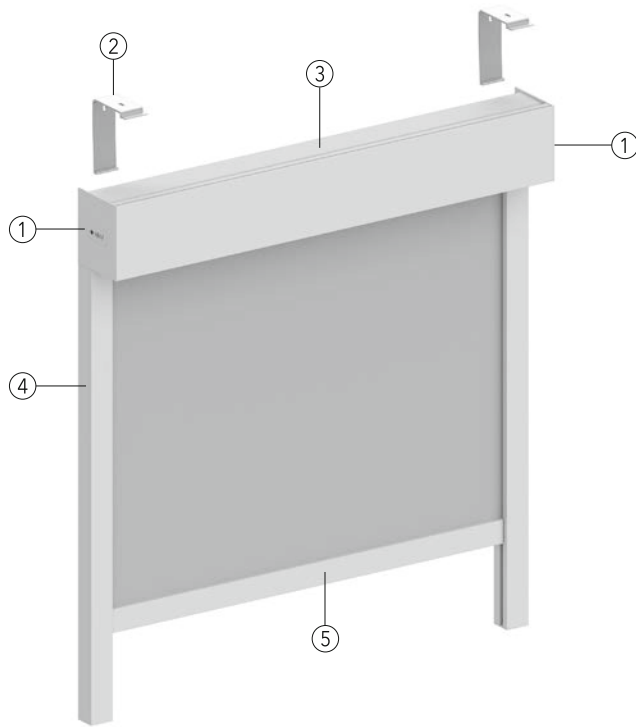


Crank bearing

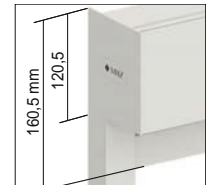
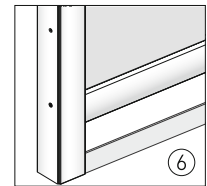
04-3464 R_04 ZIP cassette | electric drive

Side guide profile

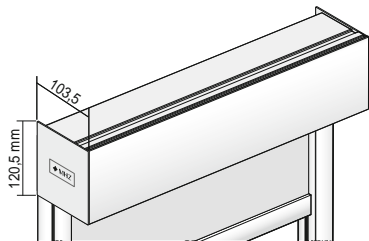
Hardware



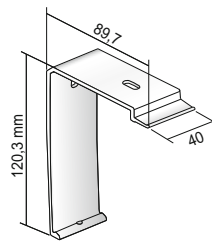
- ① Housing cover
- ② Bracket for wall and ceiling
- ③ Cassette, square
- ④ ZIP side guide profile
- ⑤ External weighted rod with brush seal
- ⑥ Bottom rail



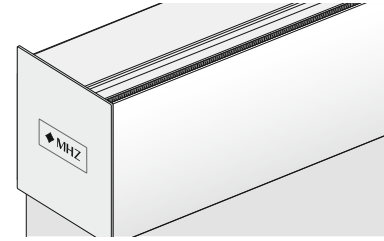
Installation options



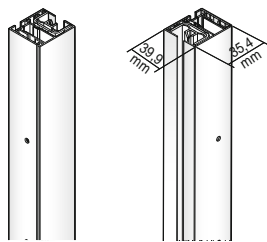
Cassette, square ZIP, side guide profile front/recess installation



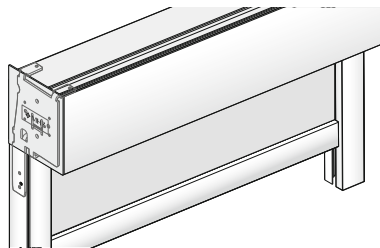
Bracket for wall/ceiling installation



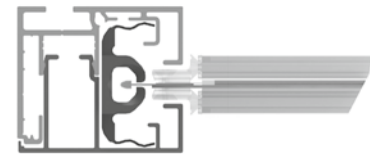
Cassette with brush seal



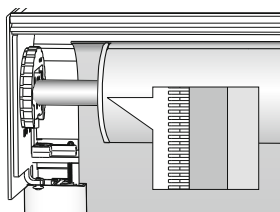
ZIP guide rail recess/front installation



Elevated track ZIP



Cross-section side guide rail



ZIP fabric attachment

04-3464 R_04 ZIP cassette | electric drive

Side guide profile

Technical data

Model:	04-3464															
Operation options:	- Radio/electric drive 230 V															
Equipment:	- Cassette, square ZIP, with side guide profile															
Description:	<p>Electric roller blind 230 V with Maestria 50 WT drive with adjustable final position switch-off; with Maestria +50 io drive extremely low noise, with adjustable final position switch-off with integrated radio receiver. Aluminium roller blind tube, Ø 65 mm, extruded. Extruded aluminium cassette. Cassette, side guide profile and, where applicable, bottom rail with brush seal. External aluminium weighted rod 17 x 40 mm with brush seal. ZIP zipper welded onto the side of the fabric edges.</p> <p>Electrical accessories and various control options, with relevant actuators suitable for BUS systems, see the separate MHZ Electrical Price List.</p>															
Hardware colours:	<table><tr><td>172 white (RAL 9016)</td><td>671 black (RAL 9005)</td></tr><tr><td>611 anthracite grey (RAL 7016)</td><td>901 silver coloured (RAL 9006)</td></tr><tr><td>651 anthracite (DB 703)</td><td></td></tr></table> <p>All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request</p>	172 white (RAL 9016)	671 black (RAL 9005)	611 anthracite grey (RAL 7016)	901 silver coloured (RAL 9006)	651 anthracite (DB 703)										
172 white (RAL 9016)	671 black (RAL 9005)															
611 anthracite grey (RAL 7016)	901 silver coloured (RAL 9006)															
651 anthracite (DB 703)																
Dimensions:	<table><thead><tr><th rowspan="2">Operation/Function</th><th colspan="3">Blind unit sizes</th></tr><tr><th>Min. width</th><th>Max. width</th><th>Max. height</th></tr></thead><tbody><tr><td>Electric drive 230 V, Maestria 50 WT 6/17</td><td>From 100 cm*</td><td>Up to 400 cm**</td><td>Up to 300 cm</td></tr><tr><td>Radio drive 230 V, Maestria+ 50 io 6/17</td><td>From 100 cm*</td><td>Up to 400 cm**</td><td>Up to 300 cm</td></tr></tbody></table> <p>*Due to the required weight of the weighted rod</p>	Operation/Function	Blind unit sizes			Min. width	Max. width	Max. height	Electric drive 230 V, Maestria 50 WT 6/17	From 100 cm*	Up to 400 cm**	Up to 300 cm	Radio drive 230 V, Maestria+ 50 io 6/17	From 100 cm*	Up to 400 cm**	Up to 300 cm
Operation/Function	Blind unit sizes															
	Min. width	Max. width	Max. height													
Electric drive 230 V, Maestria 50 WT 6/17	From 100 cm*	Up to 400 cm**	Up to 300 cm													
Radio drive 230 V, Maestria+ 50 io 6/17	From 100 cm*	Up to 400 cm**	Up to 300 cm													
Fabrics:	<p>See MHZ Collection.</p> <p>MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top.</p> <p>Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.</p>															
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.															
Additional equipment:	<ul style="list-style-type: none">- **Compensating device (recommended from a width of 320 cm)- Side guide profile- Bottom rail- Brush seal (mounting profile)- Elevated track															
Installation:	<p>Bracket:</p> <table><tr><td>- Bracket for wall installation</td><td>up to 140 cm width</td><td>2 brackets</td></tr><tr><td></td><td>up to 270 cm width</td><td>3 brackets</td></tr><tr><td></td><td>up to 400 cm width</td><td>4 brackets</td></tr></table>	- Bracket for wall installation	up to 140 cm width	2 brackets		up to 270 cm width	3 brackets		up to 400 cm width	4 brackets						
- Bracket for wall installation	up to 140 cm width	2 brackets														
	up to 270 cm width	3 brackets														
	up to 400 cm width	4 brackets														
Note:	From a width of 350 cm, 2 brackets are supplied to support the blind.															

Technical data

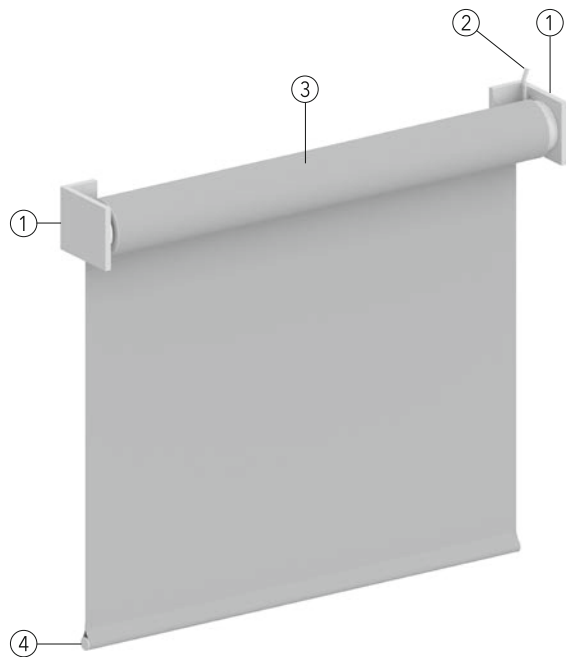
R_05 roller blind technical data



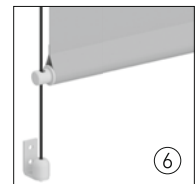
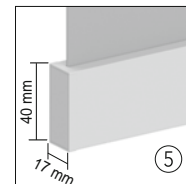
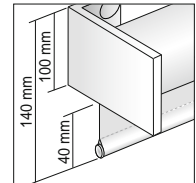
04-3504 bracket | electric drive
Page 158-159

04-3504 R_05 bracket | electric drive

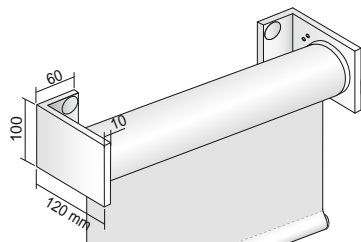
Hardware



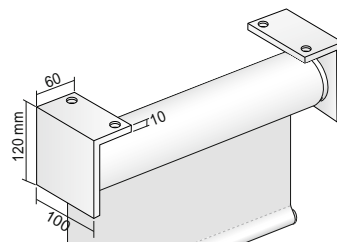
- ① Aluminium bracket
- ② Cable
- ③ Roller blind tube with fabric
- ④ Internal weighted rod
- ⑤ External weighted rod, square
- ⑥ Side guide



Installation options



Wall installation
with bracket



Ceiling installation
with bracket

04-3504 R_05 bracket | electric drive

Technical data

Model:	04-3504		
Operation options:	<ul style="list-style-type: none"> - PowerView® radio drive 230 V - Radio/electric drive 230 V 		
Equipment:	- Aluminium bracket		
Description:	<p>Electric roller blind 230 V with PV M50T-626 radio electric drive 230 V AC with adjustable final position switch-off; with Sonesse 50 drive extremely low noise, with adjustable final position switch-off; with Sonesse 50 RTS drive with integrated radio receiver, extremely low noise and with adjustable final position switch-off; with Altus 50 RTS with integrated radio receiver, with adjustable final position switch-off. Aluminium roller blind tube, Ø 65 mm up to width 600 cm, extruded. Internal steel tube weighted rod Ø 18 mm, white-coated.</p> <p>Electrical accessories and various control options, with relevant actuators suitable for BUS systems, see the separate MHZ Electrical Price List.</p>		
Hardware colours:	172 white (RAL 9016) 611 anthracite grey (RAL 7016) 651 anthracite (DB 703)	671 black (RAL 9005) 901 silver coloured (RAL 9006)	
	All aluminium surfaces in matt powder-coated, fine texture. RAL colours on request		

Dimensions:

From a unit width of 400.1 cm	Blind unit sizes			
	Min. width	Max. width	Max. height	Max. area
Electric drive 230 V, LT50 Ceres 10/17	From 400.1 cm	Up to 600 cm *	600 cm	20 m ²
Radio drive 230 V, Altus 50 RTS 10/17	From 400.1 cm	Up to 600 cm *	600 cm	20 m ²
Electric drive 230 V, Sonesse 50 10/28	From 400.1 cm	Up to 600 cm *	600 cm	20 m ²
Radio drive 230 V, Sonesse 50 RTS 10/28	From 400.1 cm	Up to 600 cm *	600 cm	20 m ²
Radio drive 230 V, Sunea Screen 50 io 10/32	From 400.1 cm	Up to 600 cm *	600 cm	20 m ²

Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing.
 If in doubt, please enquire in advance. For recess installation: Width = recess dimension - 2 mm.

Fabrics:	<p>See MHZ Collection.</p> <p>MHZ roller blinds are made without a transverse seam wherever possible. The remaining length with the transverse seam is positioned at the top.</p> <p>Note the fitting instructions regarding fabric qualities and the transverse seam in the roller blind catalogue, "Textile notes" section.</p>
Fabric size:	See page 160-161 for precise information on how to calculate the fabric size.
Additional equipment:	<ul style="list-style-type: none"> - *Compensating device (recommended from a width of 320 cm, standard from 400 cm) - External aluminium weighted rod (172, 611, 651, 671, 901): square, 17 x 40 mm - Side guide
Installation:	<p>Bracket mounting:</p> <ul style="list-style-type: none"> - Aluminium bracket for wall and ceiling installation

R_03 / R_04 / R_05 calculation of fabric size

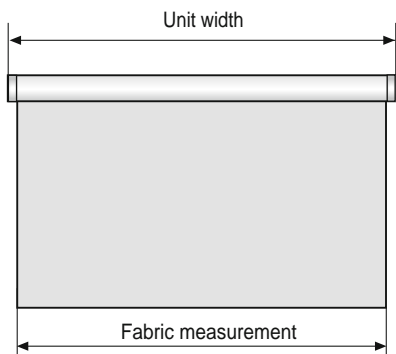
Fabric size = unit width minus the stated dimensions

Model	Operation option	Unit height up to	Fabric size	Light gap in mm		Fabric size Bracket, adjustable Mounting rail bracket, adjustable Sun protection carrier*	Light gap in mm Bracket, adjustable Mounting rail bracket, adjustable Sun protection carrier* With roller blind tube compensating device**	
				X	Y		X	Y
04-3302	Operating chain	Max. 300 cm	Unit width - 30 mm	19	11	Unit width - 30 mm	19	11
04-3303	Soft	Max. 250 cm	Unit width - 22 mm	11	11	Unit width - 22 mm	11	11
04-3305	Battery-operated radio drive 12 V, Roll Up 28 RTS	Max. 200 cm	Unit width - 33 mm	22	11	Unit width - 34 mm	23	11
04-3305	Battery-operated radio drive 12 V, Sonesse 30 Ultra RTS	Max. 300 cm	Unit width - 33 mm	22	11	Unit width - 34 mm	23	11
04-3305	Battery-operated radio drive 18 V, M25T PV 18 V	Max. 300 cm	Unit width - 31 mm	20	11			
04-3342, 04-3352	Operating chain	Max. 300 cm	Unit width - 38 mm	19	19			
04-3343	Soft	Max. 250 cm	Unit width - 38 mm	19	19			
04-3345, 04-3355	Battery-operated radio drive 12 V, Roll Up 28 RTS	Max. 200 cm	Unit width - 41 mm	22	19			
04-3345, 04-3355	Battery-operated radio drive 12 V, Sonesse 30 Ultra RTS	Max. 300 cm	Unit width - 41 mm	22	19			
04-3345, 04-3355	Battery-operated radio drive 18 V, M25T PV 18 V	Max. 300 cm	Unit width - 41 mm	22	19			
04-3346, 04-3356	Crank	Max. 300 cm	Unit width - 43 mm	24	19			
04-3304	Radio drive 18 V (PowerView®)	Max. 300 cm	Unit width - 26 mm	15	11			
04-3304	Electric drive 24 V, Roll Up 28 WT	Max. 300 cm	Unit width - 34 mm	23	11	Unit width - 35 mm	24	11
04-3304	Electric drive 24 V, Sonesse 30 DCT	Max. 300 cm	Unit width - 32 mm	21	11	Unit width - 33 mm	22	11
04-3304	Radio drive 24 V, Sonesse 30 RTS	Max. 300 cm	Unit width - 32 mm	21	11	Unit width - 33 mm	22	11
04-3304	Radio/electric drive 230 V	Max. 300 cm	Unit width - 36 mm	25	11	Unit width - 37 mm	26	11
04-3304	Radio drive 230 V (PowerView®)	Max. 300 cm	Unit width - 33 mm	22	11			
04-3344, 04-3354	Radio drive 18 V (PowerView®)	Max. 300 cm	Unit width - 40 mm	21	19			
04-3344, 04-3354	Electric drive 24 V, Roll Up 28 WT	Max. 300 cm	Unit width - 42 mm	23	19			
04-3344, 04-3354	Electric drive 24 V, Sonesse 30 DCT	Max. 300 cm	Unit width - 40 mm	21	19			
04-3344, 04-3354	Radio drive 24 V, Sonesse 30 RTS	Max. 300 cm	Unit width - 40 mm	21	19			
04-3344, 04-3354	Radio/electric drive 230 V	Max. 300 cm	Unit width - 42 mm	23	19			
04-3344, 04-3354	Radio/electric drive 230 V (PowerView®)	Max. 300 cm	Unit width - 43 mm	24	19			
04-3402	Operating chain	Max. 450 cm	Unit width - 48 mm	24	24			
04-3404	Radio drive 230 V (PowerView®)	Max. 450 cm	Unit width - 69/66 mm**	42	27		42**	24**
04-3404	Radio/electric drive 230 V	Max. 450 cm	Unit width - 56/53 mm**	29	27		29**	24**
04-3442	Operating chain	Max. 450 cm	Unit width - 46 mm	23	23			
04-3444	Radio drive 230 V (PowerView®)	Max. 450 cm	Unit width - 66/64 mm**	40	26		40**	24**
04-3444	Radio/electric drive 230 V	Max. 450 cm	Unit width - 53/51 mm**	27	26		27**	24**
04-3446	Crank	Max. 450 cm	Unit width - 55 mm	32	23			
04-3464	Radio/electric drive 230 V	Max. 300 cm	Unit width - 68 mm					
04-3504	Radio drive 230 V (PowerView®)	Max. 600 cm	Unit width - 76/73 mm**	46	30		46**	27
04-3504	Radio/electric drive 230 V	Max. 600 cm	Unit width - 63/61 mm**	33	30		33**	28**

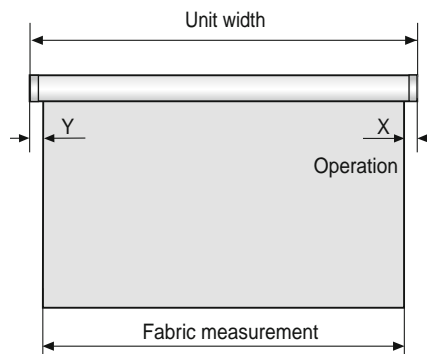
* Sun protection carrier for R_03 roller blind 04-3302, 04-3303, 04-3305 only

R_03 / R_04 / R_05 calculation of fabric size

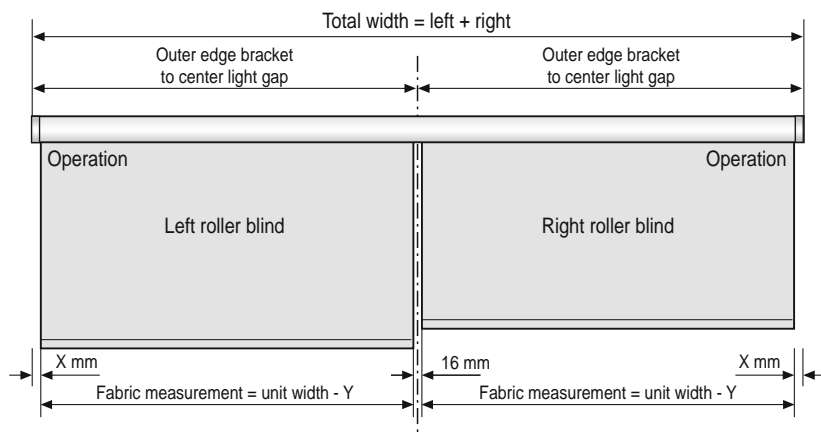
Calculation of fabric size



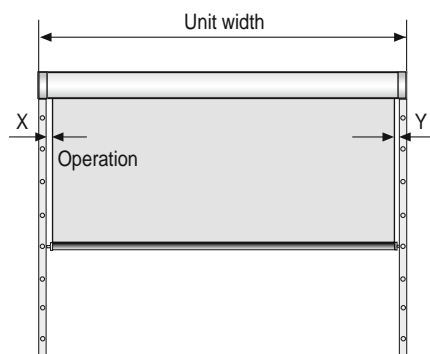
Light gap



Dimensions for R_03 non-linked blind fabric



Dimensions for elevated track



Roller blinds technical data



04-1614 SKIRO
Page 164-165



04-1671 SKID
Page 166-167



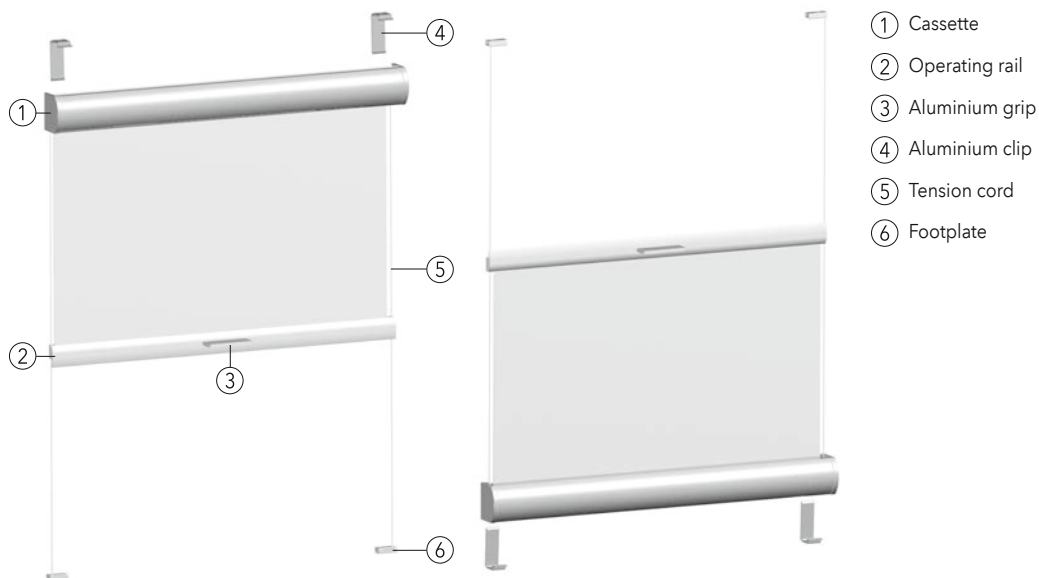
04-2250 skylight
Page 168-169



04-2251 skylight
Page 170-171

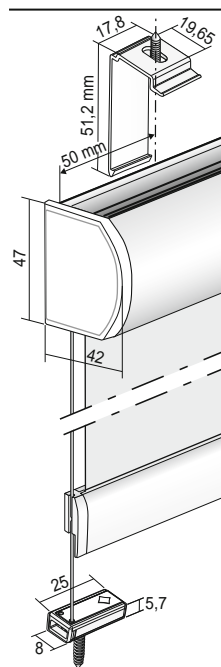
04-1614 SKIRO

Hardware



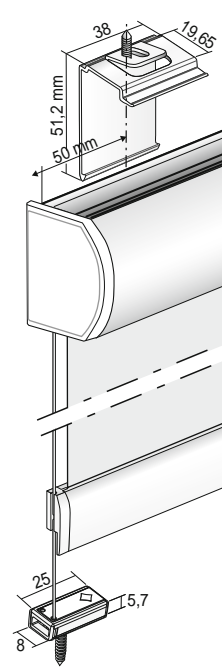
- ① Cassette
- ② Operating rail
- ③ Aluminium grip
- ④ Aluminium clip
- ⑤ Tension cord
- ⑥ Footplate

Standard installation

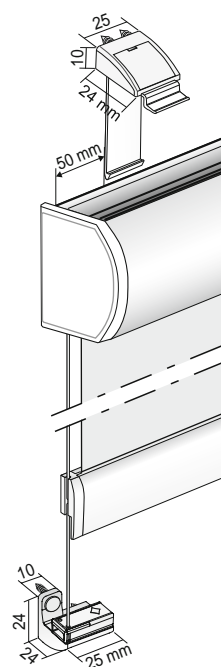


Glazing bead installation (straight glazing bead) with aluminium clip and footplate base

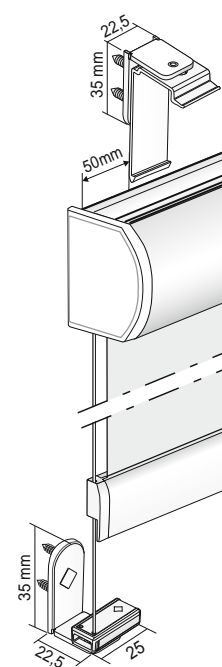
Installation options



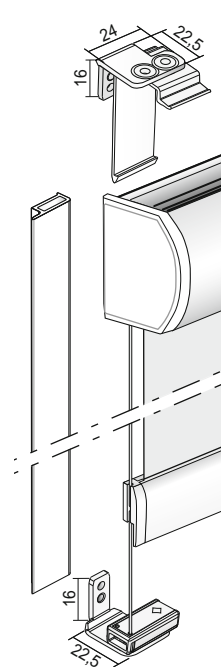
Glazing bead installation (angled glazing bead) with aluminium clip, footplate base and opt. levelling chock



Glazing bead installation (front) with aluminium clip and glazing bead bracket incl. footplate base



Window sash installation with aluminium clip and angle bracket incl. footplate base



Glass pane installation with MHZ adhesive set (not for adhesive bead with side guide profile)

Technical data

Model: 04-1614

Operation options: - Operating handle

Equipment: - Cassette

Description: Taut roller blind with internal spring drive. Roller blind tube made of galvanised steel tube, ø 20 mm. Extruded aluminium profiles. Aluminium operating rail. Operation via aluminium grip. Height of the blind fabric is adjusted by moving the bottom rail, which secures in any desired position. 1 operating handle per rail up to 90 cm width; 2 operating handles per rail from 90.1 cm width.

2 blind fabric options possible: Blind fabric operated from top to bottom
Blind fabric operated from bottom to top with special cord run (increased cord tension)

Hardware colours: 100 silver anodised
171 white powder-coated
RAL colours on request

Dimensions:	Operation/Function	Blind unit sizes		
		Min. width	Max. width	Max. height
	Operating handle/Window	From 27.5 cm	Up to 120 cm	150 cm
	Operating handle/Door	From 27.5 cm	Up to 100 cm	200 cm

Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing. If in doubt, please enquire in advance.

Fabrics: For suitable fabrics, see the SKID, SKIRO, SKYLIGHT colour charts for the roller blind/panel blind collection.

Fabric size: See below

Installation:	Adhesive set	Screw installation:
	MHZ adhesive set for sticking to the glass pane without tools or residue.	<p>Glazing bead installation (straight glazing bead) with aluminium clip and footplate base (min. 18 mm glazing bead depth)</p> <p>Glazing bead installation (angled glazing bead) with aluminium clip and footplate base (min. 18 mm glazing bead depth). For angled installation, please use levelling chocks that fit the glazing bead slope.</p> <p>Glazing bead installation (front) with aluminium clip and glazing bead bracket incl. footplate base</p> <p>Window sash installation with aluminium clip and angle bracket incl. footplate base</p>

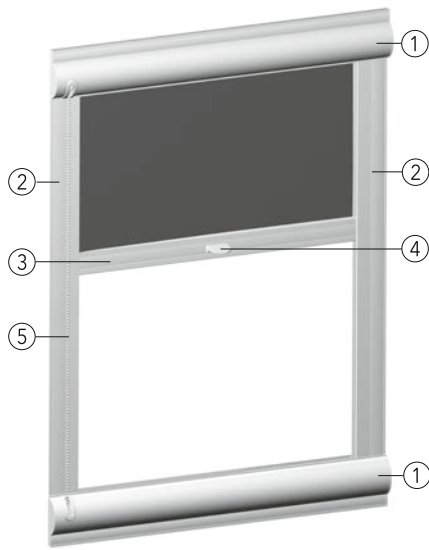
Please note the measuring advice and explanation of how to use the drilling template on page 179-181.

SKIRO roller blind - Calculation of fabric size

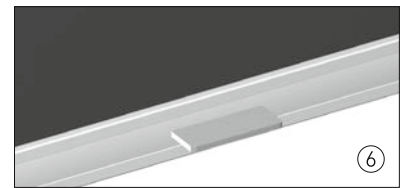
Model	Operation option	Equipment	Unit height	Fabric size
04-1614	Operating rail	Cassette	Up to 200 cm	Unit width - 22 mm

04-1671 SKID

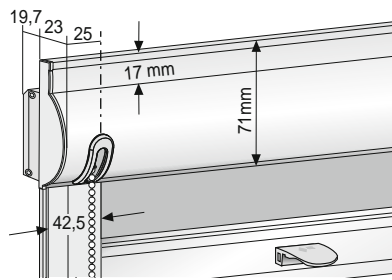
Hardware



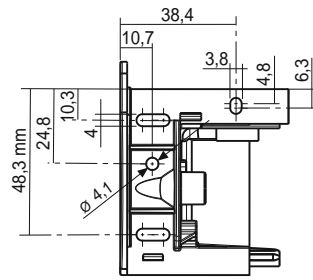
- ① Cassette
- ② Side guide
- ③ Operating rail
- ④ Operating handle
- ⑤ Operating chain
- ⑥ Aluminium grip



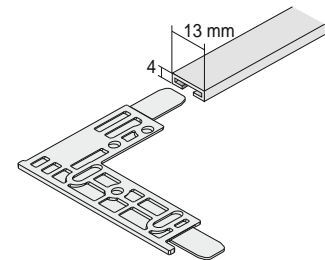
Installation options



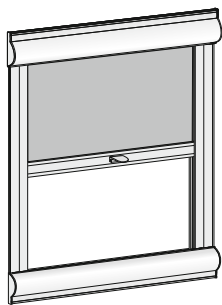
Glazing bead installation



Plastic corner profile:
Dimensions of the drill holes provided



Spacer profile for narrow glazing bead



Concealed operating chain on both sides

Technical data

Model:	04-1671															
Operation options:	- Operating chain and operating handle															
Equipment:	- Cassette															
Description:	Chain operation roller blind with cover at top and bottom, and internal spring drive. Roller blind tubes made of galvanised steel tube, ø 20 mm. Extruded aluminium profiles. Side guide profiles with brush seals. Aluminium operating rail. Operation via chain pull with transparent endless bead chain on left or right, and operating handle, secured in any desired position. 2 blind fabric options possible: Blind fabric operated from top to bottom Blind fabric operated from bottom to top															
Hardware colours:	100 silver anodised 171 white powder-coated 610 anthracite powder-coated 670 black powder-coated RAL colours on request Hardware colour 610 and 670 with transparent operating chain and black cord															
Dimensions:	<table border="1"> <thead> <tr> <th rowspan="2">Operation/Function</th> <th colspan="3">Blind unit sizes</th> </tr> <tr> <th>Min. width</th> <th>Max. width</th> <th>Max. height</th> </tr> </thead> <tbody> <tr> <td>Operating chain and operating handle/Window</td> <td>From 30 cm</td> <td>Up to 150 cm</td> <td>150 cm</td> </tr> <tr> <td>Operating chain and operating handle/Door</td> <td>From 30 cm</td> <td>Up to 120 cm</td> <td>220 cm</td> </tr> </tbody> </table> <p>Please note: If the width to height ratio is greater than 1:4, there is an increased risk of skewing. If in doubt, please enquire in advance.</p>	Operation/Function	Blind unit sizes			Min. width	Max. width	Max. height	Operating chain and operating handle/Window	From 30 cm	Up to 150 cm	150 cm	Operating chain and operating handle/Door	From 30 cm	Up to 120 cm	220 cm
Operation/Function	Blind unit sizes															
	Min. width	Max. width	Max. height													
Operating chain and operating handle/Window	From 30 cm	Up to 150 cm	150 cm													
Operating chain and operating handle/Door	From 30 cm	Up to 120 cm	220 cm													
Fabrics:	For suitable fabrics, see the SKID, SKIRO, SKYLIGHT colour charts for the roller blind/panel blind collection.															
Fabric size:	See below															
Additional equipment:	- Aluminium grip - Single/double spacer profile with 4/8 corner connectors - Concealed operating chain on both sides															
Installation:	<p>Installation: Side guide profiles are attached and swivelled in. Frame is fixed via the screw connection already present in the end cap. Drill holes provided are adapted to different glazing beads. Side guide with adhesive tape from a height of 100 cm (adhesive tape not suitable for painted or glazed surfaces).</p> <p>Dimension template as a measuring aid for different glazing bead shapes and required spacer profiles.</p> <p>Please note the measuring advice and explanation of how to use the dimension template on page 182-183.</p> <p>Caution: Regular operation prevents the formation of condensation. Condensation can form at night or on cold days when the temperature between the closed roller blind hanging and the glass pane drops considerably. A sufficient circulation of air in this case helps to prevent potential damage (e.g. water spots).</p>															
Note:	Cassette roller blinds and rail-guided units may only be lowered with the window closed. Otherwise there is the risk of a suction effect developing, which can pull the blind out of its side rails. If the unit is retracted in this condition, it may become damaged. Side guide profiles only have a dim-out effect.															

SKID roller blind - Calculation of fabric size

Model	Operation option	Equipment	Unit height	Fabric size
04-1671	Operating chain and operating handle	Cassette	Up to 220 cm	Unit width - 27 mm

Technical
data

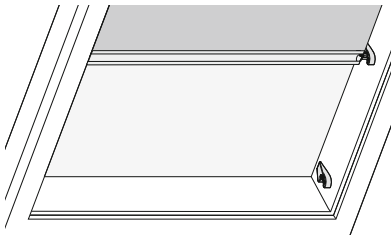
04-2250 skylight roller blind

Hardware



- ① Cassette
- ② Operating rail
- ③ Weighted rod clip

Installation and operation



.....
Operating rail

04-2250 skylight roller blind

Technical data

Model: 04-2250

Operation options: - Operating rail

Equipment: - Cassette

Description: **Operating rail:** Skylight roller blind for conventional skylight models. Extruded aluminium cassette. Painted white steel roller blind tube, ø 25 mm. Internal spring drive without locking mechanism. Operation via operating rail. Opened and closed by pulling or releasing the operating rail. Secured in position by hooking the operating rail into the clips at the side.

Hardware colours: 100 silver anodised
171 white powder-coated
RAL colours on request

Dimensions:	Operation/Function	Blind unit sizes			
		Min. width	Max. width	Min. height	Max. height
	Operating rail	From 35 cm	Up to 120 cm	30 cm	150 cm

Please note: Deviations may occur, depending on the fabric.

Fabrics: For suitable fabrics, see the SKID, SKIRO, SKYLIGHT colour charts for the roller blind/panel blind collection.

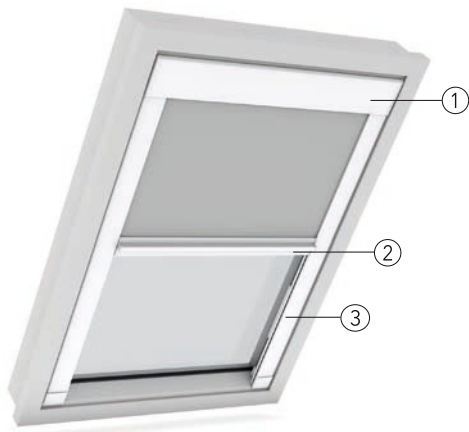
Installation: Suitable for VELUX® Pick + Click.
Fixed via screws.

Note: For technical reasons, the MHZ skylight roller blind is **not** suitable for the following window models: BRAAS Atelier, DELTA Galeria Atelier/Smart, DÖRKEN Atelier/Galeria Smart, ROTO H3 top horizontally pivoted sash window.
Max. inclination angle: 60°.
Since heat builds up in the area around skylights, a slight waviness at the edges of the roller blind fabric may be unavoidable, depending on the fabric quality in question.

04-2251 skylight roller blind

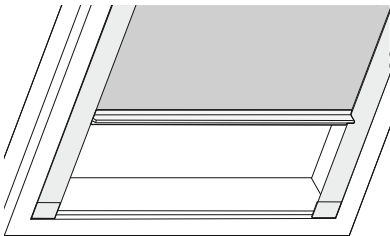
Side guide profile

Hardware



- ①
- ②
- ③

Installation and operation



Operating rail

04-2251 skylight roller blind

Side guide profile

Technical data

Model: 04-2251

Operation options: - Operating rail

Equipment: - Cassette with side guide profile

Description: **Operating rail:** Cassette skylight roller blind for conventional skylight models. Dim-out with side guide profiles, operating rail with sealing lip. Extruded aluminium profiles. Painted white steel roller blind tube, \varnothing 25 mm. Internal spring drive without locking mechanism. Opened and closed by moving the operating rail, which secures in the desired position automatically.

Hardware colours:
100 silver anodised
171 white powder-coated
RAL colours on request

Dimensions:	Operation/Function	Blind unit sizes			
		Min. width	Max. width	Min. height	Max. height
	Operating rail	From 35 cm	Up to 120 cm	30 cm	150 cm

Please note: Deviations may occur, depending on the fabric.

Fabrics: For suitable fabrics, see the SKID, SKIRO, SKYLIGHT colour charts for the roller blind/panel blind collection.

Additional equipment: Operating rod for operating rail 100, 150 or 200 cm incl. cap.

Installation: Without removing the original bracket. Also suitable for VELUX® Pick + Click.
Fixed via screws.

Note: For technical reasons, the MHZ skylight roller blind is not suitable for the following window models:
BRAAS Atelier, DELTA Galeria Atelier/Smart, DÖRKEN Atelier/Galeria Smart, ROTO H3 top horizontally pivoted sash window.
Max. inclination angle: 60°.
Side guide profiles only have a dim-out effect.
Since heat builds up in the area around skylights, a slight waviness at the edges of the roller blind fabric may be unavoidable, depending on the fabric quality in question.