

Hinge set



# AVENTOS

An inspiring range of lift systems

[www.blum.com](http://www.blum.com)

Perfecting motion  **blum**<sup>®</sup>





# Ease of motion – multitude of options

The AVENTOS lift system brings ease of motion to the wall cabinet. Even large and heavy lift systems can be opened with the utmost ease. What makes AVENTOS especially practical is that it offers the furniture user full freedom of movement and provides the necessary cabinet access at all times. Your customers will be inspired.

## Contents

- 4 Lift system range
- 5 Ideas for practical kitchens
- 8 Motion technologies
- 10 Top quality
- 12 Assembly
- 14 Frequently asked questions
- 16 Design
- 18 AVENTOS HF
- 34 AVENTOS HS
- 42 AVENTOS HL
- 50 AVENTOS HK
- 64 AVENTOS HK-S
- 74 Blum transformer and accessories
- 78 SERVO-DRIVE for AVENTOS functions
- 82 Blum

# The lift system programme

## They fold, lift and swing up and over with fascinating ease

AVENTOS is the ideal solution for any wall cabinet. Whether it is used in the kitchen or living area, whether there is lots of space available or only a little and whether it is used with small or large fronts, one thing never changes: the supreme ease of motion. With SERVO-DRIVE the lift system opens at a single touch. Thanks to BLUMOTION, it closes again silently and effortlessly. AVENTOS lift system fittings offer the highest quality – in addition to their proven stability and elegant design.



### Bi-fold lift system AVENTOS HF

- Ideal for high wall cabinets
- Handle is easy to reach, even when the lift system is open
- Takes up minimal space even with large cabinet heights, thanks to the two-part front
- Can be used with fronts of different heights



### Up & over lift system AVENTOS HS

- Ideal for large, one-part fronts
- Minimal space required thanks to swivel motion
- Can be combined with cornice or crown moulding



### Lift up AVENTOS HL

- Ideal for tall or wall cabinets with fronts above or for recessed cabinets.
- Suitable for smaller, one-piece and even low fronts
- Easy access to storage items



### Stay lift AVENTOS HK

- Ideal for small and medium wall cabinets
- The space requirement above cabinet is low thanks to the lift system motion
- No hinges required



### Small stay lift AVENTOS HK-S

- Perfect for small cabinets, e.g. over refrigerators or larder units
- Harmonious proportions
- No hinges required



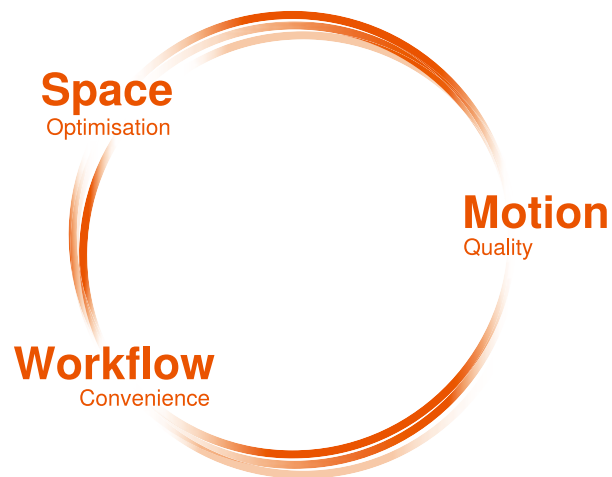
# DYNAMIC SPACE



Ideas from Blum  
for practical kitchens

## DYNAMIC SPACE – Ideas from Blum for practical kitchens

Good workflows, enough storage space and top quality motion. For Blum, workflow, space and motion are the three essential features of a practical kitchen. With DYNAMIC SPACE, we offer helpful ideas, suggestions and solutions so that today's kitchens don't just look great, but are practical as well.



### Workflow – Easy access

With AVENTOS, the front moves up, taking it right away from the work area. This makes the cabinet contents easy to access at all times. If the cabinet is placed near the dishwasher, clean glasses can be put back in their rightful place at lightning speed.



### Space – Fits in with storage space requirements

Wall cabinets with lift systems are flexible with regard to size. The optimum size depends on your room layout, your individual storage space requirements and your aesthetic preferences. Depending on the lift system type, heights of approx. 185 mm to 1040 mm are possible, coupled with widths ranging from 300 mm to 1800 mm.



### Motion – New effortlessness for lift systems

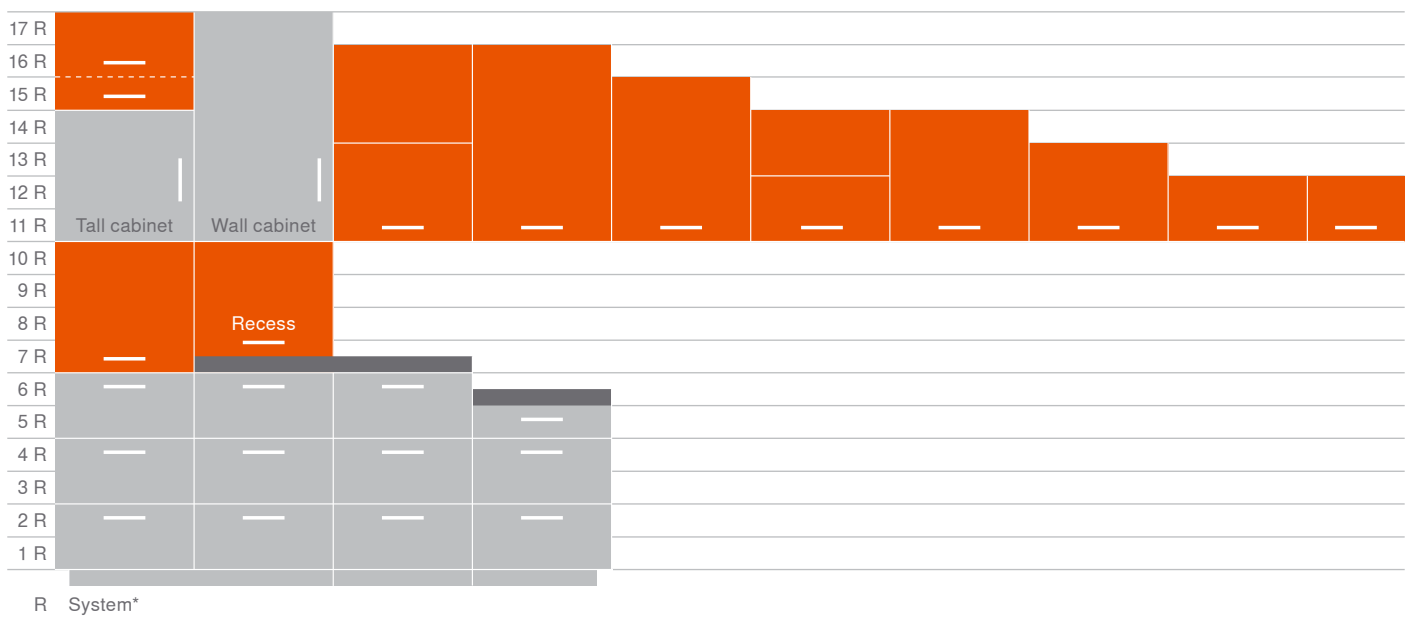
Even heavy and wide fronts have a feather-light glide. Regardless of the force applied, all AVENTOS lift systems always close silently and effortlessly – thanks to BLUMOTION. With SERVO-DRIVE, the electrical motion support system, lift systems open with just a light touch and close at the touch of an easily accessible switch.

# The lift system programme

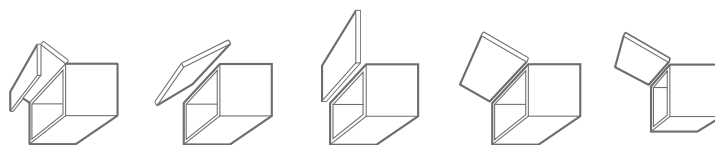
## Everything at a glance

The graphic below shows how the five fittings from the AVENTOS range can be used in a common kitchen system.

AVENTOS HL AVENTOS HL AVENTOS HF AVENTOS HS AVENTOS HS AVENTOS HF AVENTOS HS AVENTOS HS AVENTOS HK AVENTOS  
 AVENTOS HK AVENTOS HL AVENTOS HL HK-S  
 AVENTOS HK-S AVENTOS HL AVENTOS HL AVENTOS HK AVENTOS HK



\* AVENTOS is flexible enough to be used in wall cabinets using 4-tier systems in addition to the 6-tier system shown above.



HF HS HL HK HK-S

**Area of application**

High wall cabinets	■	■			
Medium wall cabinets	■	■	■	■	
Low wall cabinets			■	■	■
Tall cabinets			■	■	■

**Room planning**

Min. top space requirement	■	■		■	■
----------------------------	---	---	--	---	---

**Design**

Single front		■	■	■	■
Two-part front	■				
Can be combined with cornice or crown moulding	■	■	■	■	■
Cabinet height dimensions in mm	480–1040	350–800	300–580	up to 600 <sup>1</sup>	up to 400
Cabinet width dimensions in mm	up to 1800	up to 1800	up to 1800	up to 1800	up to 1800 <sup>2</sup>

**Ergonomics**

Handles within easy reach	■	■	■	(■)	(■)
Easy access to cabinet interior	■	■	■	■	■

**Motion technologies**

BLUMOTION	■	■	■	■	■
SERVO-DRIVE	■	■	■	■	
TIP-ON				■ <sup>3</sup>	■ <sup>3</sup>

<sup>1</sup> For ergonomic reasons, we recommend a maximum cabinet height of 600 mm. However, higher lift systems can also be implemented subject to the power factor limits (see page 54).

<sup>2</sup> Depending on the power factor

<sup>3</sup> Cannot be combined with BLUMOTION

# Fascinating ease of motion for lift systems

With its innovative motion technologies, Blum not only makes opening and closing lift systems easier – it turns the process into an experience.

## SERVO-DRIVE inside

### SERVO-DRIVE

#### Unsurpassed ease of use

A single touch suffices and the lift system opens as if by magic. To close, simply press the easy-to-access switch on the inside of the cabinet.

## TIP-ON inside

### TIP-ON

#### Simply press the lift system and it opens

TIP-ON for AVENTOS HK and HK-S, our mechanical opening support system, now makes handle-less fronts easy and comfortable to open.

## BLUMOTION inside

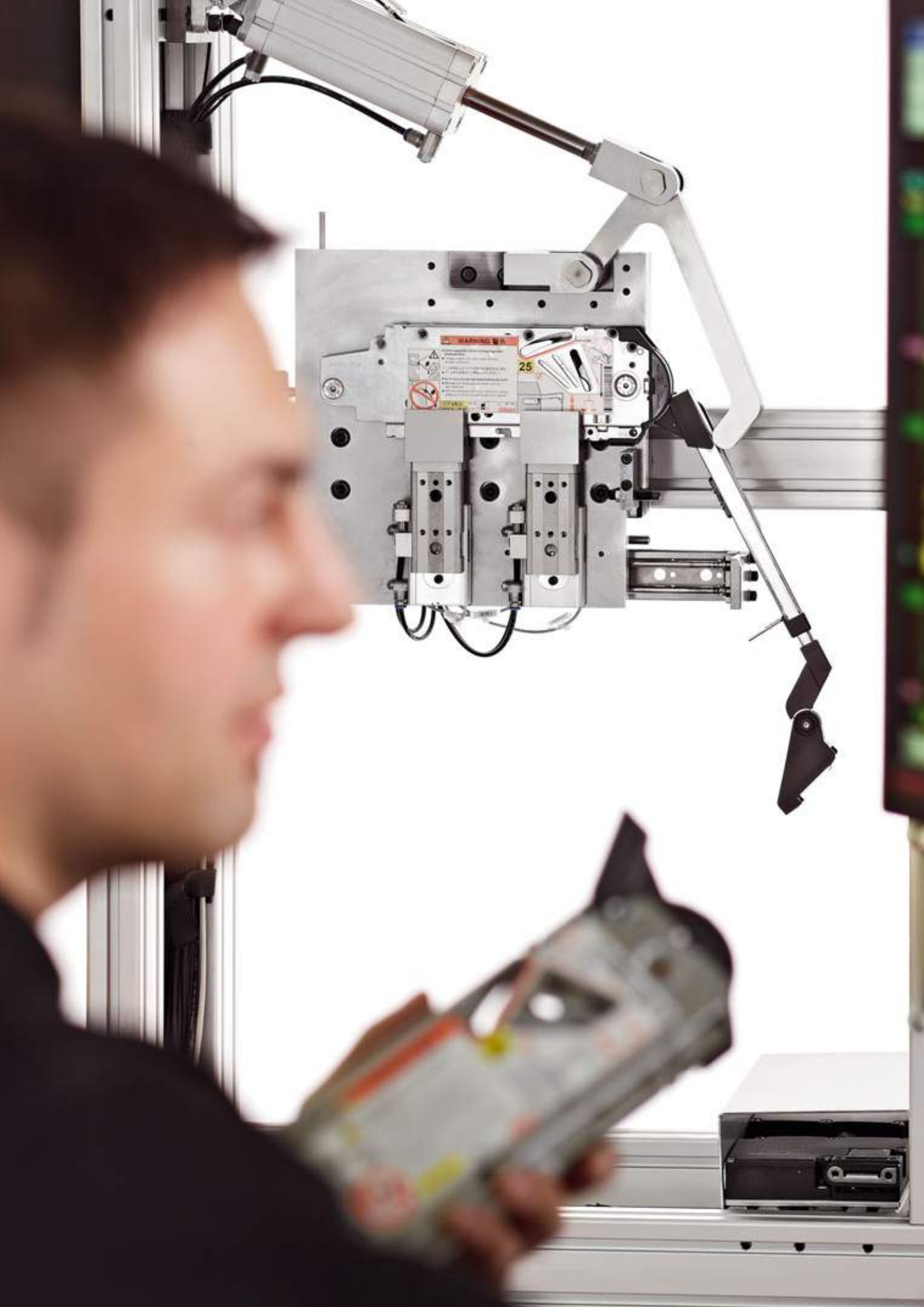
### BLUMOTION

#### Soft and effortless closing

BLUMOTION is synonymous with fascinating quality of motion. Allow your customers to see for themselves – they will be inspired.







# Reliability – a furniture lifetime



We want our fitting solutions to provide your customers with many years of enjoyment and satisfaction.

That is why we focus on ensuring the highest quality:

#### Precision testing

Each fitting is tested extensively according to strict criteria. Testing is carried out at our own test labs as well as in conjunction with international testing organisations. An AVENTOS lift system goes through the opening and closing process up to 80,000 times – only then are we satisfied in terms of our quality.

#### Long warranty

Our promise to provide “quality for a furniture’s lifetime” naturally applies to AVENTOS as well. We are so confident of this that we offer you a full 5-year warranty in respect of all the electrical components used in combination with Blum products.

#### Meticulous selection and processes

High-quality robust materials. Exact, fast and simple assembly. From the choice of material right through to construction and start-up, we insist on consistently high levels of quality.



Easy insertion: Assembly of the cross stabiliser for AVENTOS HS and AVENTOS HL is now completely tool-free.





Just a few simple steps are required



#### Almost entirely tool-free

AVENTOS can be assembled with ease and the proven CLIP technology makes the process almost entirely tool-free. The only tool required is a power screwdriver for adjusting the lift mechanism in precise accordance with the front weight. The fact that the cross stabiliser for AVENTOS HS is attached without tools significantly reduces the amount of effort required for assembly. Fronts can be conveniently adjusted in 3 dimensions to ensure perfect gap alignment.

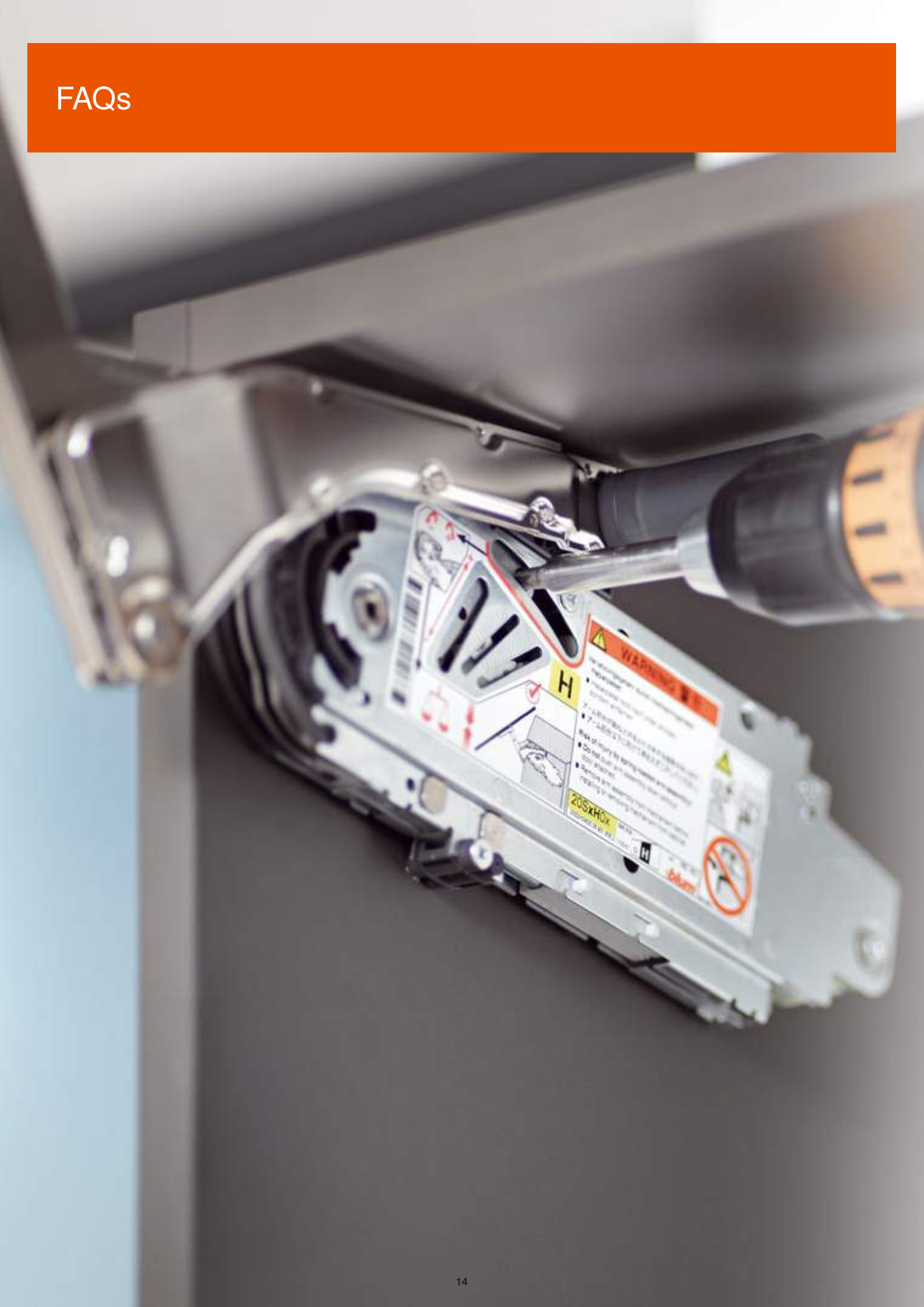
#### SERVO-DRIVE: Start-up made easy

SERVO-DRIVE for AVENTOS only has a few components. These are easy to attach and can be precisely adjusted. In just a few simple steps, SERVO-DRIVE can be assembled, cable added, switch installed and the system can be put into operation.



Find out more about  
SERVO-DRIVE

# FAQs



## AVENTOS

### Why is it that the lift system rises or falls when you let go?

It is because the lift mechanism has not been set correctly. The fine adjustment process involves using a power screwdriver and the integral calibration to adjust the lift mechanism in precise accordance with the front weight. The result: The front stays in the position required.

### Is it also possible to use opening angle stops?

Yes, it is possible for AVENTOS HF, HK and HK-S. In the case of SERVO-DRIVE for AVENTOS, the drive unit must be mounted first and once the opening angle stop has been subsequently mounted, a reference run must be performed.

### Can the AVENTOS concept be implemented without using handles?

Yes, you can equip the lift system with SERVO-DRIVE (an electrical motion support system) or TIP-ON (a mechanical opening support system). A single touch suffices and the lift systems appear to open by themselves.

## SERVO-DRIVE for AVENTOS

### Is it possible to synchronise multiple lift systems?

Yes. Up to three drive units can be set so that they move simultaneously. This is especially practical in cases where there is a shared front covering several cabinets. In addition, the "collision avoidance" function for corner solutions allows you to adjust the drive units so that only one front ever opens at a time.

### What does my customer see when the wireless switch battery has to be replaced?

The SERVO-DRIVE switch contains a battery display. It flashes red when the battery power begins to weaken. Battery replacement is very simple. All you need is a conventional button cell battery (type CR 2032).

### What happens when the power goes out?

When there is a power outage SERVO-DRIVE for AVENTOS is not activated. However, you can continue to open and close manually without restrictions. Once the power has been restored, you can carry on using everything as normal without having to make any additional settings.

### Can SERVO-DRIVE for AVENTOS be deactivated?

Your customers can deactivate SERVO-DRIVE for AVENTOS very easily. This is especially practical when cleaning the fronts, for example. We recommend a switched outlet for this. While deactivated, the lift systems can continue to be opened and closed manually.







# Award-winning design

## Enchanting Elegance

Along with high functionality, the AVENTOS range is sure to inspire through its simple yet elegant design. The fact that it is has received a number of international awards is testament to this.





## A vast array of options for wall cabinets

**SERVO-DRIVE**  
inside

**BLUMOTION**  
inside

The AVENTOS HF bi-fold lift system is the ideal solution for high and mid wall units. Thanks to the two-part front, even high cabinets can be accommodated. With AVENTOS HF, there is no limit to the variety of planning and design options available. Whether your customers want wooden fronts, narrow or wide aluminium frames, combinations of different materials or even fronts of different heights, you will always be able to meet their individual requirements.



Watch video of the assembly and adjustment processes



Greater freedom of design: AVENTOS HF allows you to combine different materials for the lift system front.

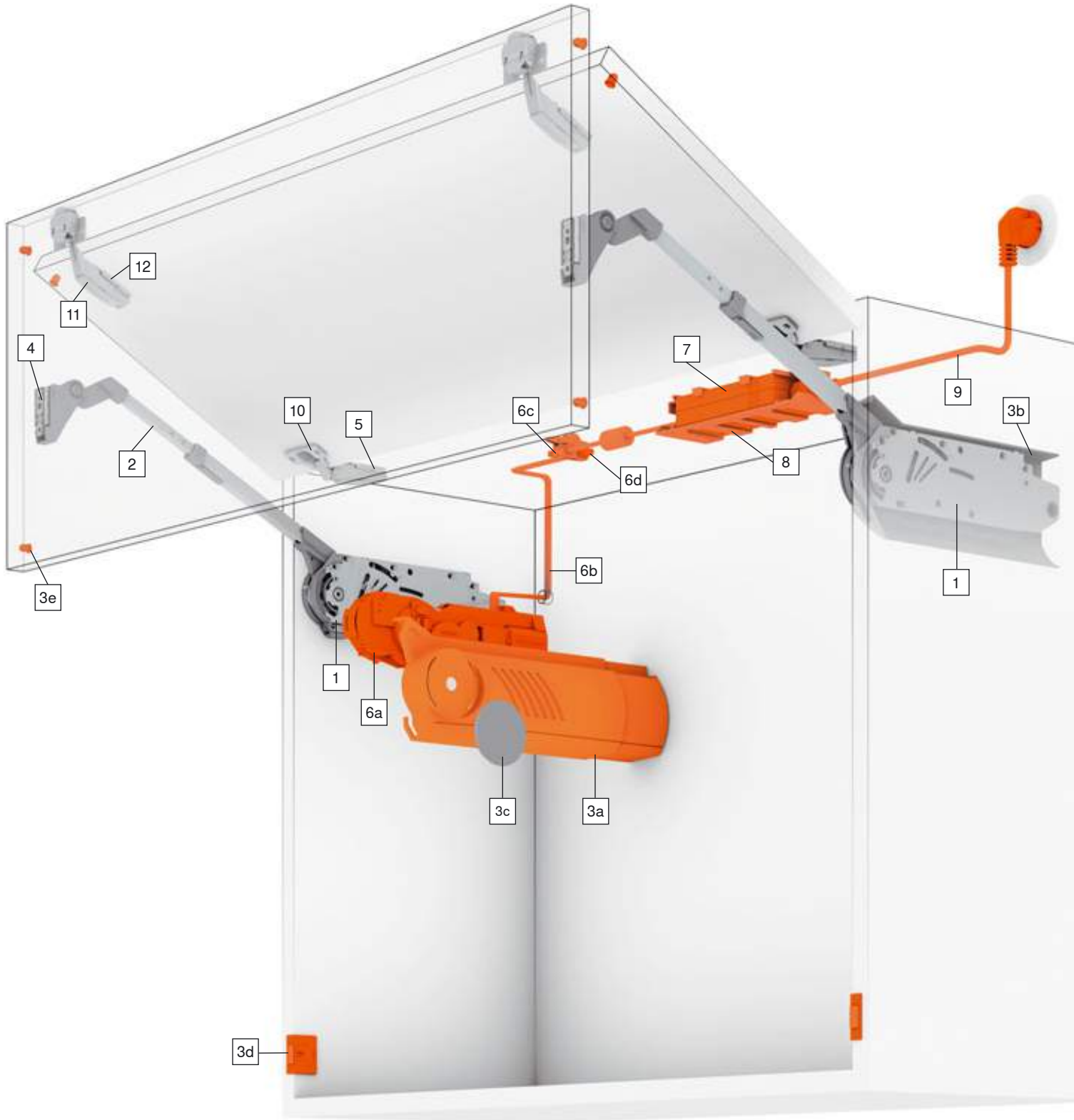


Innovative technology that offers protection: The CLIP top centre hinge prevents fingers getting caught.



At the heart of this fitting solution is the lift mechanism with BLUMOTION and a robust spring package.

# AVENTOS HF



□ Standard  
■ SERVO-DRIVE



1 **Lift mechanism**

2 **Telescopic arm**

3a **Cover cap, left**  
The left SERVO-DRIVE cover cap is used to cover the lift mechanism, drive unit and distribution cable. To cover the cabling, the cover cap can be expanded up to an internal depth of 350 mm.

3b **Cover cap right**

3c **Cover cap round**

3d **SERVO-DRIVE switch**  
The SERVO-DRIVE switch is attached to the cabinet side at the bottom. The switch signals the drive unit via a wireless connection. The 2.4 GHz frequency is certified for international use.

3e **Blum distance bumper**  
The Blum distance bumper creates and maintains the required trigger path of 2 mm.

4 **Mounting plate for telescopic arm**

5 **Mounting plate for CLIP top 120° hinge**  
  12 **CLIP top centre hinge**

6a **Drive unit**  
The drive unit is attached without tools to the left lift mechanism. The same drive unit can be used for all lift mechanisms.

6b **Distribution cable**  
This cable is used to supply power to the drive unit. The maximum permitted operating power is 24 V.

6c **Connecting node +**  
 6d **cable end protector**  
This node establishes the electrical connection between the distribution cable and the transformer. The cable end protector is inserted into the “open” end of the cable.

7 **Blum transformer + flex**  
 9  
The Blum transformer can be used worldwide. It converts the country-specific mains voltage to 24 V direct current. You must use a flex with a regular plug for the respective country depending on the installation location.

8 **Transformer unit housing**  
The transformer is easily and securely stored in the transformer unit housing.

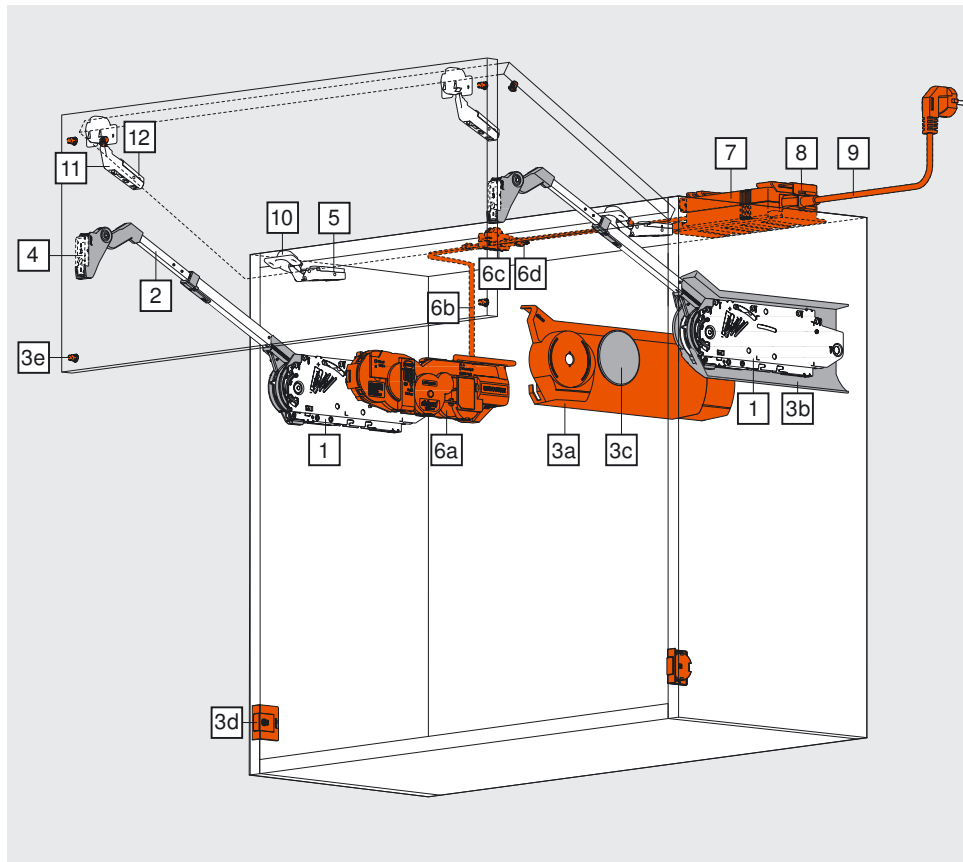
10 **CLIP top 120° hinge**  
(unsprung)

11 **CLIP top centre hinge**

# Order information

## Standard and SERVO-DRIVE for AVENTOS HF

Wooden fronts and wide alu frames symmetrical/asymmetrical



**3 types of lift mechanisms are enough to cover a wide range of applications.**

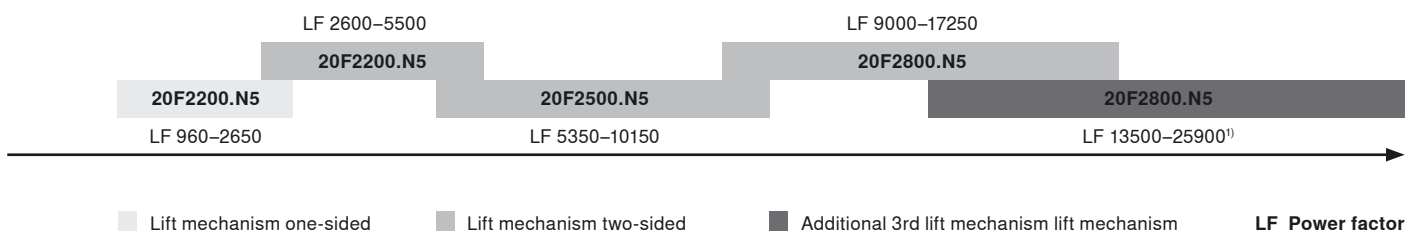
Using the power factor, you can calculate the number of required lift mechanisms. The power factor required depends on the weight of the lower and upper front and the cabinet height. The power factor and the door weight can be increased by 50% when a third lift mechanism is used.

The larger front must be at the top for asymmetrical fronts.

□ Standard  
 ■ SERVO-DRIVE



**Power factor LF = cabinet height KH (mm) x front weight bottom and top incl. handle (kg)**



A trial application is recommended when you are in a borderline area of the individual lift mechanism.

<sup>1)</sup> We recommend two synchronised drive units for a power factor > 17250.

1	Lift mechanism set	2	Telescopic arm set
	Power factor LF		Nickel plated steel
	2600-5500 (1 piece LF 960-2650)		Cabinet height <sup>2)</sup> 480-570 mm
	5350-10150		Cabinet height <sup>2)</sup> 560-710 mm
	9000-17250 (3 pieces LF 13500-25900)		Cabinet height <sup>2)</sup> 700-900 mm
	<b>Composed of:</b>		Cabinet height <sup>2)</sup> 760-1040 mm
	2 x symmetrical lift mechanisms		<b>Composed of:</b>
	10 x chipboard screws Ø 4 x 35 mm		2 x symmetrical telescopic arms
			<sup>2)</sup> "Theoretical cabinet height" for asymmetrical fronts = front height top (FHO) x 2 (incl. gaps)





<input type="checkbox"/>	<b>3</b>	<b>Cover cap set</b>		
		Nylon		
		light grey		<b>20F8000.NA</b>
		<b>Composed of:</b>		
<b>3a</b>		1 x cover cap large left		
<b>3b</b>		1 x cover cap large right		
<b>3c</b>		2 x round cover caps		

<input checked="" type="checkbox"/>	<b>3</b>	<b>Cover cap set for SERVO-DRIVE</b>		
		Nylon		
		light grey		<b>21F8000.NA</b>
		<b>Composed of:</b>		
<b>3a</b>		1 x SERVO-DRIVE cover cap large left		
<b>3b</b>		1 x cover cap large right		
<b>3c</b>		2 x round cover caps		
<b>3d</b>		2 x SERVO-DRIVE switches		
<b>3e</b>		6 x Blum distance bumpers, Ø 5 mm		

<input checked="" type="checkbox"/>	<b>6</b>	<b>SERVO-DRIVE set</b>		
		Nylon		
		RAL 7037 dust grey		<b>21FA000</b>
		<b>Composed of:</b>		
<b>6a</b>		1 x drive unit		
<b>6b</b>		1 x distribution cable, 1500 mm		
<b>6c</b>		1 x connecting node		
<b>6d</b>		2 x cable end protectors		

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<b>Opening angle stop</b>		
		Nylon		
		104° Dark grey	2 x	<b>20F7051</b>
		83° Dust grey	2 x	<b>20F7011</b>

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<b>Hinge set</b>		
		for wooden fronts		
		Fixing method: INSERTA/EXPANDO/knock in		<b>78Z5530T10</b>
		<b>Comprising of:</b>		
<b>10</b>		2 x CLIP top 120° hinge o. F. <sup>3)</sup> (70T5590BTL)		
<b>11</b>		2 x CLIP top centre hinge (78Z5530T)		
<b>4, 5, 12</b>		6 x Horizontal cam mounting plate (177H5100)		
<b>12</b>		2 x Cruciform mounting plate (174E6100.01)		
		<sup>3)</sup> o. F. = unsprung		

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<b>Hinge set</b>		
		for wooden fronts and wide alu frames		
		Fixing method: Screw-on <sup>4)</sup>		<b>78Z5500T11</b>
		<b>Comprising of:</b>		
<b>10</b>		2 x CLIP top 120° hinge o. F. <sup>3)</sup> (70T5550.TL)		
<b>11</b>		2 x CLIP top centre hinge (78Z5500T)		
<b>4, 5, 12</b>		6 x Horizontal cam mounting plate (175H5400)		
<b>12</b>		2 x Cruciform cam mounting plate (173H7100)		
		<sup>3)</sup> o. F. = unsprung		
		<sup>4)</sup> Use chipboard screws (609.1x00) for wooden fronts. Use self tapping screw, countersunk head (660.0950) for wide alu frames.		

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<b>Bit PZ cross slot</b>		
		Size 2, length 39 mm		<b>BIT-PZ KS2</b>

<input checked="" type="checkbox"/>	<b>7, 8, 9</b>	<b>Blum transformer, flex and transformer unit housing</b>		

# Planning information

## Standard and SERVO-DRIVE for AVENTOS HF

Wooden fronts and wide alu frames symmetrical

**Drilling position**

4 x  $\varnothing 4 \times 35$  mm  
 Drilled hole for SERVO-DRIVE distribution cable, left only

\* Drilling depth 5 mm  
 \*\* Alternative drilling

Cabinet height	H
480–549 mm	KH x 0.3 -28 mm
550–1040 mm	KH x 0.3 -57 mm

**Space requirement**

**SERVO-DRIVE**

KH Cabinet height

**Front assembly**

KH Cabinet height  
 SFA Side front overlay

**Number of hinges**  
 3 hinges starting at cabinet width 1200 mm and/or 12 kg door weight  
 4 hinges starting at cabinet width 1800 mm and/or 20 kg door weight

Cabinet height (KH)	X	X
	177H3100 177H3100E 177H3100E10 177H5100 175H3100 175H4100	175H5400 177H5400E
480–549 mm	70 mm	68 mm
550–1040 mm	47 mm	45 mm

**CLIP top 120° hinge unsprung**

F Gap  
 ( ) CLIP top 120° special hinge

**Drilling distance TB for standard hinge**

	Front overlay FA																
	5	6	7	8	9	10	11	12	13	14	15	16	17				
0										3	4	5	6				
3							3	4	5	6							
6				3	4	5	6										
9	3	4	5	6													

▲ Mounting plate

**CLIP top centre hinge**

Min. gap F = 1.5 mm  
 \* 37 mm for cruciform mounting plates (37/32)

**Drilling distance TB**

	Centre gap F								
						3	4	5	6
0						6	5	4	3
3									
6									
9									

▲ Mounting plate



**Space requirement**

FH Front height  
Opening angle stop

Without	$Y = FH \times 0.44 + 38 \text{ mm}$
104°	$Y = FH \times 0.24 + 34 \text{ mm}$
83°	$Y = 0 \text{ mm}$

**Screw-on assembly**

**INSERTA/EXPANDO assembly**

( ) INSERTA

**SERVO-DRIVE switch**

**Blum distance bumper**

**Blum distance bumper drilling position**

\* From cabinet bottom edge for fronts that protrude below the cabinet

Recommendation for aluminium frames: Consider drilling Blum distance bumper holes in the cabinet side. A trial application must be carried out when fixing the Blum distance bumper to the front.

**i** Do not glue Blum distance bumper.

- Standard
- SERVO-DRIVE

# Planning information

## Standard and SERVO-DRIVE for AVENTOS HF

Wooden fronts and wide alu frames asymmetrical

**Drilling position**

4 x  $\text{Ø} 4 \times 35 \text{ mm}$

Drilled hole for SERVO-DRIVE distribution cable, left only

\* Drilling depth 5 mm

\*\* Alternative drilling

Cabinet height	H
480–549 mm	TKH x 0.3 - 28 mm
550–1040 mm	TKH x 0.3 - 57 mm

**Space requirement**

TKH Theoretical cabinet height

KH Cabinet height

FHo Front height top

FHu Front height bottom

Theoretical cabinet height (TKH) = front height top (FHo) x 2 (including gaps)

**Front assembly**

Min. lower front height  
 $X + 19 + \text{FAu}$

FHo Front height top

TKH Theoretical cabinet height

SFA Side front overlay

FAu Lower front overlay

**Number of hinges**  
3 hinges starting at cabinet width 1200 mm and/or 12 kg door weight  
4 hinges starting at cabinet width 1800 mm and/or 20 kg door weight

Theoretical cabinet height (TKH)	X	X
	177H3100 177H3100E 177H3100E10 177H5100 175H3100 175H4100	175H5400 177H5400E
480–549 mm	FHo/2 + 70 mm	FHo/2 + 68 mm
550–1040 mm	FHo/2 + 47 mm	FHo/2 + 45 mm

**CLIP top 120° hinge unsprung**

F Gap

( ) CLIP top 120° special hinge

**Drilling distance TB for standard hinge**

	Front overlay FA													
	5	6	7	8	9	10	11	12	13	14	15	16	17	
0										3	4	5	6	
3							3	4	5	6				
6				3	4	5	6							
9	3	4	5	6										

▲ Mounting plate

**CLIP top centre hinge**

Min. gap  $F = 1.5 \text{ mm}$

\* 37 mm for cruciform mounting plates (37/32)

**Drilling distance TB**

	Centre gap F									
							3	4	5	6
0							6	5	4	3
3										
6										
9										

▲ Mounting plate





**Space requirement**

FH Front height

Opening angle stop

Without	$Y = FH \times 0.44 + 38 \text{ mm}$
104°	$Y = FH \times 0.24 + 34 \text{ mm}$
83°	$Y = 0 \text{ mm}$

**Screw-on assembly**

3-6

35

min 12.6

**INSERTA/EXPANDO assembly**

3-6

min 12.6 (12.8)

9.5

35<sup>+0.2</sup><sub>0</sub>

45

8

( ) INSERTA

**SERVO-DRIVE switch**

12 ± 0.3

min 30-  
max 90

Ø35

11<sup>+0.5</sup><sub>0</sub>

**Blum distance bumper drilling position**

8

8

8\*

Ø5 (Ø8)

min 10

\* From cabinet bottom edge for fronts that protrude below the cabinet

Recommendation for aluminium frames: Consider drilling Blum distance bumper holes in the cabinet side. A trial application must be carried out when fixing the Blum distance bumper to the front.

**i** Do not glue Blum distance bumper.

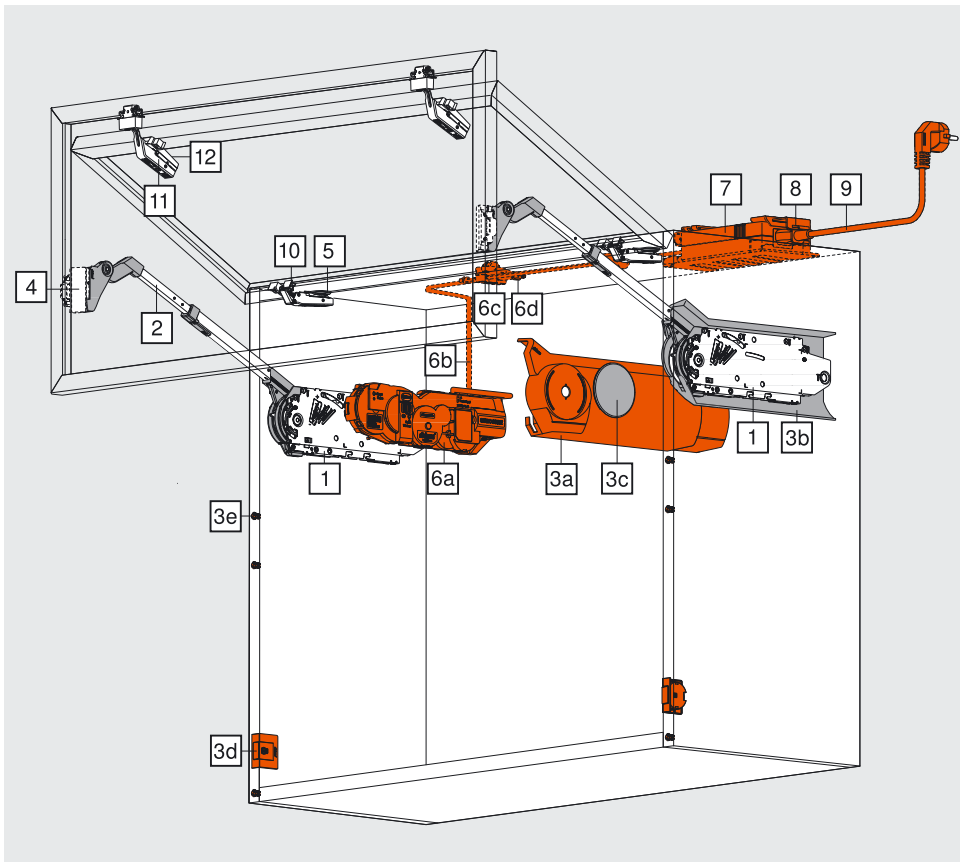
**Blum distance bumper**

- Standard
- SERVO-DRIVE

# Order information

## Standard and SERVO-DRIVE for AVENTOS HF

Narrow aluminium frames symmetrical/asymmetrical



**3 types of lift mechanisms are enough to cover a wide range of applications.**

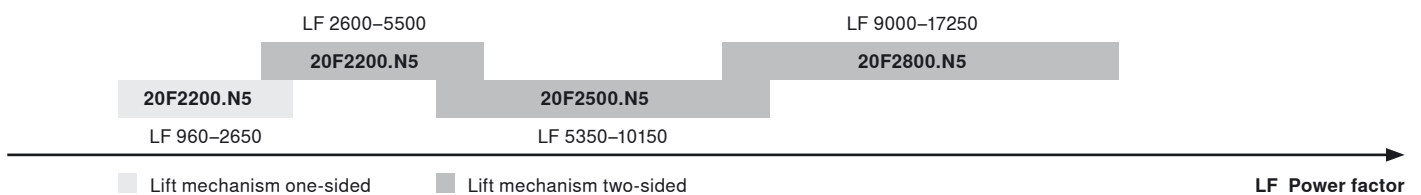
Using the power factor, you can calculate the number of required lift mechanisms. The power factor required depends on the weight of the lower and upper front and the cabinet height.

The larger front must be at the top for asymmetrical fronts.

□ Standard  
 ■ SERVO-DRIVE



Power factor LF = cabinet height KH (mm) x front weight bottom and top incl. handle (kg)

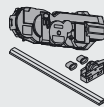


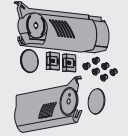
A trial application is recommended when you are in a borderline area of the individual lift mechanism.


1	Lift mechanism set	2	Telescopic arm set
	Power factor LF		Nickel plated steel
	2600-5500 (1 piece LF 960-2650)		Cabinet height <sup>2)</sup> 480-570 mm
	5350-10150		Cabinet height <sup>2)</sup> 560-710 mm
	9000-17250 (3 pieces LF 13500-25900)		Cabinet height <sup>2)</sup> 700-900 mm
	<b>Composed of:</b>		Cabinet height <sup>2)</sup> 760-1040 mm
	2 x symmetrical lift mechanisms		<b>Composed of:</b>
	10 x chipboard screws Ø 4 x 35 mm		2 x symmetrical telescopic arms
			<sup>2)</sup> "Theoretical cabinet height" for asymmetrical fronts = front height top (FHO) x 2 (incl. gaps)





	<b>3</b>	<b>Cover cap set</b>	
		Nylon	
		light grey	
			<b>20F8000.NA</b>
		<b>Composed of:</b>	
<b>3a</b>		1 x cover cap large left	
<b>3b</b>		1 x cover cap large right	
<b>3c</b>		2 x round cover caps	

	<b>6</b>	<b>SERVO-DRIVE set</b>	
		Nylon	
		RAL 7037 dust grey	<b>21FA000</b>
		<b>Composed of:</b>	
<b>6a</b>		1 x drive unit	
<b>6b</b>		1 x distribution cable, 1500 mm	
<b>6c</b>		1 x connecting node	
<b>6d</b>		2 x cable end protectors	

	<b>3</b>	<b>Cover cap set for SERVO-DRIVE</b>	
		Nylon	
		light grey	
			<b>21F8000.NA</b>
		<b>Composed of:</b>	
<b>3a</b>		1 x SERVO-DRIVE cover cap large left	
<b>3b</b>		1 x cover cap large right	
<b>3c</b>		2 x round cover caps	
<b>3d</b>		2 x SERVO-DRIVE switches	
<b>3e</b>		6 x Blum distance bumpers, Ø 5 mm	

		<b>Hinge set</b>	
		for narrow alu frames	
		Fixing method: screw-on	
			<b>78Z550AT11</b>
		<b>Comprising of:</b>	
<b>10</b>		2 x CLIP top 120° alu frame hinge o. F. <sup>2)</sup> (72T550A.TL)	
<b>11</b>		2 x CLIP top alu frame centre hinge (78Z550AT)	
<b>12</b>		2 x CLIP adapter plate symmetrical (175H5A00)	
<b>4</b>		2 x CLIP adapter plate left/right (175H5B00)	
<b>5</b>		2 x Horizontal cam mounting plate (175H5400)	
		<sup>2)</sup> o. F. = unsprung	

		<b>Bit PZ cross slot</b>	
		Size 2, length 39 mm	
			<b>BIT-PZ KS2</b>

	<b>7, 8, 9</b>	<b>Blum transformer, flex and transformer unit housing</b>	
		Side	<b>74</b>

# Planning information

## Standard and SERVO-DRIVE for AVENTOS HF

### Narrow alu frames symmetrical

**Drilling position**

4 x Ø 4 x 35 mm

Drilled hole for SERVO-DRIVE distribution cable, left only

\* Drilling depth 5 mm

\*\* Alternative drilling

Cabinet height	H
480–549 mm	KH x 0.3 - 28 mm
550–1040 mm	KH x 0.3 - 57 mm

**Space requirement**

**SERVO-DRIVE**

KH Cabinet height

**Front assembly**

KH Cabinet height

**Number of hinges**  
 3 hinges starting at cabinet width 1200 mm and/or 12 kg door weight  
 4 hinges starting at cabinet width 1800 mm and/or 20 kg door weight

Cabinet height	X
480–549 mm	54 mm
550–1040 mm	31 mm

**CLIP top 120° alu frame hinge unsprung**

**CLIP top alu frame centre hinge**

Min. gap F = 1.5 mm

An adjustment has to be made for frame thicknesses over 20.5 mm

- Standard
- SERVO-DRIVE



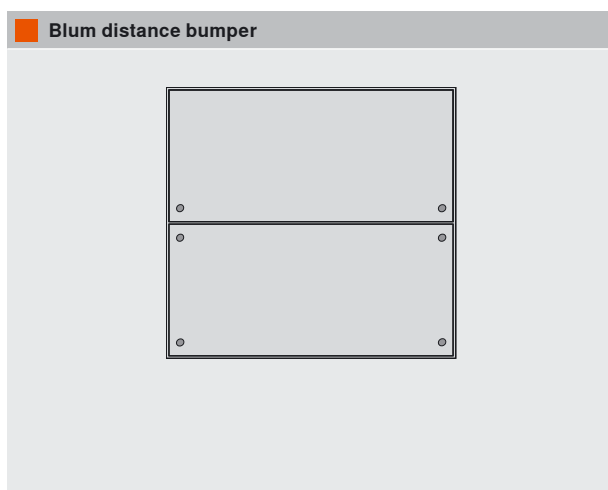
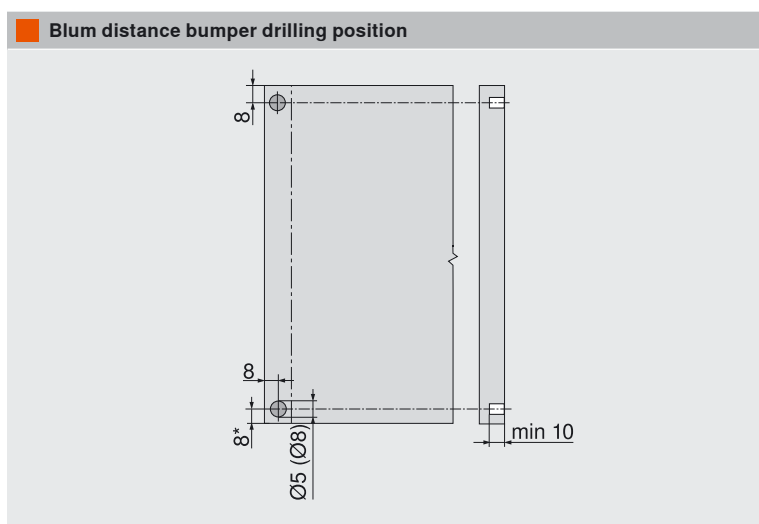
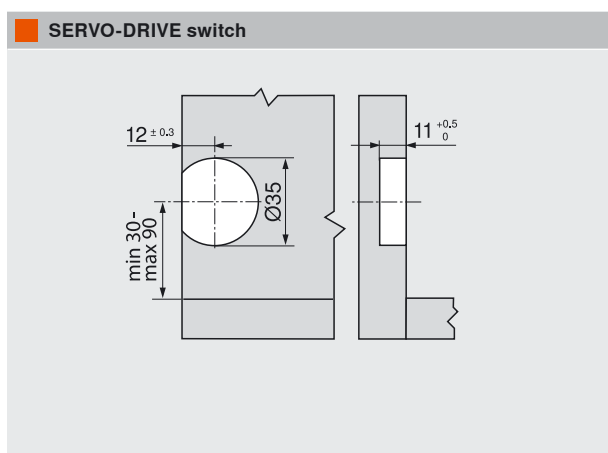
**Space requirement**

FH Front height

Opening angle stop	
Without	$Y = FH \times 0.44 + 38 \text{ mm}$
104°	$Y = FH \times 0.24 + 34 \text{ mm}$
83°	$Y = 0 \text{ mm}$

**Front assembly**

\* When changing material thickness, adjust the assembly dimensions accordingly



\* From cabinet bottom edge for fronts that protrude below the cabinet

Recommendation for aluminium frames: Consider drilling Blum distance bumper holes in the cabinet side. A trial application must be carried out when fixing the Blum distance bumper to the front.

**i** Do not glue Blum distance bumper.



# Planning information

## Standard and SERVO-DRIVE for AVENTOS HF

### Narrow alu frames asymmetrical

**Drilling position**

4 x  $\varnothing 4 \times 35$  mm  
 Drilled hole for SERVO-DRIVE distribution cable, left only

\* Drilling depth 5 mm  
 \*\* Alternative drilling

TKH	H
480–549 mm	TKH x 0.3 - 28 mm
550–1040 mm	TKH x 0.3 - 57 mm

**Space requirement**

TKH Theoretical cabinet height  
 KH Cabinet height  
 FHo Front height top  
 FHu Front height bottom  
 Theoretical cabinet height (TKH) = upper front height (FHO) x 2 (including gaps)

**Front assembly**

Min. measurement for front height bottom  
 $X + 33 + FAu$

FHo Front height top  
 TKH Theoretical cabinet height  
 FHu Front height bottom  
 FAu Lower front overlay

**Number of hinges**  
 3 hinges starting at cabinet width 1200 mm and/or 12 kg door weight  
 4 hinges starting at cabinet width 1800 mm and/or 20 kg door weight

TKH	X
480–549 mm	FHo/2 + 54 mm
550–1040 mm	FHo/2 + 31 mm

**CLIP top 120° alu frame hinge unsprung**

**CLIP top alu frame centre hinge**

Min. gap F = 1.5 mm  
 An adjustment has to be made for frame thicknesses over 20.5 mm



**Space requirement**

FH Front height

Opening angle stop

Without	$Y = FH \times 0.44 + 38 \text{ mm}$
104°	$Y = FH \times 0.24 + 34 \text{ mm}$
83°	$Y = 0 \text{ mm}$

**Front assembly**

\* When changing material thickness, adjust the assembly dimensions accordingly

**SERVO-DRIVE switch**

**Blum distance bumper drilling position**

**Blum distance bumper**

\* From cabinet bottom edge for fronts that protrude below the cabinet

Recommendation for aluminium frames: Consider drilling Blum distance bumper holes in the cabinet side. A trial application must be carried out when fixing the Blum distance bumper to the front.

**i** Do not glue Blum distance bumper.

- Standard
- SERVO-DRIVE



## Room for beautiful details

**SERVO-DRIVE**  
inside

**BLUMOTION**  
inside

With the lift system fitting for AVENTOS HS, even large, one-part fronts appear to defy gravity by swinging up effortlessly. There is still enough space over the cabinet for a host of design options, such as beautiful details in the form of cornice or crown mouldings. As you would expect, this product is just as easy to assemble as the others and the process is almost entirely tool-free.



Watch video of the assembly and adjustment processes



Tailored to your tastes: AVENTOS HS also allows wall cabinets to be decorated with cornice or crown mouldings.

At the heart of this fitting solution is the lift mechanism with BLUMOTION and a robust spring package.

# AVENTOS HS



- Standard
- SERVO-DRIVE





1 **Lift mechanism**

2a **Lever arm**  
2b

2c **Cross stabiliser cover cap**

3a **Cover cap, left**  
The left SERVO-DRIVE cover cap is used to cover the lift mechanism, drive unit and distribution cable. To cover the cabling, the cover cap can be expanded up to an internal depth of 350 mm.

3b **Cover cap right**

3c **Cover cap round**

3d **SERVO-DRIVE switch**  
The SERVO-DRIVE switch is attached to the cabinet side at the bottom. The switch signals the drive unit via a wireless connection. The 2.4 GHz frequency is certified for international use.

3e **Blum distance bumper**  
The Blum distance bumper creates and maintains the required trigger path of 2 mm.

4 **Front fixing bracket**

5 **Cross stabiliser rod round**

6a **Drive unit**  
The drive unit is attached without tools to the left lift mechanism. The same drive unit can be used for all lift mechanisms.

6b **Distribution cable**  
This cable is used to supply power to the drive unit. The maximum permitted operating power is 24 V.

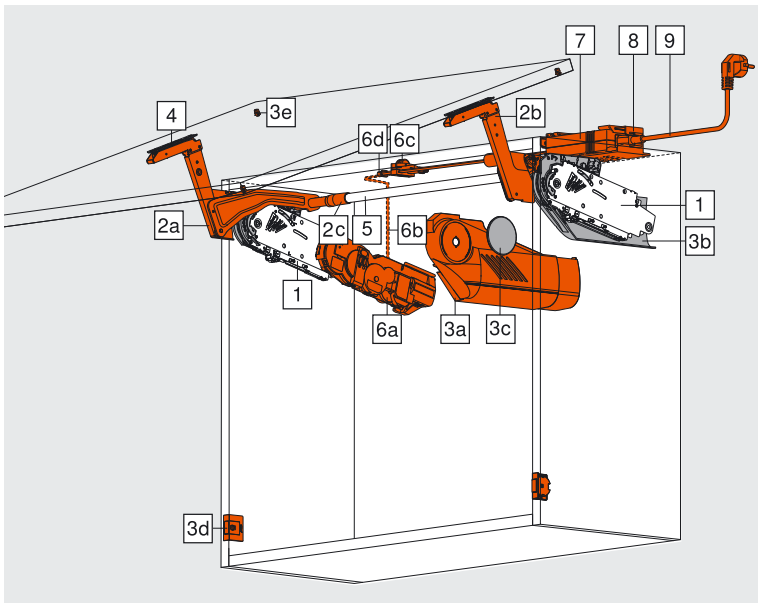
6c **Connecting node +**  
6d **cable end protector**  
This node establishes the electrical connection between the distribution cable and the transformer. The cable end protector is inserted into the "open" end of the cable.

7 **Blum transformer + flex**  
9  
The Blum transformer can be used worldwide. It converts the country-specific mains voltage to 24 V direct current. You must use a flex with a regular plug for the respective country depending on the installation location.

8 **Transformer unit housing**  
The transformer is easily and securely stored in the transformer unit housing.

# Order information

## Standard and SERVO-DRIVE for AVENTOS HS



	<b>1</b>	<b>Lift mechanism set</b>			
		KH 350–525 mm	20S2A00.N5	20S2B00.N5	20S2C00.N5
		KH 526–675 mm	20S2D00.N5	20S2E00.N5	20S2F00.N5
		KH 676–800 mm	20S2G00.N5	20S2H00.N5	20S2I00.N5
		<b>Composed of:</b>			
		2 x symmetrical lift mechanisms			
		10 x chipboard screws Ø 4 x 35 mm			

	<b>2</b>	<b>Lever arm set</b>			
		Steel, nickel plated			20S3500.06
		<b>Composed of:</b>			
	2a	1 x lever arm left			
	2b	1 x lever arm right			
	2c	2 x cross stabiliser cover caps			

	<b>2</b>	<b>Lever arm set for SERVO-DRIVE</b>			
		Steel, nickel plated			21S3500.01
		<b>Includes:</b>			
	2a	1 x SERVO-DRIVE lever arm left			
	2b	1 x SERVO-DRIVE lever arm right			
	2c	2 x cross stabiliser cover caps			

	<b>3</b>	<b>Cover cap set</b>			
		Nylon			
		light grey			20S8000.NA
		<b>Composed of:</b>			
	2a	1 x cover cap large left			
	2b	1 x cover cap large right			
	2c	2 x round cover caps			

	<b>3</b>	<b>Cover cap set for SERVO-DRIVE</b>			
		Nylon			21S8000.NA
		light grey			
		<b>Composed of:</b>			
	3a	1 x SERVO-DRIVE cover cap large left			
	3b	1 x cover cap large right			
	3c	2 x round cover caps			
	3d	2 x SERVO-DRIVE switches			
	3e	4 x Blum distance bumpers, Ø 5 mm			

	<b>4</b>	<b>Front fixing bracket set</b>			
		Nickel plated			
		Wooden fronts and wide aluminium frames <sup>1)</sup>			20S4200
		Narrow alu frames			20S4200A
		<sup>1)</sup> Use 4 chipboard screws (609.1x00) per side for wooden fronts. Use 4 countersunk self tapping screws (660.0950) per side for wide aluminium frames.			



	<b>5</b>	<b>Cross stabiliser rod round</b>			
		Aluminium, Ø 16 mm			
		For cutting to size, 1061 mm			20Q1061UN
		<b>Cutting:</b> LW - 129 mm			
		SERVO-DRIVE: LW - 164 mm			

		<b>Connecting piece set for cross stabiliser</b>			
		Aluminium, Ø 16 mm			
		With LW of 1190 mm and up			20Q153ZN
		<b>Cutting for 5:</b> LW / 2 - 147 mm			
		SERVO-DRIVE: LW / 2 - 165 mm			
		<b>Composed of:</b>			
		1 x connecting piece			
		1 x fixing			
		2 x cross stabiliser cover caps			


	<b>6</b>	<b>SERVO-DRIVE set</b>			
		Nylon			
		RAL 7037 dust grey			21FA000
		<b>Composed of:</b>			
	6a	1 x drive unit			
	6b	1 x distribution cable, 1500 mm			
	6c	1 x connecting node			
	6d	2 x cable end protectors			
		We recommend one SERVO-DRIVE drive unit per set for connected fronts!			

<input type="checkbox"/>	Standard	KH	Cabinet height
<input checked="" type="checkbox"/>	SERVO-DRIVE	LW	Inner cabinet width



	<b>Bit PZ cross slot</b>
	Size 2, length 39 mm
	<b>BIT-PZ KS2</b>

	<b>7, 8, 9</b>	<b>Blum transformer, flex and transformer unit housing</b>
		Page <b>74</b>

The cabinet front and door weight is required in order to select the correct lift mechanism.

**Example:** KH = 600 mm, weight of front = 10 kg

Lift mechanism selection = **20S2E00.N5**

KH = 602 mm -> 600 mm, KH = 603 mm -> 605 mm

KH (mm)	Door weight (kg)		
	20S2G00.N5	20S2H00.N5	20S2I00.N5
800	4.00-7.00	6.00-12.25	10.50-20.00
795	4.00-7.00	6.00-12.25	10.50-20.00
790	4.00-7.00	6.00-12.25	10.75-20.00
785	4.00-7.00	6.25-12.50	10.75-20.00
780	4.00-7.00	6.25-12.50	10.75-20.25
775	3.75-7.00	6.25-12.50	11.00-20.25
770	3.75-7.00	6.25-12.50	11.00-20.25
765	3.75-7.25	6.50-12.50	11.00-20.25
760	3.75-7.25	6.50-12.75	11.25-20.25
755	3.75-7.25	6.50-12.75	11.25-20.50
750	3.50-7.25	6.50-12.75	11.50-20.50
745	3.50-7.25	6.50-12.75	11.50-20.50
740	3.50-7.25	6.50-12.75	11.75-20.75
735	3.50-7.50	6.50-13.00	11.75-20.75
730	3.50-7.50	6.75-13.00	11.75-21.00
725	3.50-7.50	6.75-13.00	12.00-21.00
720	3.50-7.50	6.75-13.00	12.00-21.25
715	3.50-7.50	6.75-13.00	12.00-21.25
710	3.50-7.75	6.75-13.25	12.25-21.25
705	3.50-7.75	6.75-13.25	12.25-21.50
700	3.50-7.75	6.75-13.25	12.50-21.50
695	3.50-7.75	6.75-13.25	12.50-21.50
690	3.50-7.75	6.75-13.25	12.75-21.50
685	3.50-8.00	7.00-13.25	12.75-21.50
680	3.50-8.00	7.00-13.50	13.00-21.50
676	3.50-8.00	7.00-13.50	13.00-21.50

KH (mm)	Door weight (kg)		
	20S2D00.N5	20S2E00.N5	20S2F00.N5
675	3.00-5.25	5.00-11.00	09.75-19.00
670	3.00-5.25	5.00-11.00	09.75-19.00
665	3.00-5.25	5.00-11.00	09.75-19.00
660	3.00-5.50	5.25-11.25	10.00-19.00
655	3.00-5.50	5.25-11.25	10.00-19.00
650	3.00-5.50	5.25-11.25	10.00-19.00
645	3.00-5.50	5.25-11.25	10.00-18.75
640	3.00-5.50	5.25-11.25	10.00-18.75
635	3.00-5.50	5.25-11.50	10.25-18.75
630	3.00-5.75	5.50-11.50	10.25-18.75
625	3.00-5.75	5.50-11.50	10.25-18.75

620	3.00-5.75	5.50-11.50	10.25-18.75
615	3.00-5.75	5.50-11.50	10.25-18.75
610	3.00-6.00	5.50-11.75	10.50-18.50
605	3.00-6.00	5.50-11.75	10.50-18.50
600	3.00-6.00	5.50-11.75	10.50-18.50
595	3.00-6.00	5.50-11.75	10.50-18.50
590	3.00-6.00	5.50-12.00	10.75-18.25
585	3.00-6.25	5.75-12.00	10.75-18.25
580	3.00-6.25	5.75-12.00	11.00-18.00
575	3.00-6.25	5.75-12.00	11.00-18.00
570	3.00-6.25	5.75-12.25	11.25-17.75
565	3.00-6.25	5.75-12.25	11.25-17.75
560	3.00-6.50	6.00-12.25	11.25-17.50
555	3.00-6.50	6.00-12.50	11.50-17.50
550	3.00-6.50	6.00-12.50	11.50-17.25
545	3.00-6.50	6.00-12.50	11.50-17.25
540	3.00-6.50	6.00-12.75	11.75-17.00
535	3.00-6.75	6.25-12.75	11.75-16.75
530	3.00-6.75	6.25-12.75	11.75-16.75
526	3.00-6.75	6.25-13.00	12.00-16.50

KH (mm)	Door weight (kg)		
	20S2A00.N5	20S2B00.N5	20S2C00.N5
525	2.50-4.00	3.25-7.50	7.25-15.00
520	2.50-4.00	3.50-7.50	7.25-15.00
515	2.50-4.00	3.50-7.50	7.25-14.75
510	2.50-4.00	3.50-7.75	7.50-14.75
505	2.50-4.00	3.50-7.75	7.50-14.75
500	2.50-4.25	3.50-7.75	7.50-14.75
495	2.50-4.25	3.75-7.75	7.50-14.50
490	2.50-4.25	3.75-8.00	7.75-14.50
485	2.50-4.25	3.75-8.00	7.75-14.25
480	2.50-4.25	3.75-8.00	7.75-14.25
475	2.50-4.25	3.75-8.00	7.75-14.00
470	2.50-4.25	4.00-8.25	8.00-14.00
465	2.25-4.25	4.00-8.25	8.00-13.75
460	2.25-4.25	4.00-8.25	8.00-13.75
455	2.25-4.25	4.00-8.50	8.25-13.50
450	2.25-4.25	4.00-8.50	8.25-13.50
445	2.25-4.50	4.25-8.50	8.25-13.25
440	2.25-4.50	4.25-8.50	8.25-13.00
435	2.25-4.50	4.25-8.75	8.50-13.00
430	2.25-4.50	4.25-8.75	8.50-12.75
425	2.25-4.50	4.25-8.75	8.50-12.75
420	2.25-4.50	4.25-8.75	8.50-12.50
415	2.25-4.50	4.25-8.75	8.50-12.50
410	2.25-4.50	4.25-9.00	8.75-12.25
405	2.25-4.50	4.25-9.00	8.75-12.00
400	2.00-4.75	4.25-9.00	8.75-12.00
395	2.00-4.75	4.50-9.00	8.75-11.75
390	2.00-4.75	4.50-9.00	8.75-11.50
385	2.00-4.75	4.50-9.25	9.00-11.50
380	2.00-4.75	4.50-9.25	9.00-11.25
375	2.00-4.75	4.50-9.25	9.00-11.25
370	2.00-4.75	4.50-9.25	9.00-11.00
365	2.00-4.75	4.50-9.25	9.00-11.00
360	2.00-4.75	4.50-9.50	9.25-10.75
355	2.00-4.75	4.50-9.50	9.25-10.50
350	2.00-5.00	4.50-9.50	9.25-10.50

# Planning information

## Standard and SERVO-DRIVE for AVENTOS HS

**Drilling position**

5 x  $\text{Ø} 4 \times 35 \text{ mm}$

Drilled hole for SERVO-DRIVE distribution cable, left only

\* Drilling depth 5 mm

\*\* Alternative drilling

SOB Top panel thickness

**Space requirement**

**SERVO-DRIVE**

**Front assembly**

Narrow alu frames      Wooden fronts and wide aluminium frames<sup>1)</sup>

FAo Upper front overlay

SFA Side front overlay

Wall application:  
Requires minimum gap 5 mm

<sup>1)</sup> Use 4 chipboard screws (609.1x00) per side for wooden fronts. Use 4 countersunk self tapping screws (660.0950) per side for wide aluminium frames.

**Planning narrow alu frames**

SFA Side front overlay

For frame frieze width 19 mm: SFA of 11–18 mm possible

\* When changing material thickness, adjust the assembly dimensions accordingly

- Standard
- SERVO-DRIVE



**Front setting**

Dimensions depend on tilt adjustment

**Cornice and crown moulding clearance**

Gap F	X max	Y max
3 mm	35 mm	101 mm
2 mm	31 mm	101 mm
1.5 mm	28 mm	101 mm

**Cross stabiliser**

[1] LW - 129 mm  
SERVO-DRIVE: LW - 164 mm

**Connecting piece**

[2] Half LW - 147 mm  
SERVO-DRIVE: Half LW - 165 mm

LW Internal width

**SERVO-DRIVE switch**

**Blum distance bumper drilling position**

\* From cabinet bottom edge for fronts that protrude below the cabinet

Recommendation for aluminium frames: Consider drilling Blum distance bumper holes in the cabinet side. A trial application must be carried out when fixing the Blum distance bumper to the front.

**i** Do not glue Blum distance bumper.

**Blum distance bumper**





Easy **access**  
combined with  
visual **appeal**

**SERVO-DRIVE**  
inside

**BLUMOTION**  
inside

This product is a brilliant combination of design and function. As its name suggests, the AVENTOS HL “lift up” lifts right up and out of the user’s way so that everything is always within easy reach. As a result, even special installations are possible. For example, you can integrate electrical appliances into tall cabinets.



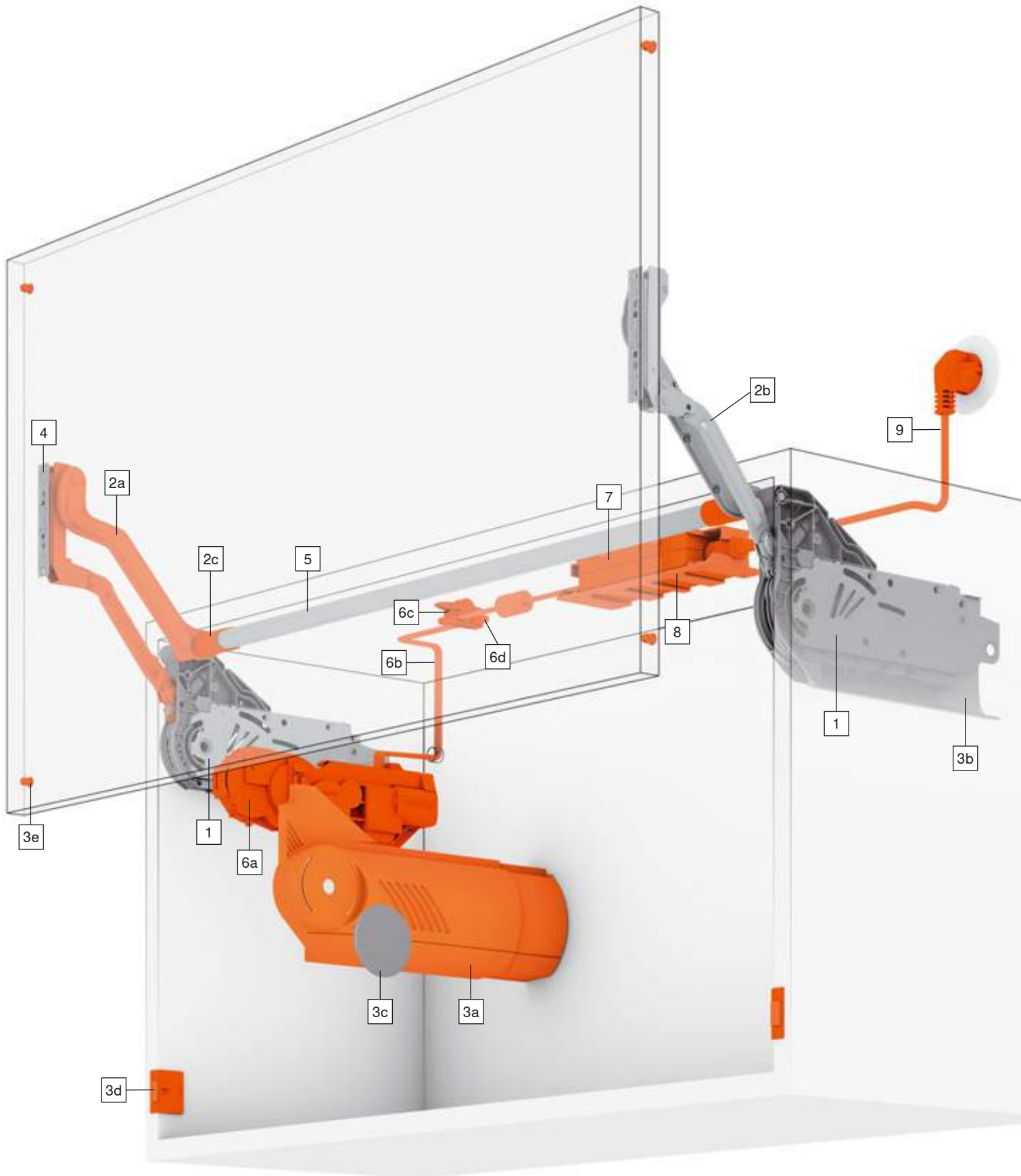
Watch video of the assembly and adjustment processes



Sheer beauty: With AVENTOS HL, electrical appliances disappear behind a continuous cabinet front.

At the heart of this fitting solution is the lift mechanism with BLUMOTION and a robust spring package.

# AVENTOS HL



- Standard
- SERVO-DRIVE



1 **Lift mechanism**

2a **Lever arm left**

2b **Lever arm right**

2c **Cross stabiliser cover cap**

3a **Cover cap, left**  
The left SERVO-DRIVE cover cap is used to cover the lift mechanism, drive unit and distribution cable. To cover the cabling, the cover cap can be expanded up to an internal depth of 350 mm.

3b **Cover cap right**

3c **Cover cap round**

3d **SERVO-DRIVE switch**  
The SERVO-DRIVE switch is attached to the cabinet side at the bottom. The switch signals the drive unit via a wireless connection. The 2.4 GHz frequency is certified for international use.

3e **Blum distance bumper**  
The Blum distance bumper creates and maintains the required trigger path of 2 mm.

4 **Front fixing bracket**

5 **Oval cross stabiliser**

6a **Drive unit**  
The drive unit is attached without tools to the left lift mechanism. The same drive unit can be used for all lift mechanisms.

6b **Distribution cable**  
This cable is used to supply power to the drive unit. The maximum permitted operating power is 24 V.

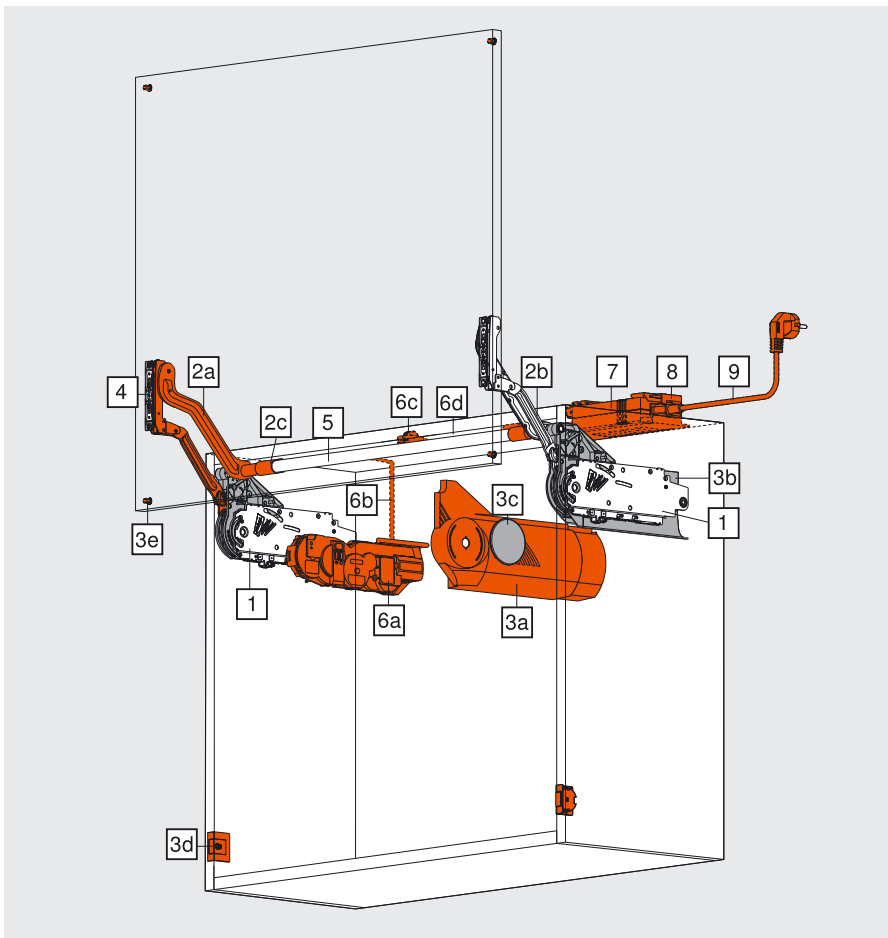
6c **Connecting node +**  
 6d **cable end protector**  
This node establishes the electrical connection between the distribution cable and the transformer. The cable end protector is inserted into the “open” end of the cable.

7 **Blum transformer + flex**  
 9  
The Blum transformer can be used worldwide. It converts the country-specific mains voltage to 24 V direct current. You must use a flex with a regular plug for the respective country depending on the installation location.

8 **Transformer unit housing**  
The transformer is easily and securely stored in the transformer unit housing.

# Order information

## Standard and SERVO-DRIVE for AVENTOS HL



5 types of lift mechanisms are enough to cover a wide range of applications.

In order to select the correct lift mechanism, it is necessary to establish both the cabinet height and the weight of the front (including the handle).

□ Standard  
 ■ SERVO-DRIVE

	Cabinet height			
	300–349 mm	350–399 mm	400–550 mm	450–580 mm
	Lever arm set			
	□ 20L3200.06	□ 20L3500.06	□ 20L3800.06	□ 20L3900.06
<b>Lift mechanism set</b>	■ 21L3200.01	■ 21L3500.01	■ 21L3800.01	■ 21L3900.01
20L2100.N5	1.25–4.25 kg	1.25–2.50 kg		
20L2300.N5	3.50–7.25 kg	1.75–5.00 kg	1.75–3.50 kg	
20L2500.N5	6.50–12.00 kg	4.25–9.00 kg	2.75–6.75 kg	2.00–5.25 kg
20L2700.N5	11.00–20.00 kg	8.00–14.75 kg	5.75–11.75 kg	4.25–9.25 kg
20L2900.N5		13.50–20.00 kg	10.50–20.00 kg	8.25–16.50 kg

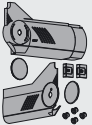
A trial application is recommended when you are in a borderline area of the individual lift mechanism.


1	Lift mechanism set	2	Lever arm set
	20L2100.N5		Cabinet height 300–349 mm
	20L2300.N5		20L3200.06
	20L2500.N5		20L3500.06
	20L2700.N5		20L3800.06
	20L2900.N5		20L3900.06
<b>Composed of:</b>		<b>Composed of:</b>	
2 x symmetrical lift mechanisms		2a	1 x lever arm left
10 x chipboard screws Ø 4 x 35 mm		2b	1 x lever arm right
		2c	2 x cross stabiliser cover caps




2 Lever arm set for SERVO-DRIVE	
	Cabinet height 300–349 mm <b>21L3200.01</b>
	Cabinet height 350–399 mm <b>21L3500.01</b>
	Cabinet height 400–550 mm <b>21L3800.01</b>
	Cabinet height 450–580 mm <b>21L3900.01</b>
<b>Composed of:</b>	
2a	1 x SERVO-DRIVE lever arm left
2b	1 x lever arm right
2c	2 x cross stabiliser cover caps


3 Cover cap set	
	Nylon
	light grey <b>20L8000.N1</b>
<b>Composed of:</b>	
3a	1 x cover cap large left
3b	1 x cover cap large right
3c	2 x round cover caps


3 Cover cap set for SERVO-DRIVE	
	Nylon
	light grey <b>21L8000.NA</b>
<b>Includes:</b>	
3a	1 x SERVO-DRIVE cover cap left
3b	1 x cover cap right
3c	2 x round cover caps
3d	2 x SERVO-DRIVE switches
3e	4 x Blum distance bumpers, Ø 5 mm

4 Front fixing bracket set	
	Nickel plated
	Wooden fronts and wide aluminium frames <sup>1)</sup> <b>20S4200</b>
	Narrow alu frames <b>20S4200A</b>
<b>Composed of:</b>	
2 x symmetrical front fixing brackets	
<sup>1)</sup> Use 4 chipboard screws (609.1x00) per side for wooden fronts. Use 4 countersunk self tapping screws (660.0950) per side for wide aluminium frames.	

5 Cross stabiliser rod oval	
	Aluminium, Ø 16 mm
	For cutting to size, 1061 mm <b>20Q1061UA</b>
	<b>Cutting:</b> LW - 129 mm
	SERVO-DRIVE: LW - 164 mm
LW Inner cabinet width	

Connecting piece set for cross stabiliser	
	Aluminium, Ø 16 mm
	With LW of 1190 mm and up <b>20Q153ZA</b>
	<b>Cutting for 5:</b> LW / 2 - 147 mm
SERVO-DRIVE: LW / 2 - 165 mm	
<b>Composed of:</b>	
1 x connecting piece	
1 x fixing	
2 x cross stabiliser cover caps	
LW Inner cabinet width	

6 SERVO-DRIVE set	
	Nylon
	RAL 7037 dust grey <b>21FA000</b>
<b>Composed of:</b>	
6a	1 x drive unit
6b	1 x distribution cable, 1500 mm
6c	1 x connecting node
6d	2 x cable end protectors
We recommend one SERVO-DRIVE drive unit per set for connected fronts!	

Bit PZ cross slot	
	Size 2, length 39 mm
	<b>BIT-PZ KS2</b>

7, 8, 9 Blum transformer, flex and transformer unit housing	
Page <b>74</b>	



# Planning information

## Standard and SERVO-DRIVE for AVENTOS HL

**Drilling position**

5 x  $\times$   $\varnothing$  4 x 35 mm

Drilled hole for SERVO-DRIVE distribution cable, left only

\* Drilling depth 5 mm

\*\* Alternative drilling

SOB Top panel thickness

**Space requirement**

Lever arm set		min LH*	Y*	LH	Internal cabinet height
<input type="checkbox"/>	<input checked="" type="checkbox"/>	mm	mm	KH	Cabinet height
20L3200.06	21L3200.01	262	264		
20L3500.06	21L3500.01	312	352		
20L3800.06	21L3800.01	362	440		* Dimensions apply to lower gap = 0 mm
20L3900.06	21L3900.01	412	529		

**Front assembly**

Narrow alu frames

Wooden fronts and wide aluminium frames<sup>1)</sup>

Lever arm set		X	FAo	Upper front overlay
<input type="checkbox"/>	<input checked="" type="checkbox"/>	mm	SFA	Side front overlay
20L3200.06	21L3200.01	153		
20L3500.06	21L3500.01	203		Wall application: Requires minimum gap 5 mm
20L3800.06	21L3800.01	253		
20L3900.06	21L3900.01	303		

<sup>1)</sup> Use 4 chipboard screws (609.1x00) per side for wooden fronts. Use 4 countersunk self tapping screws (660.0950) per side for wide aluminium frames.

**Planning narrow alu frames**

SFA - 4.5

SFA Side front overlay

For frame frieze width 19 mm: SFA of 11-18 mm possible

\* When changing material thickness, adjust the assembly dimensions accordingly

- Standard
- SERVO-DRIVE



**Front setting**

Lever arm set		a	b*	Max. c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	mm	mm	mm
20L3200.06	21L3200.01	114	257	159
20L3500.06	21L3500.01	146	345	209
20L3800.06	21L3800.01	178	433	259
20L3900.06	21L3900.01	210	522	309.5

\* Dimensions apply to lower gap = 0 mm

**Cornice and crown moulding clearance**

SOB	X
16 mm	28 mm
18 mm	30 mm
19 mm	31 mm

SOB Top panel thickness

**Cross stabiliser**

[1] LW - 129 mm  
SERVO-DRIVE: LW - 164 mm

**Connecting piece**

[2] Half LW - 147 mm  
SERVO-DRIVE: Half LW - 165 mm

LW Internal width

**SERVO-DRIVE switch**

**Blum distance bumper drilling position**

\* From cabinet front edge for fronts that protrude below the cabinet

Recommendation for aluminium frames: Consider drilling the Blum distance bumper holes in the cabinet side. A trial application must be carried out when fixing the Blum distance bumper to the front.

**i** Do not glue Blum distance bumper.

**Blum distance bumper**



## State-of-the-art stay lifts

**SERVO-DRIVE**  
inside

**TIP-ON**  
inside

**BLUMOTION**  
inside

This convenient lift system fitting for mid wall units requires only a small amount of space at the top. The AVENTOS HK stay lift is another product that provides inspiration thanks to its consistently high quality of motion. Handle-less fronts can be opened using SERVO-DRIVE or TIP-ON technology and without any need for hinges.



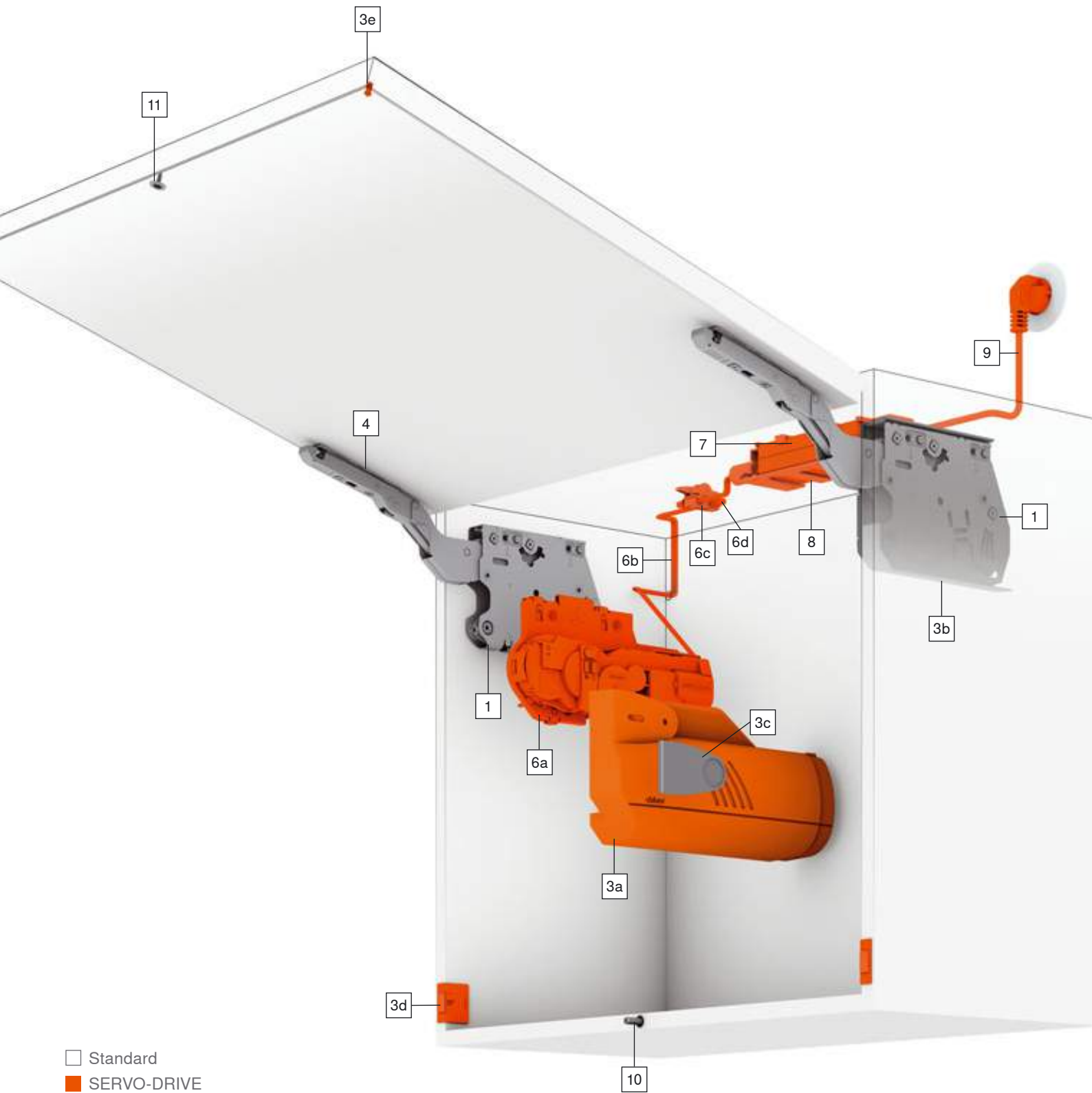
Watch video of the assembly and adjustment processes



A single touch is all that is needed. The TIP-ON mechanical opening support system makes opening cabinets easier and more convenient than ever before.

At the heart of this fitting solution is the lift mechanism with BLUMOTION and a robust spring package.

# AVENTOS HK



- Standard
- SERVO-DRIVE
- TIP-ON



**1 Lift mechanism**



**3a Cover cap left**

The left SERVO-DRIVE cover cap is used to cover the lift mechanism, drive unit and distribution cable. To cover the cabling, the cover cap can be expanded up to an internal depth of 350 mm.



**3b Cover cap right**



**3c Cover cap small**



**3d SERVO-DRIVE switch**

The SERVO-DRIVE switch is attached to the cabinet side at the bottom. The switch signals the drive unit via a wireless connection. The 2.4 GHz frequency is certified for international use.



**3e Blum distance bumper**

The Blum distance bumper creates and maintains the required trigger path of 2 mm.



**4 Front fixing bracket**



**6a Drive unit**

The drive unit is attached without tools to the left lift mechanism. A special drive unit with an adapter plate is required for AVENTOS HK.



**6b Distribution cable**

This cable is used to supply power to the drive unit. The max. permitted operating voltage is 24 V.



**6c Connecting node +  
6d cable end protector**

This node establishes the electrical connection between the distribution cable and the transformer. The cable end protector is inserted into the “open” end of the cable.



**7 Blum transformer + flex**



The Blum transformer can be used worldwide. It converts the county-specific mains voltage to 24 V direct current. You must use a flex with a regular plug for the respective country depending on the installation location.



**8 Transformer unit housing**

The transformer is easily and securely stored in the transformer unit housing.



**10 TIP-ON**

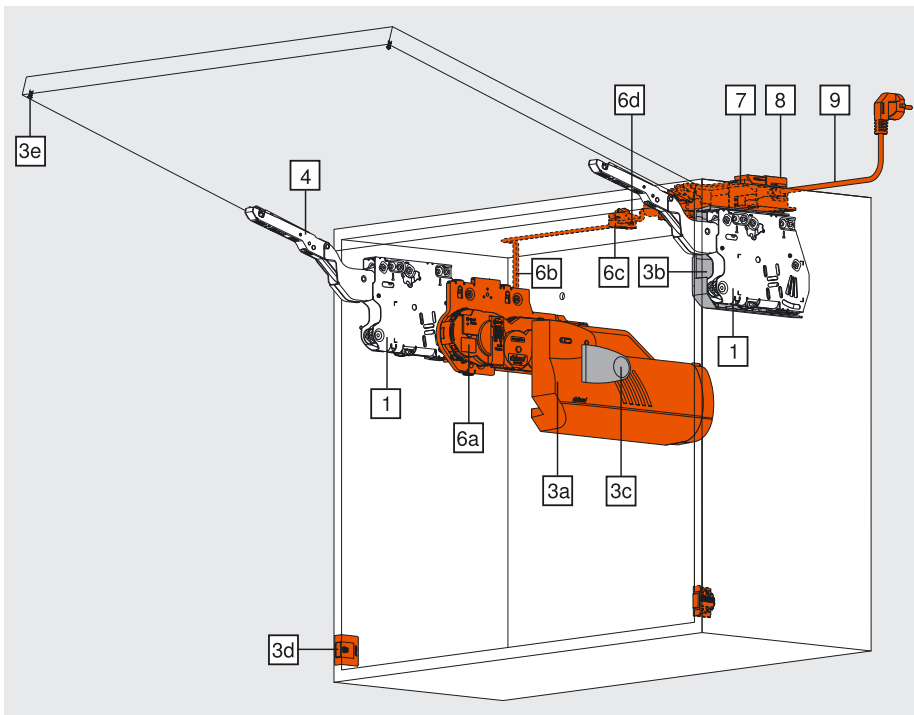


**11 Screw-on catch plate**



# Order information

## Standard and SERVO-DRIVE for AVENTOS HK



**4 types of lift mechanisms are enough to cover a wide range of applications.**

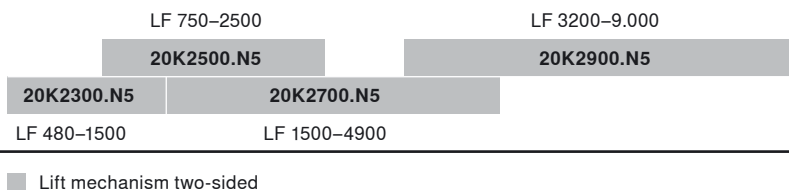
Using the power factor, you can calculate the number of required lift mechanisms. The power factor required depends on the weight of the front and the cabinet height.

The power factor and the door weight can be increased by 50% when a third lift mechanism is used.

- Standard
- SERVO-DRIVE



**Power factor LF = cabinet height KH (mm) x front weight incl. double handle weight (kg)**



A trial application is recommended when you are in a borderline area of the individual lift mechanism.

<input checked="" type="checkbox"/>	<b>1</b>	<b>Lift mechanism set</b>	
	Power factor	Opening angle	
	480–1500	107°	<b>20K2300.N5</b>
	750–2500	107°	<b>20K2500.N5</b>
	1500–4900	107°	<b>20K2700.N5</b>
	3200–9000	100° *)	<b>20K2900.N5</b>
<b>Composed of:</b>			
2 x symmetrical lift mechanisms			
6 x chipboard screws Ø 4 x 35 mm			
Max. door weight 18 kg for two lift mechanisms			
*) Pre-mounted opening angle stop			

<input type="checkbox"/>	<b>3</b>	<b>Cover cap set</b>	
	Nylon		
	light grey		<b>20K8000.NA</b>
<b>Composed of:</b>			
<b>3a</b>		1 x cover cap large left	
<b>3b</b>		1 x cover cap large right	
<b>3c</b>		2 x cover caps small	

**Note**  
We recommend a lift mechanism attached to the centre panel for wide cabinets. The reason for this is to prevent the middle of the front from sagging when open.



	<b>3</b>	<b>Cover cap set for SERVO-DRIVE</b>	
		Nylon	
		light grey	<b>21K8000.NA</b>
		<b>Composed of:</b>	
<b>3a</b>		1 x SERVO-DRIVE cover cap large left	
<b>3b</b>		1 x cover cap large right	
<b>3c</b>		2 x cover caps small	
<b>3d</b>		2 x SERVO-DRIVE switches	
<b>3e</b>		4 x Blum distance bumpers, Ø 5 mm	

	<b>5</b>	<b>SERVO-DRIVE set</b>	
		Nylon	
		Dust grey	<b>21KA000</b>
		<b>Composed of:</b>	
<b>6a</b>		1 x drive unit	
<b>6b</b>		1 x distribution cable, 1500 mm	
<b>6c</b>		1 x connecting node	
<b>6d</b>		2 x cable end protectors	
		We recommend two synchronised drive units for a power factor > 9000.	

	<b>4</b>	<b>Front fixing bracket set</b>	
		Nickel plated	
		Wooden fronts and wide aluminium frames <sup>1)</sup>	<b>20S4200</b>
		Narrow alu frames	<b>20S4200A</b>
		<b>Composed of:</b>	
		2 x symmetrical front fixing brackets	
		<sup>1)</sup> Use 4 chipboard screws (609.1x00) per side for wooden fronts. Use 4 countersunk self tapping screws (660.0950) per side for wide aluminium frames.	

		<b>Opening angle stop</b>	
		Nylon	
		100° Dark grey	2 x <b>20K7041</b>
		75° Dust grey	2 x <b>20K7011</b>

		<b>Bit PZ cross slot</b>	
		Size 2, length 39 mm	
			<b>BIT-PZ KS2</b>

	<b>7, 8, 9</b>	<b>Blum transformer, flex and transformer unit housing</b>	
			Page <b>74</b>

# Planning information

## Standard and SERVO-DRIVE for AVENTOS HK

**Drilling position**

3 x  $\text{Ø} 4 \times 35 \text{ mm}$

Drilled hole for SERVO-DRIVE distribution cable, left only

\* Drilling depth 5 mm

\*\* Alternative drilling

SOB Top panel thickness

**Space requirement**

**SERVO-DRIVE**

LH Internal cabinet height

\* Min. 261 mm with visible wall hanging bracket

**Front assembly**

Narrow alu frames

Wooden fronts and wide aluminium frames<sup>1)</sup>

Wall application: Requires minimum gap 5 mm

4 x  $\text{Ø} 3.5 \times 15 \text{ mm}$

SOB Top panel thickness

F Gap

SFA Side front overlay

<sup>1)</sup> Use 4 chipboard screws (609.1x00) per side for wooden fronts. Use 4 countersunk self tapping screws (660.0950) per side for wide aluminium frames.

**Planning narrow alu frames**

SFA Side front overlay

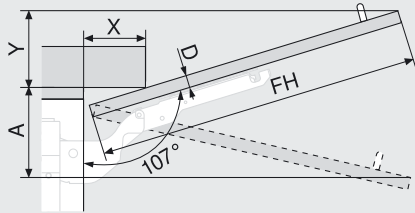
For frame frieze width 19 mm: SFA of 11–18 mm possible

\* When changing material thickness, adjust the assembly dimensions accordingly

- Standard
- SERVO-DRIVE



**Cornice and crown moulding clearance**

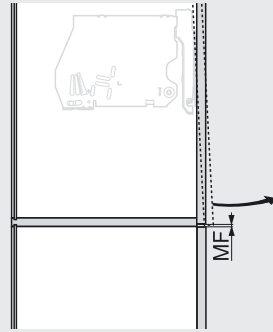


D (mm)	16	19	22	26	28
X (mm)	70	59	49	35	26

**Opening angle stop**

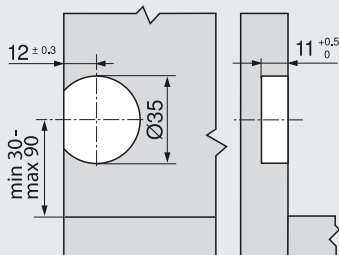
Without	$Y = FH \times 0.29 - 15 + D$
100°	$Y = FH \times 0.17 - 15 + D$
75°	$A = FH \times 0.26 + 15 - D$

**Minimum gap**

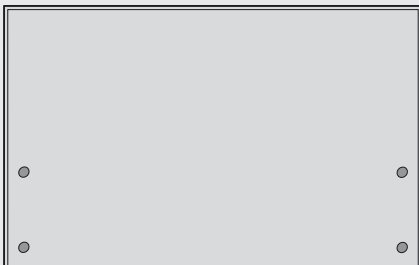


MF Minimum gap for opening (2 mm)

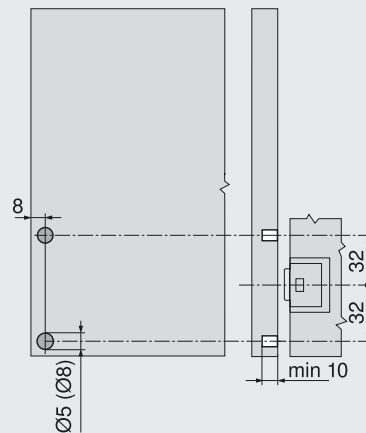
**SERVO-DRIVE switch**



**Blum distance bumper**



**Blum distance bumper drilling position**



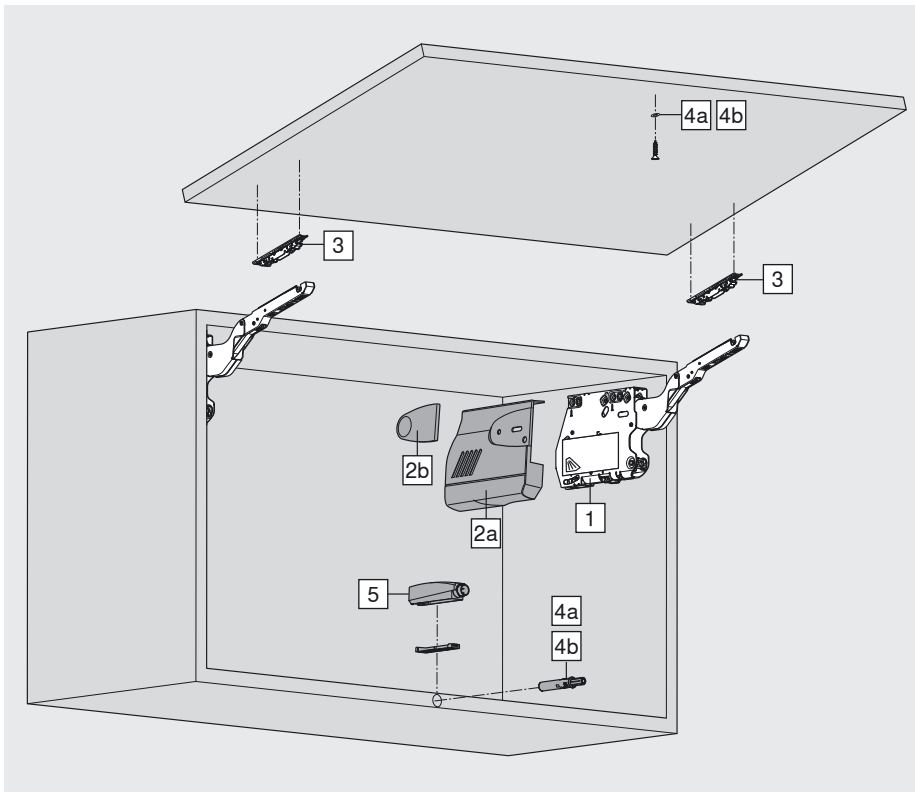
In general, we recommend installing 4 distance bumpers near to the switch. For certain applications (high fronts, low weight), 2 distance bumpers may sometimes be sufficient. A trial application is recommended.

Recommendation for aluminium frames: Consider drilling the Blum distance bumper holes in the cabinet side. A trial application must be carried out when fixing the Blum distance bumper to the front.

**i** Do not glue Blum distance bumper.

# Order information

## TIP-ON for AVENTOS HK



**4 types of lift mechanisms are enough to cover a wide range of applications.**

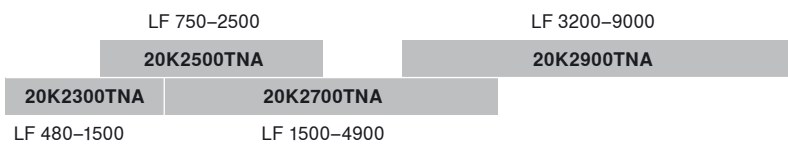
Using the power factor, you can calculate the number of required lift mechanisms. The power factor required depends on the weight of the front and the cabinet height.

The power factor and the door weight can be increased by 50% when a third lift mechanism is used.

■ TIP-ON



**Power factor LF = cabinet height KH (mm) x front weight**



■ Lift mechanism two-sided

LF Power factor →


A trial application is recommended when you are in a borderline area of the individual lift mechanism.


1	Lift mechanism set	
	Power factor	Opening angle
	480-1500	107°
	750-2500	107°
	1500-4900	107°
	3200-9000	100° *)
<b>Composed of:</b>		
2 x symmetrical lift mechanisms		
6 x chipboard screws Ø 4 x 35 mm		
Max. door weight 18 kg for two lift mechanisms		
*) Pre-mounted opening angle stop		


2	Cover cap set	
	Nylon	
	light grey	20K8000.NA
	<b>Composed of:</b>	
2a	1 x cover cap large left	
2b	1 x cover cap large right	
2c	2 x cover caps small	


	Opening angle stop	
	Nylon	
	100° Dark grey	2 x 20K7041
	75° Dust grey	2 x 20K7011




	<b>3 Front fixing bracket set</b>	
	Nickel plated	
	Wooden fronts and wide aluminium frames <sup>1)</sup>	<b>20S4200</b>
	Narrow alu frames	<b>20S4200A</b>
	<b>Includes:</b>	
	2 x symmetrical front fixing brackets	
	<sup>1)</sup> Use 4 chipboard screws (609.1x00) for wooden fronts. Use 4 countersunk self tapping screws (660.0950) for wide alu frames.	

	<b>4b TIP-ON long version set</b>	
	For front heights over 500 mm	
	For drilling Ø 10 x 76 mm	
	RAL 7037 nylon, dust grey	
	With magnet	<b>955A1004</b>
	Output path approx. 38 mm	
	<b>Composed of:</b>	
	1 x TIP-ON	
	1 x screw-on catch plate <sup>3)</sup>	
	1 x chipboard screw 609.1500	
	<sup>3)</sup> Note: The glue-on catch plate should not be used in combination with TIP-ON for AVENTOS HK	

	<b>4a TIP-ON set</b>	
	For fronts up to a height of 500 mm	
	For drilling Ø 10 x 50 mm	
	RAL 7037 nylon, dust grey	
	With magnet	<b>955.1004</b>
	Output path approx. 18 mm	
	<b>Composed of:</b>	
	1 x TIP-ON	
	1 x screw-on catch plate <sup>2)</sup>	
	1 x chipboard screw 609.1500	
	<sup>2)</sup> Note: The glue-on catch plate should not be used in combination with TIP-ON for AVENTOS HK	

	<b>5 Adapter plate</b>	
	<b>Inline adapter plate</b>	
	Nylon 7036 platinum grey	<b>955.1201</b>
	<b>Cruciform adapter plate</b>	
	Nylon 7036 platinum grey	
	Screws	<b>955.1501</b>
	EXPANDO	<b>955.15E1</b>
	Assembly with Ø 3.5 mm or Ø 4 mm chipboard screws	

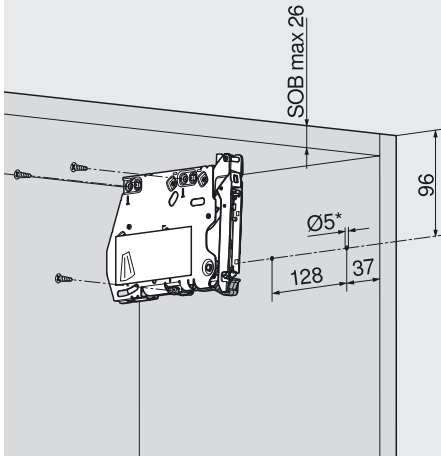
	<b>Bit PZ cross slot</b>	
	Size 2, length 39 mm	<b>BIT-PZ KS2</b>



# Planning information

## TIP-ON for AVENTOS HK

### Drilling position

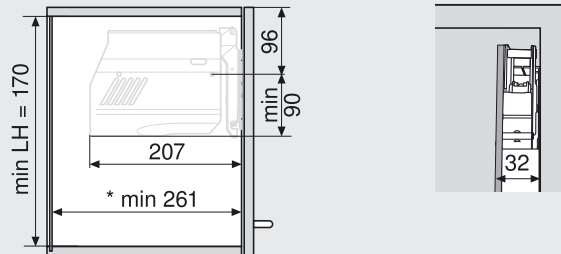


\* Drilling depth 5 mm

SOB Top panel thickness

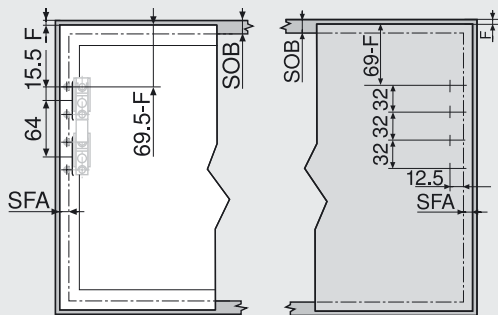
3 x Ø 4 x 35 mm

### Space requirement



\* Min. 261 mm with visible wall hanging bracket

### Front assembly



Narrow alu frames

Wooden fronts and wide aluminium frames<sup>1)</sup>

Wall application: Requires minimum gap 5 mm

4 x Ø 3.5 x 15 mm

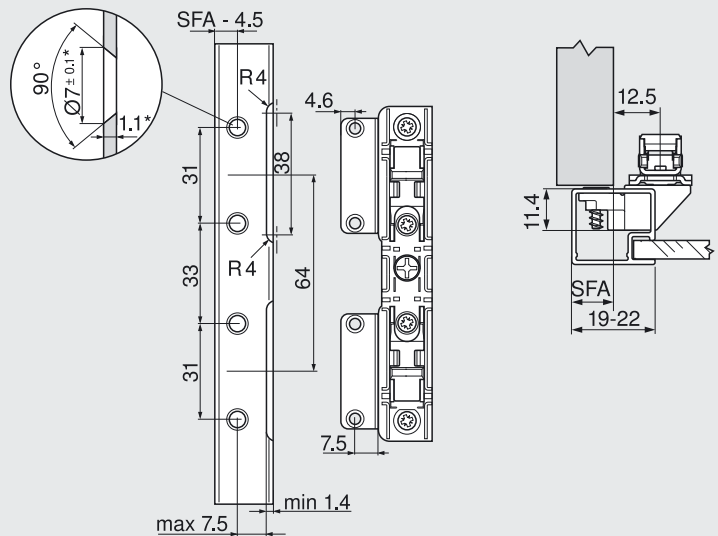
SOB Top panel thickness

F Gap

SFA Side front overlay

<sup>1)</sup> Use 4 chipboard screws (609.1x00) per side for wooden fronts.  
Use 4 countersunk self tapping screws (660.0950) per side for wide aluminium frames.

### Planning narrow alu frames



SFA Side front overlay

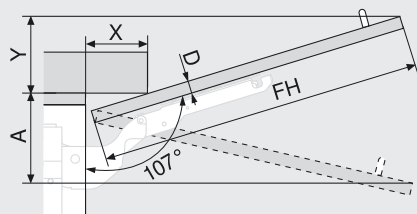
For frame frieze width 19 mm: SFA of 11–18 mm possible

\* When changing material thickness, adjust the assembly dimensions accordingly

### TIP-ON



**Cornice and crown moulding clearance**

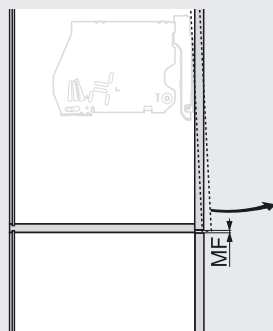


D (mm)	16	19	22	26	28
X (mm)	70	59	49	35	26

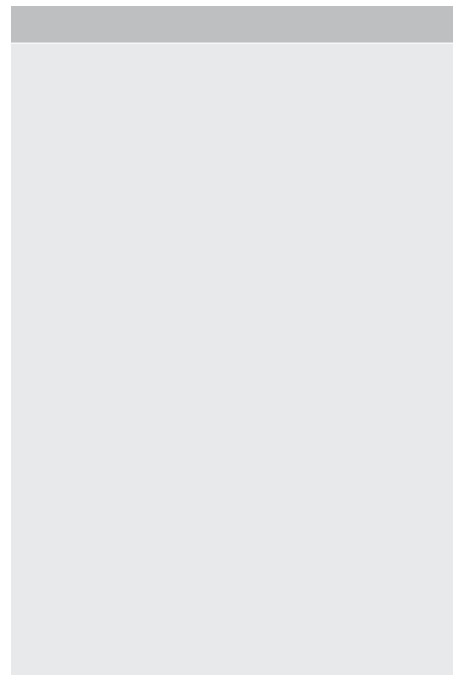
Opening angle stop

Without	$Y = FH \times 0.29 - 15 + D$
100°	$Y = FH \times 0.17 - 15 + D$
75°	$A = FH \times 0.26 + 15 - D$

**Minimum gap**



MF Minimum gap for opening (2 mm)

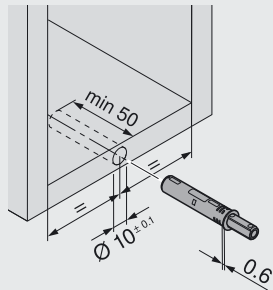


# Planning information

## TIP-ON for AVENTOS HK

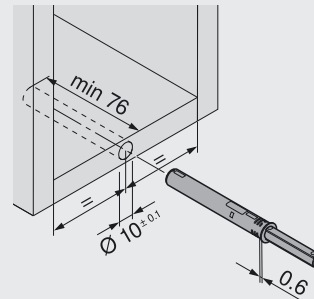
### TIP-ON fixing position

Standard version



For fronts up to a height of 500 mm

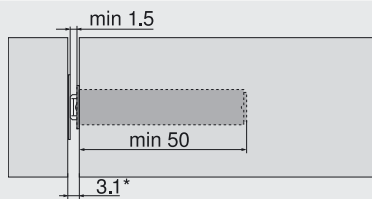
Long version



For front heights over 500 mm

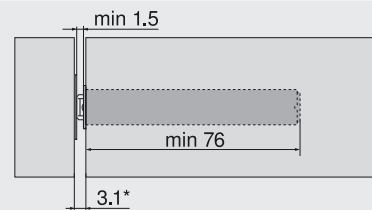
### TIP-ON installation dimension

Standard version



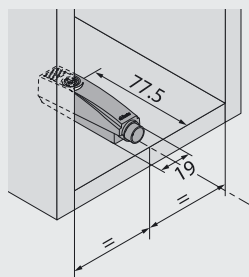
\* Min. 3.1 mm with screw-on catch plate

Long version

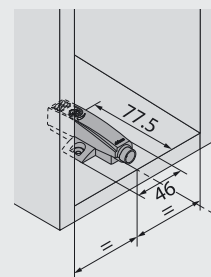


### Adapter plate fixing position

Inline adapter plate

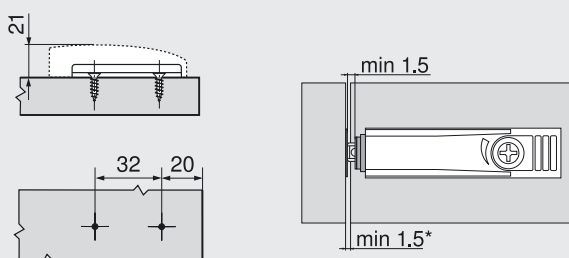


Cruciform adapter plate



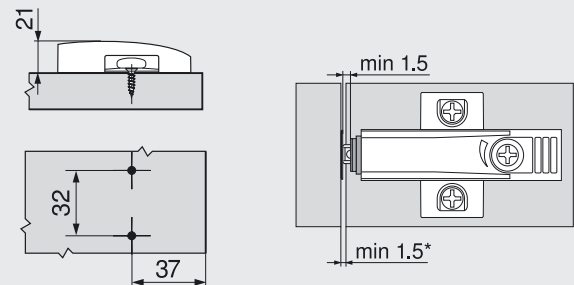
### Adapter plate installation dimension

Inline adapter plate



\* Factory setting = 2 mm

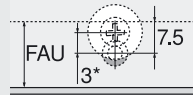
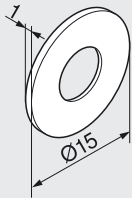
Cruciform adapter plate



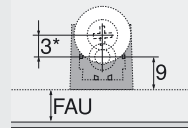
\* Factory setting = 2 mm



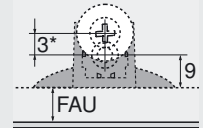
### ■ Screw-on catch plate planning



For drilling



Inline adapter plate



Cruciform adapter plate

\* We recommend offsetting the positioning of TIP-ON by 3 mm for the screw-on catch plate.

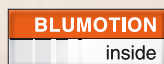
Comment: The glue-on catch plate should not be used in combination with TIP-ON for AVENTOS HK

FAU Lower front overlay

### ■ TIP-ON



## Small lift system but supreme ease of motion



AVENTOS HK-S is the perfect choice for small lift systems in tall cabinets, e.g. above refrigerators. Thanks to its neat and tidy dimensions, the fitting can be perfectly integrated into small pieces of furniture, making the best possible use of the storage space.



Watch video of the assembly and adjustment processes

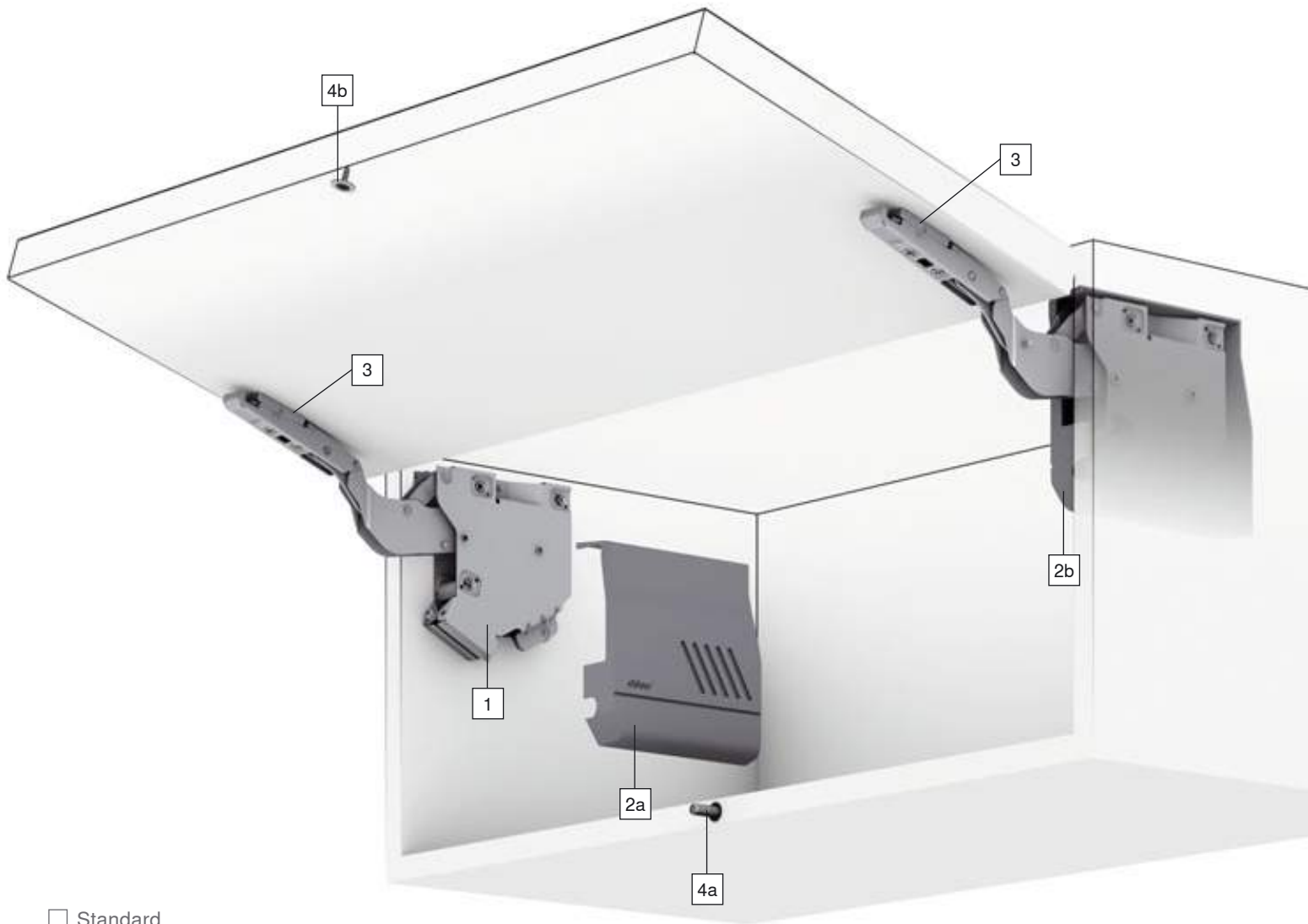


Handle-less fronts can be opened with a gentle touch using the TIP-ON technology for AVENTOS HK-S. To close the lift system, simply press shut.

At the heart of this fitting solution is the lift mechanism with BLUMOTION and a robust spring package.



# AVENTOS HK-S



- Standard
- TIP-ON



1 Lift mechanism

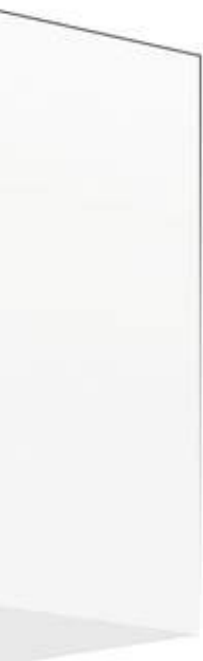
2a Cover cap, left

2b Cover cap right

3 Front fixing bracket

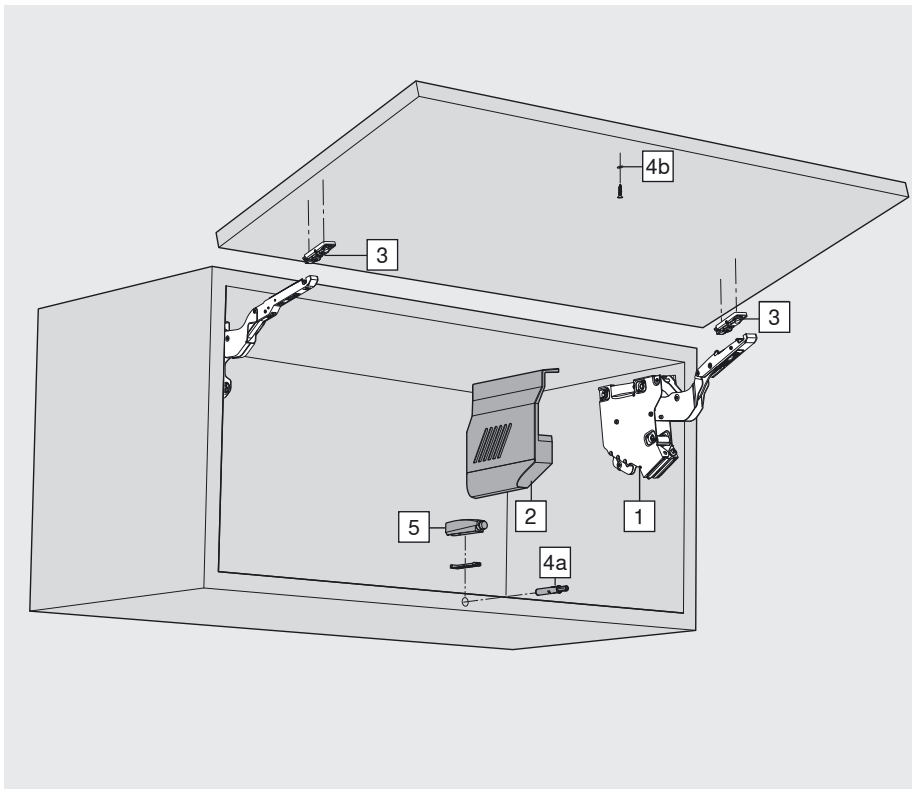
4a TIP-ON

4b Screw-on catch plate



# Order information

## Standard and TIP-ON for AVENTOS HK-S



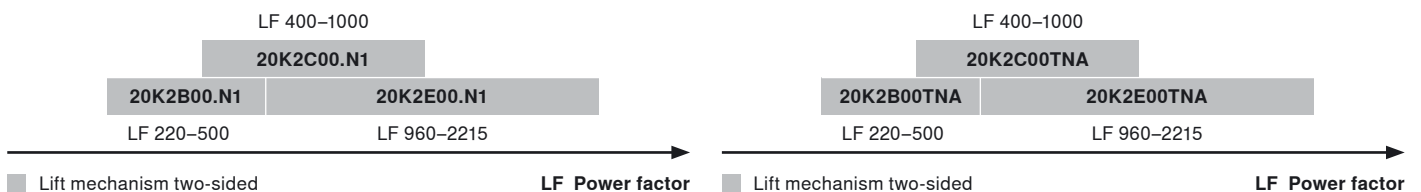
**3 types of lift mechanisms are enough to cover a wide range of applications.**

Using the power factor, you can calculate the number of required lift mechanisms. The power factor required depends on the weight of the front and the cabinet height. The power factor and the door weight can be increased by 50% when a third lift mechanism is used. The maximum cabinet height for AVENTOS HK-S is 400 mm. Taller cabinets are only permitted in conjunction with the 175H3100 steel front fixing bracket.

□ Standard  
 ■ TIP-ON



**Power factor LF = cabinet height KH (mm) x front weight incl. double handle weight (kg)**







A trial application is recommended when you are in a borderline area of the individual lift mechanism.


□	1	Lift mechanism set		
	Power factor	Spring		
	220-500	Weak		20K2B00.N1
	400-1000	Medium		20K2C00.N1
	960-2215	Strong		20K2E00.N1
	Opening angle	107°		
	<b>Composed of:</b>			
	2 x symmetrical lift mechanisms			
	2 x cover caps large left/right light grey			
	6 x chipboard screws, Ø 4 x 35 mm			


■	1	Lift mechanism set		
	Power factor	Spring		
	220-500	Weak		20K2B00TNA
	400-1000	Medium		20K2C00TNA
	960-2215	Strong		20K2E00TNA
	Opening angle	107°		
	<b>Includes:</b>			
	2 x symmetrical lift mechanisms			
	2 x cover caps large left/right light grey			
	6 x chipboard screws, Ø 4 x 35 mm			






	<b>3</b>	<b>Front fixing bracket</b>	
		Wooden fronts and wide aluminium frames <sup>1)</sup>	2 x <b>175H3100</b>
		<sup>1)</sup> Use 2 chipboard screws (609.1x00) for wooden fronts. Use 2 countersunk self tapping screws (660.0950) for wide alu frames.	

	<b>3</b>	<b>Front fixing bracket set</b>	
		Narrow alu frames	<b>20K4A00A01</b>
		<b>Composed of:</b>	
		2 x front fixing brackets left/right	

	<b>4</b>	<b>TIP-ON set</b>	
		For drilling Ø 10 x 50 mm	
		RAL 7037 nylon, dust grey	
		With magnet	<b>955.1004</b>
		Output path approx. 18 mm	
		<b>Includes:</b>	
<b>4a</b>		1 x TIP-ON	
<b>4b</b>		1 x screw-on catch plate <sup>2)</sup>	
		1 x chipboard screw 609.1500	
		<sup>2)</sup> Note: The glue-on catch plate should not be used in combination with TIP-ON for AVENTOS HK-S	

	<b>5</b>	<b>Adapter plate</b>	
		<b>Inline adapter plate</b>	
		Nylon 7036 platinum grey	<b>955.1201</b>
		<b>Cruciform adapter plate</b>	
		Nylon 7036 platinum grey	
		Screws	<b>955.1501</b>
		EXPANDO	<b>955.15E1</b>
		Assembly with Ø 3.5 mm or Ø 4 mm chipboard screws	

		<b>Opening angle stop</b>	
		Nylon	
		100° Dark grey	2 x <b>20K7A41</b>
		75° Dust grey	2 x <b>20K7A11</b>

		<b>Bit PZ cross slot</b>	
		Size 2, length 39 mm	
			<b>BIT-PZ KS2</b>

# Planning information

## Standard and TIP-ON for AVENTOS HK-S

**Drilling position**

SOB Top panel thickness

**Fixing position**

3 x Ø 4 x 35 mm

**Space requirement**

\* Min. 240 mm with visible wall hanging bracket

Maximum cabinet height 400 mm

**Front assembly**

Narrow alu frames

Wooden fronts and wide aluminium frames<sup>1)</sup>

Ø 3.5 x 15 mm

SOB Top panel thickness

F Gap

SFA Side front overlay

<sup>1)</sup> Use 2 chipboard screws (609.1x00) for wooden fronts. Use 2 countersunk self tapping screws (660.0950) for wide alu frames.

**Planning narrow alu frames**

SFA Side front overlay

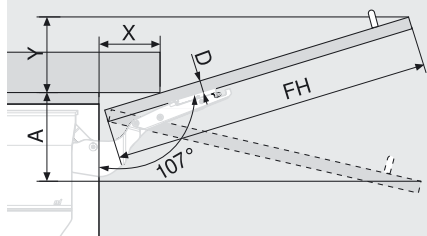
For frame frieze width 19 mm: SFA of 11–18 mm possible

\* When changing material thickness, adjust the assembly dimensions accordingly

- Standard
- TIP-ON



**Cornice and crown moulding clearance**

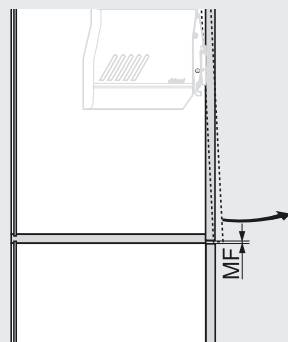


D (mm)	16	19	22	26
X (mm)	70	59	49	35

**Opening angle stop**

Without	$Y = FH \times 0.29 - 15 + D$
100°	$Y = FH \times 0.17 - 15 + D$
75°	$A = FH \times 0.26 + 15 - D$

**Minimum gap**

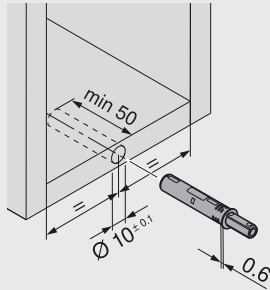


MF Minimum gap for opening (2 mm)

# Planning information

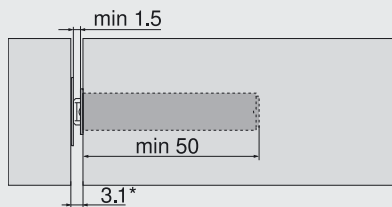
## TIP-ON for AVENTOS HK-S

### TIP-ON fixing position



For fronts up to a height of 500 mm

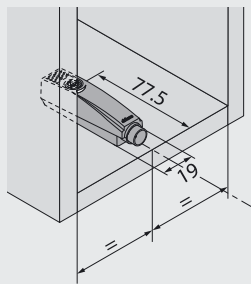
### TIP-ON installation dimension



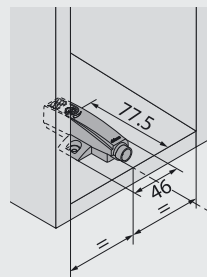
\* Min. 3.1 mm with screw-on catch plate

### Adapter plate fixing position

Inline adapter plate

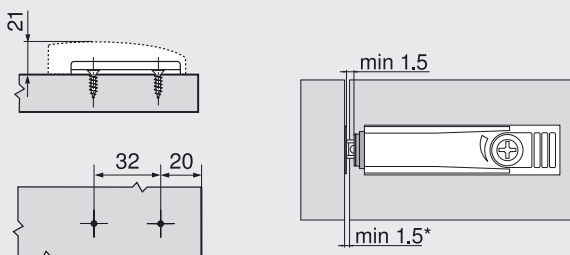


Cruciform adapter plate



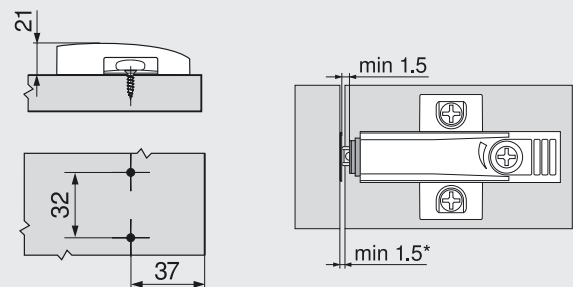
### Adapter plate installation dimension

Inline adapter plate



\* Factory setting = 2 mm

Cruciform adapter plate

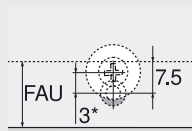
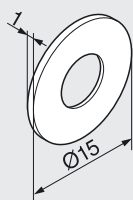


\* Factory setting = 2 mm

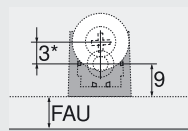




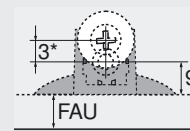
### Screw-on catch plate planning



For drilling



Inline adapter plate



Cruciform adapter plate

\* We recommend offsetting the positioning of TIP-ON by 3 mm for the screw-on catch plate.

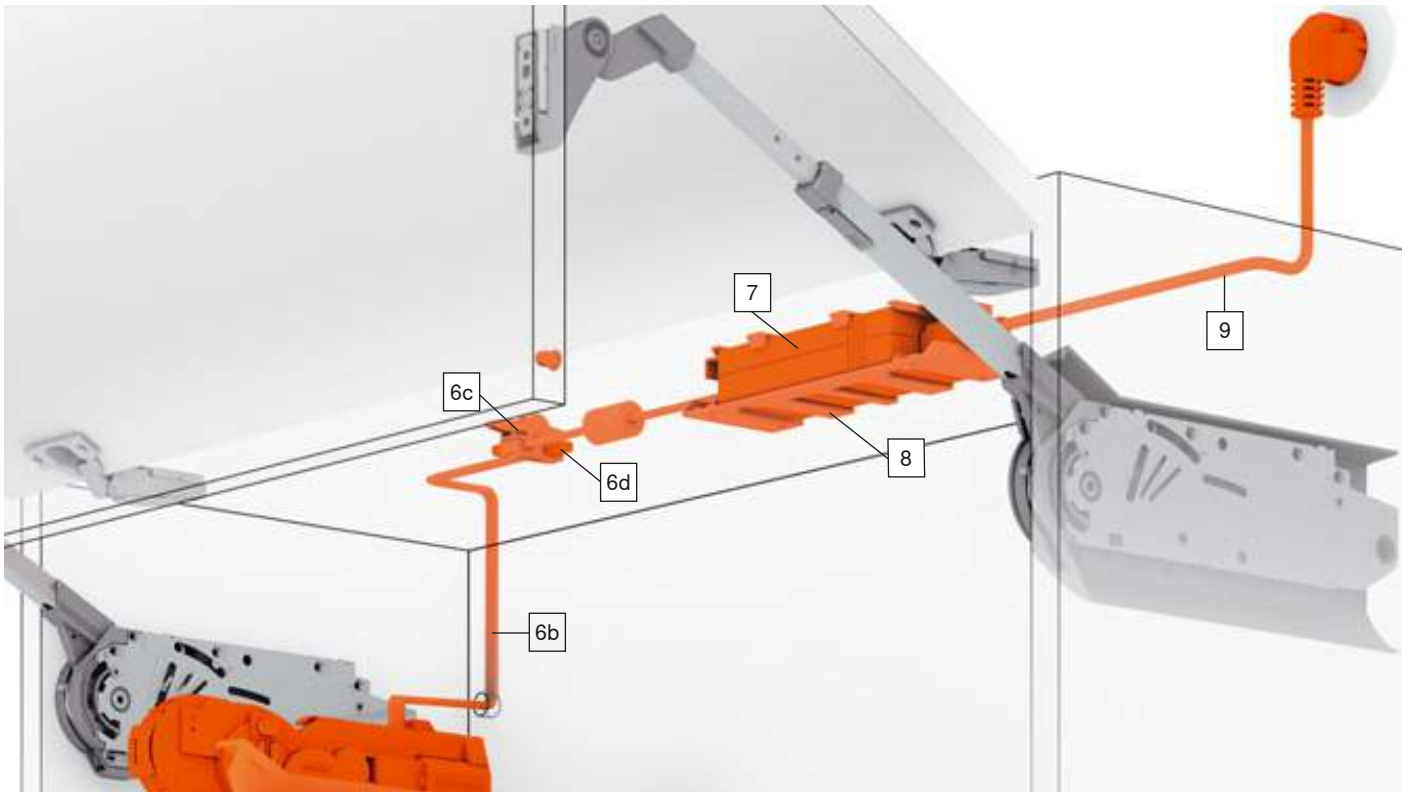
Comment: The glue-on catch plate should not be used in combination with TIP-ON for AVENTOS HK-S


FAU Lower front overlay


### TIP-ON

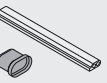
# Order information

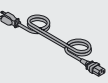
## Blum transformer and accessories





	<b>6c, 6d</b> <b>Connecting node + cable end protector</b>	Black	<b>Z10V100E.01</b>
---	--	-------	--------------------

	<b>8</b> <b>Transformer unit housing for panel fixing</b>	White grey	<b>Z10NG120</b>
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	<b>6b, 6d</b> <b>Distribution cable for cutting to size + cable end protector</b>	Electrical cable length 8 m with 5 pieces cable end protector Can be used as a distribution cable	<b>Z10K800AE</b>
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	<b>9</b> <b>Flex</b>	Countries Flex US, CA	<b>Z10M200U</b>
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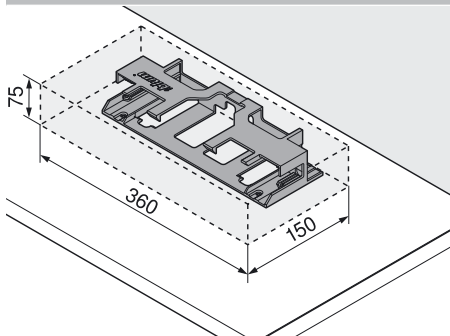
	<b>7</b> <b>Blum transformer</b>	72 W Language packages – installation instructions and instruction leaflet	<b>Z10NE020G</b>
		<b>G</b> EN, ES, FR, (US, CA)	

	<b>Cable holder</b>	Using the cable holder, the distribution cable can be easily managed to keep everything tidy and safe.	<b>Z10K0009</b>
		White	

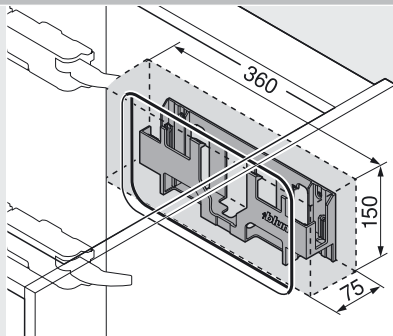
# Assembly

## Blum transformer and accessories

### Space requirement and safety distance for Blum transformer unit housing



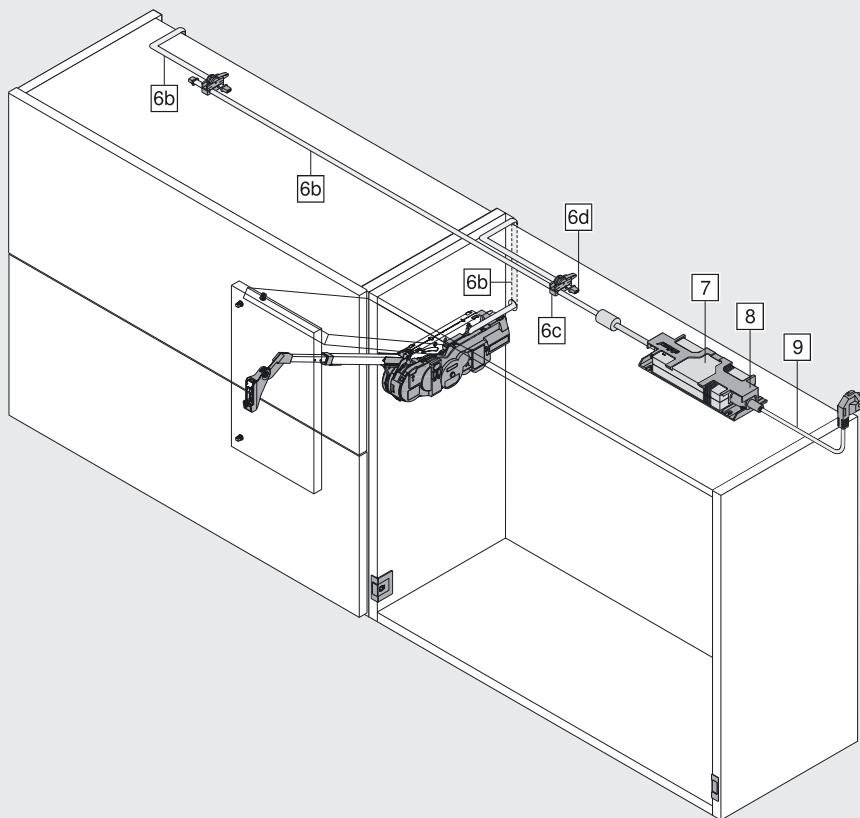
Assembly on the top panel



Assembly in combination with SERVO-DRIVE for box and runner systems

**i** A safety distance of 30 mm must be maintained for air circulation (see graphic); otherwise, there is a risk that the Blum transformer could overheat.

### Assembly on the top panel

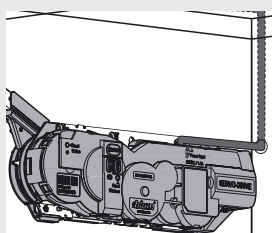


- 6b** Distribution cable for cutting to size
- 6c** Connecting node
- 6d** Cable end protector
- 7** Blum transformer
- 8** Transformer unit housing
- 9** Flex

**i** Only one Blum transformer can be connected to each distribution cable.

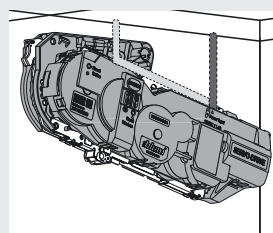
### Back cabling

Recommended



### Upper cabling

Optional



Cabinet front edge to centre of drilled hole

HF: 167 mm

HS: 69 or 167 mm

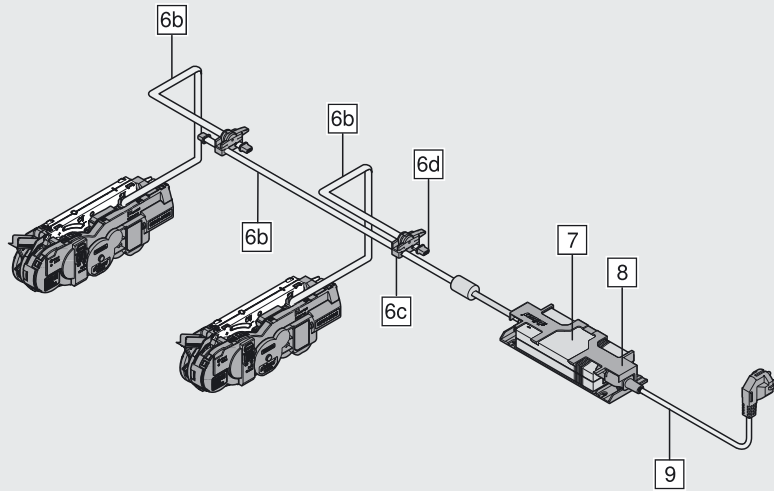
HL: 74.5 or 167 mm

HK: 167 mm

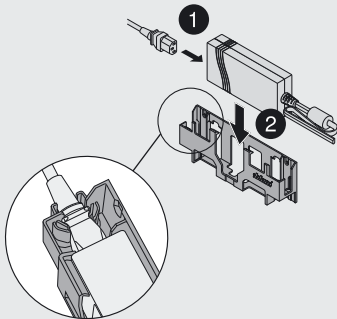
# Assembly

## Blum transformer and accessories

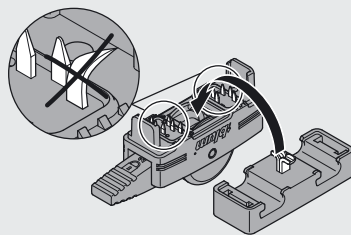
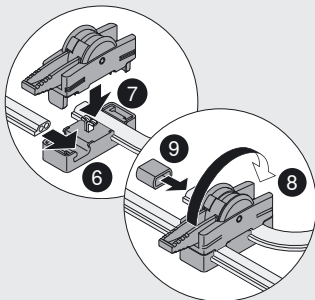
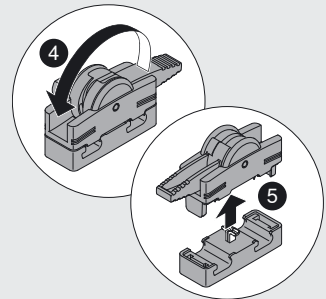
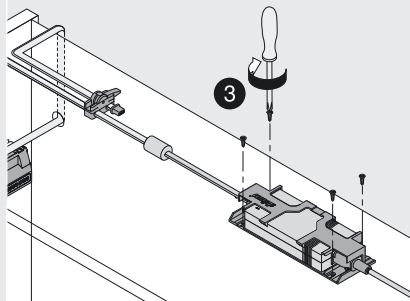
Cable diagram for two cabinets



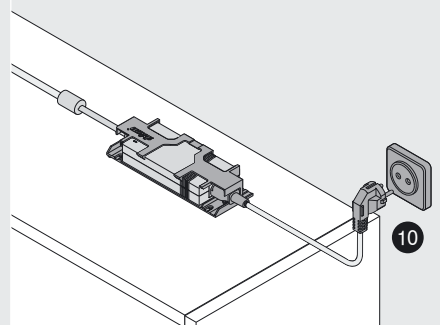
Transformer unit housing



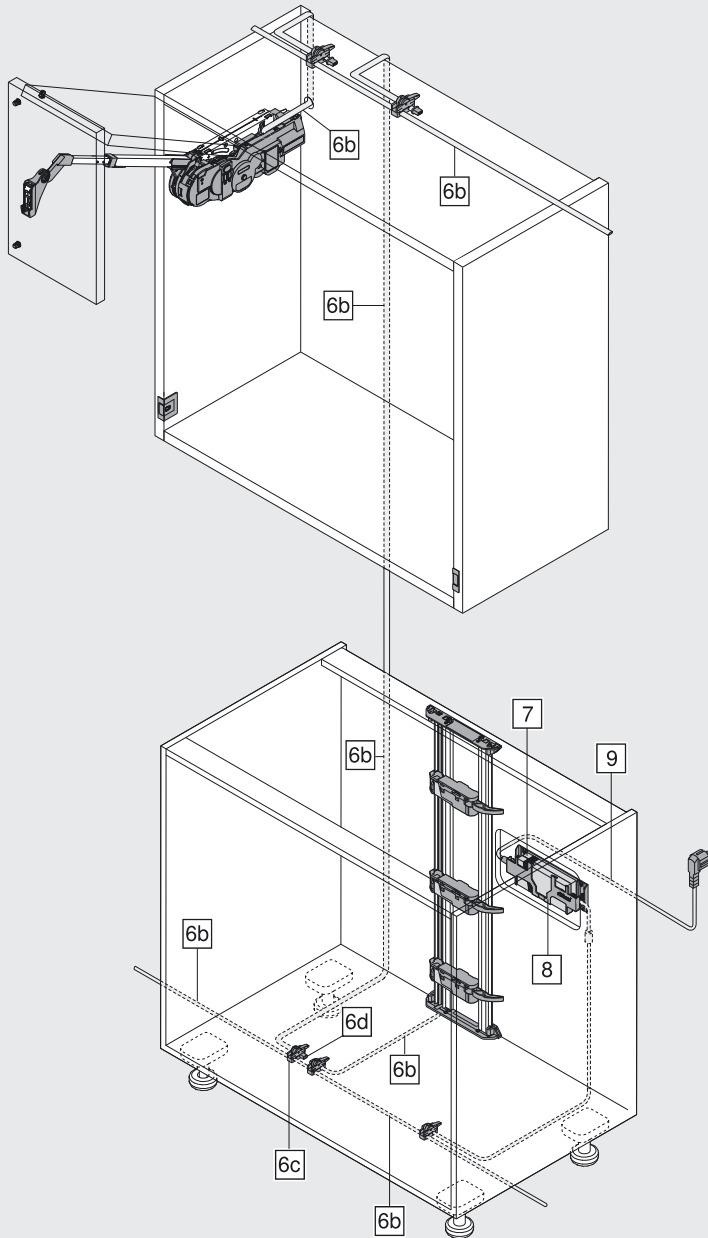
Pull-out stop



**i** Do not damage piercing pins.



## Assembly in combination with SERVO-DRIVE for box and runner systems



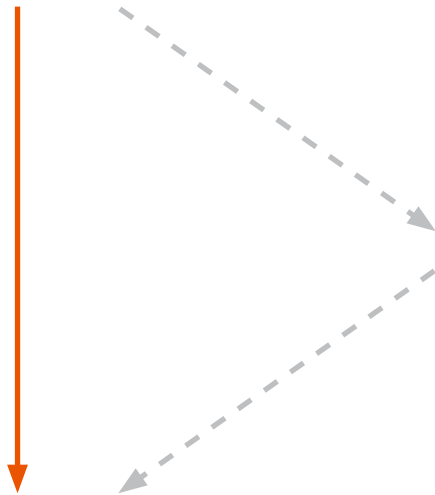
- 6b Distribution cable for cutting to size
- 6c Connecting node
- 6d Cable end protector
- 7 Blum transformer
- 8 Transformer unit housing
- 9 Flex

**i** Only one Blum transformer can be connected to each distribution cable.

# Overview of functions SERVO-DRIVE for AVENTOS

## Start-up

**A** Activating the SERVO-DRIVE switch



## Additional features

**C** Activating synchronisation

**D** Activating collision avoidance

Optional

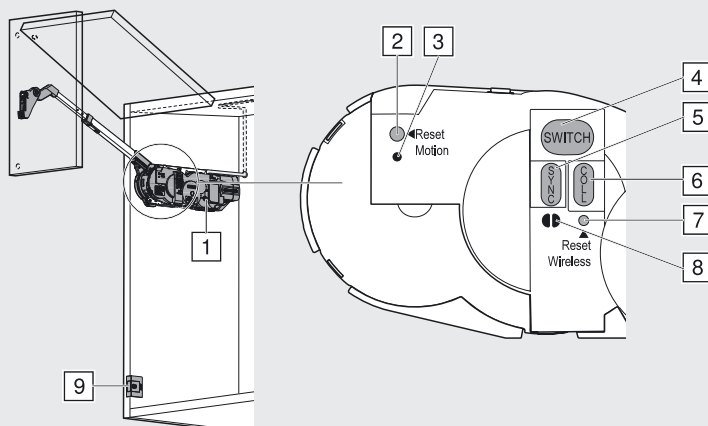
**B** Starting reference run

## Deactivation

**E** Reset motion


**F** Reset wireless


## Button layout



- 1 Drive unit
- 2 <Reset Motion> button
- 3 Motion LED
- 4 <SWITCH> button
- 5 <SYNC> button
- 6 <COLL> button
- 7 <Reset Wireless> button
- 8 Wireless LED
- 9 SERVO-DRIVE switch

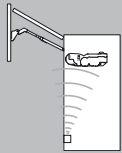
# Start-up SERVO-DRIVE for AVENTOS

 Operation

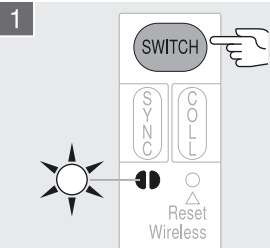
 Lights up continuously

 Flashes

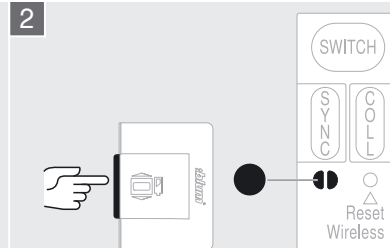
## A Activating the SERVO-DRIVE switch



Setting up the wireless connection between the SERVO-DRIVE switch and the drive unit.  
Each SERVO-DRIVE switch can be assigned to one drive unit only.



Press the <SWITCH> button until the LED flashes



Press the SERVO-DRIVE switch until the LED lights up continuously

3 Repeat procedure **A** 1–2 for additional SERVO-DRIVE switches in the cabinet.

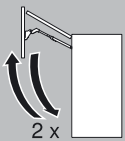
## Additional features

Optional

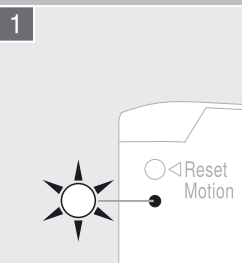
### C Activating synchronisation

### D Activating collision avoidance

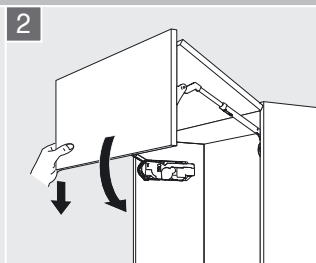
## B Starting reference run



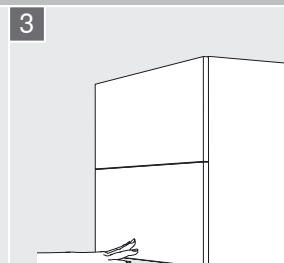
The drive unit recognises the required parameters using the reference run.



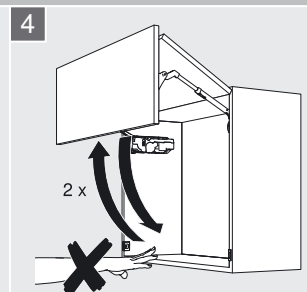
Reference run is required: LED flashes



Close the front manually



Press on front: The reference run starts automatically




Front opens and closes 2x automatically: Under no circumstances should you try to manually interrupt or stop the process


If the reference run is interrupted, it should be reset – see Reset Motion **E** 1.  
Restart reference run.



# Additional features

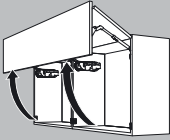
## SERVO-DRIVE for AVENTOS

 Operation

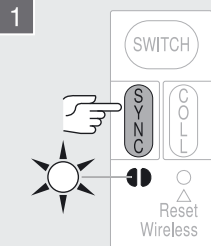
 Lights up continuously

 Flashes

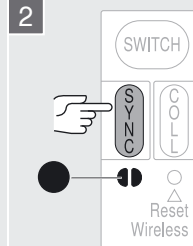
### C Activating synchronisation



Up to three drive units can be synchronised so that they move simultaneously. This function is required for several cabinets with a uniform front.



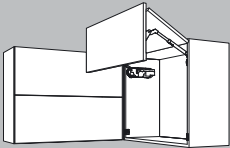
Press the <SYNC> button on the 1st drive unit until the LED flashes



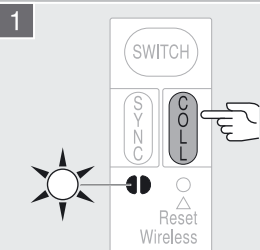
Press <SYNC> on the 2nd drive unit until the LEDs on both synchronised drive units light up continuously

3 Repeat procedure **C** 1–2 for all additional drive units.

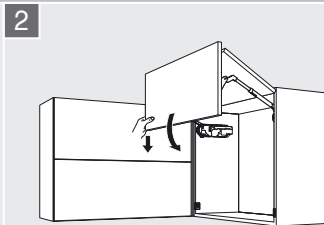
### D Activating collision avoidance



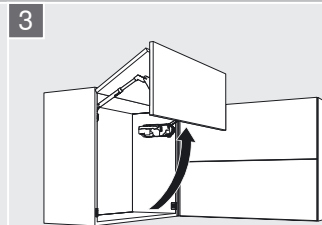
To avoid the collision of fronts, drive units (max. 6) are linked so that only one front can be opened at a time. A front is prevented from opening as long as a linked front remains open.



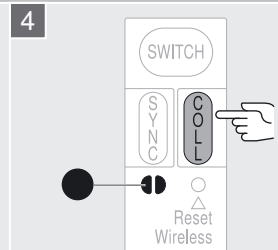
Press the <COLL> button on the 1st drive unit until the LED flashes



Close the front manually



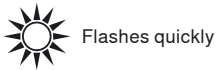
2. Open the front manually



Press <COLL> on the 2nd drive unit until the LED lights up continuously.

5 Repeat procedure **D** 1–4 for all additional cabinets.

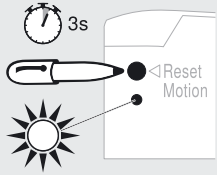
# Deactivation SERVO-DRIVE for AVENTOS



## E Reset motion

Resets the reference run and enables a new reference run to be started.

1

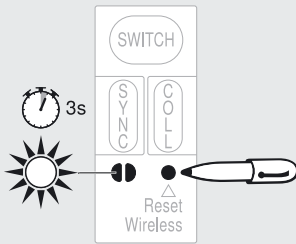


Press the <Reset Motion> button using a pen (at least 3 seconds) until the LED flashes quickly.

## F Reset wireless

Deactivates all functions:  
All active SERVO-DRIVE switches, synchronisations and collision avoidance settings for the respective drive unit are deleted.

1



Press the <Reset Wireless> button using a pen (at least 3 seconds) until the LED flashes quickly.

### Motion LED signals

	Flashes orange	Reference run is required
	Lights orange continuously	Power available Operating mode display Reference run successfully completed
	Flashes orange quickly	Reset Motion confirmation

### Wireless LED signals

	Flashes green	Activation mode
	Lights up green continuously	Activation confirmation
	Flashes green quickly	Deactivation confirmation
	Lights red continuously	Last process was not completed successfully



**1952**



**The first product**

Studs are attached to horse-shoes to stop horses slipping.

**1958**



**Début in the furniture industry**

The ANUBA hinge is Blum's first furniture fitting.

**1964**



**Production start**

Blum produces concealed furniture hinges.

**1966**



**Roller runners**

Blum starts to produce roller runners.

**1985**

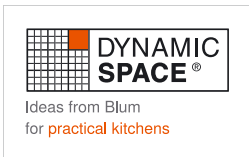


**Assembly technology**

CLIP hinges can be mounted without tools thanks to CLIP technology.

# Perfecting motion

Blum's fittings solutions are designed to make opening and closing furniture a mesmerising experience. That's why we make every effort to perfect the motion of our lift, hinge, box and runner systems.



## DYNAMIC SPACE

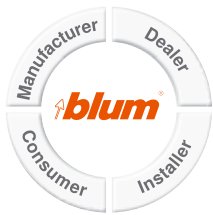
Blum products help optimise workflows, produce extra storage space and provide enhanced user convenience – making kitchens extremely practical.

## Blum in Austria and around the world

Over 5,000 employees work hard to help us perfect motion. Our fittings are manufactured at ten plants. Seven are in Austria, the remaining are in the USA, Brazil and Poland. Thanks to international subsidiaries and sales agencies, Blum is on site to serve its customers all over the world.

## Global customer benefits

Everyone should benefit from the advantages of Blum products – from furniture manufacturers right down to end users.



## Top quality

Blum products have been developed for everyday kitchen use and are a pleasure to use for a furniture's lifetime.



## Innovations

We want our fittings solutions to be innovative and make everyday kitchen use easier. That's why our developments are based on findings from requirement research and input from our customers.

## Environment

Blum strives to minimise its environmental impact. We use environmentally-friendly processes, use raw materials intelligently and save energy wherever we can.



1987



### Box systems

Blum's first box system goes into production with METABOX.

2001



### Soft-close system

BLUMOTION ensures that furniture closes softly and effortlessly.

2005



### Lift systems

AVENTOS lift systems are presented for the first time

2007



### Electrical opening support system

SERVO-DRIVE has received numerous awards for design and function.

2011



### Runner systems

With MOVENTO, a new generation of runner systems was born.



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