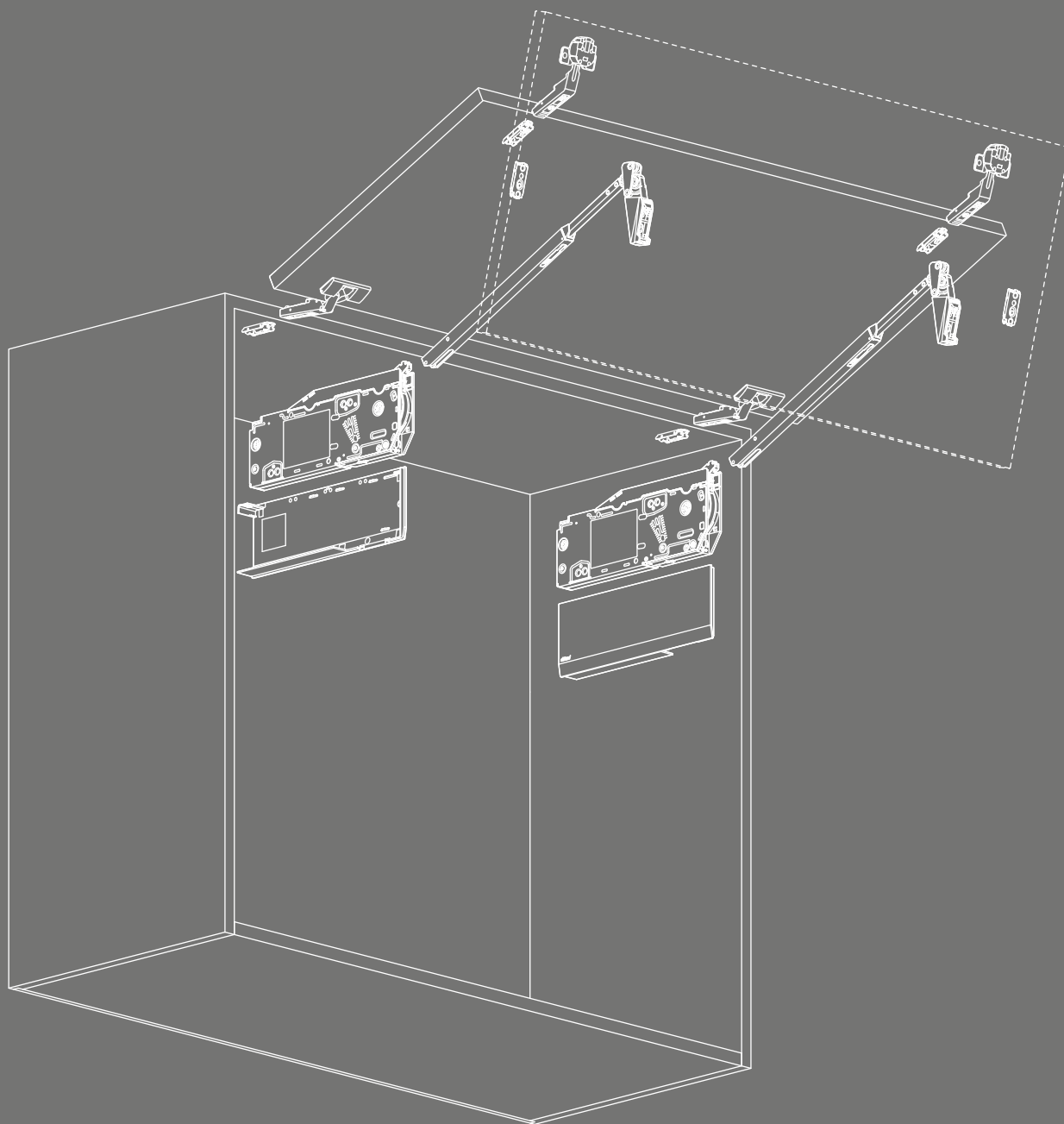


# AVENTOS top

## Ordering and planning information



# The latest generation in our comprehensive repertoire

Our AVENTOS lift systems have been reliably used in wall and tall cabinets for more than two decades. It was time for an evolution: we have reduced the size, optimised the functions and adapted the design. New AVENTOS top allows you to masterfully stage individual items of furniture or entire living spaces – without compromise.



## Contents

- 4** Living world
- 5** Services
- 6** Overview of cabinet heights
- 8** AVENTOS HF top
- 20** AVENTOS HS top
- 26** AVENTOS HL top
- 32** AVENTOS HK top
- 40** AVENTOS HK-S
- 46** AVENTOS HK-XS
- 52** TIP-ON
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- 55** Assembly devices
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## Uniquely arranged. Across all living areas

With their compact size and minimalist design, the lift systems from the AVENTOS top range fit perfectly into every piece of furniture and every living space. Depending on your requirements and the space available, you can find a suitable and reliable solution with AVENTOS HF top, HS top, HL top and HK top. Freedom of movement and optimal access are maintained at all times – no matter whether fronts fold up, swing up and over, lift up or pivot up.



Detailed information  
on AVENTOS top at:  
[www.blum.com/aventostop](http://www.blum.com/aventostop)



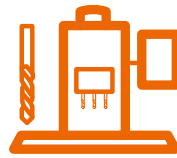
# Our services at a glance

Our services are customised to your specific needs, for every step along your process chain, allowing you to work more efficiently and therefore save time. Tailored to you and available when and where you need them.



## Digital services

Digital support for more efficiency



## Assembly devices

Practical tools for precise work



## Communication services

Comprehensive material for targeted marketing



## Personal services

Direct contact for customer-focussed support



## Logistics services

Optimised processes for quick delivery



Find out more about  
our services:  
[www.blum.com/services](https://www.blum.com/services)

# The right tool for every composition

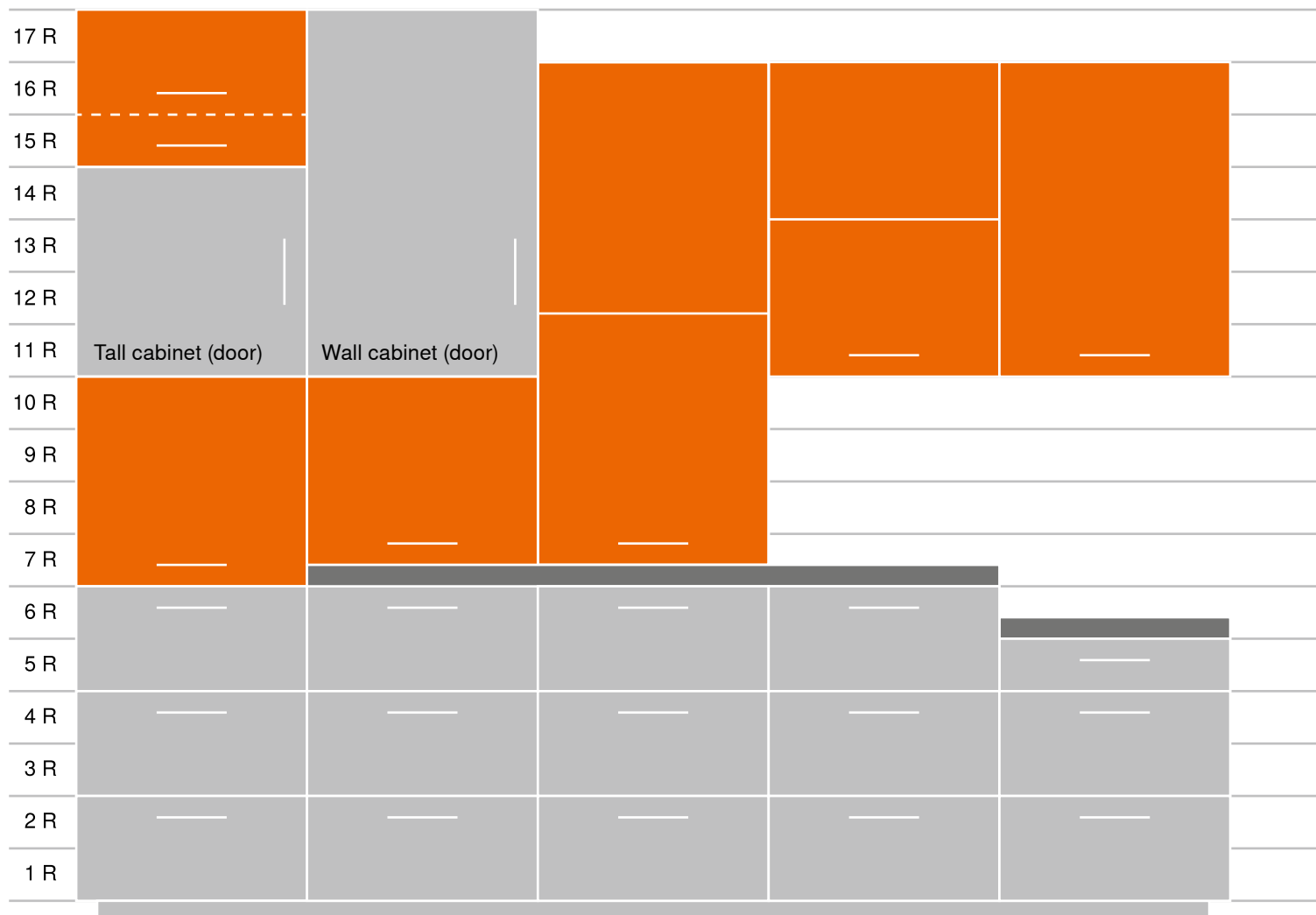
AVENTOS HK-S  
AVENTOS HL top  
AVENTOS HK top

AVENTOS HL top

AVENTOS HF top

AVENTOS HF top

AVENTOS HS top



R = tier system

AVENTOS HS top

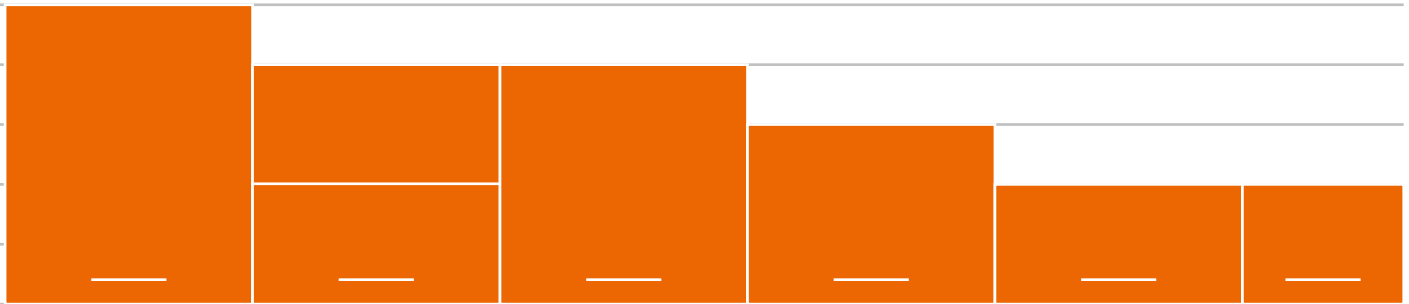
AVENTOS HF top

AVENTOS HS top  
AVENTOS HL top  
AVENTOS HK top

AVENTOS HS top  
AVENTOS HL top  
AVENTOS HK top

AVENTOS HK top

AVENTOS HK-S  
AVENTOS HK-XS

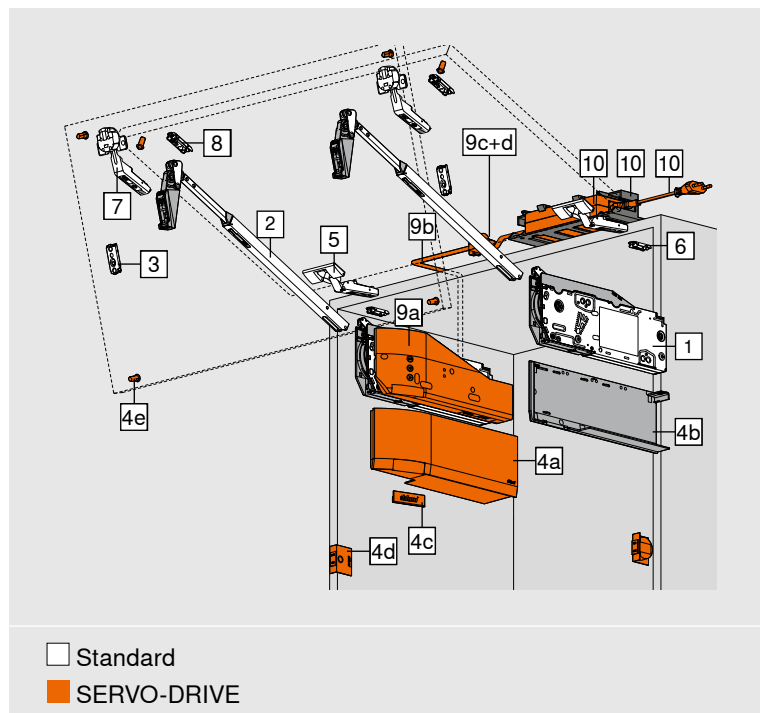


# AVENTOS HF top





## Wooden fronts and wide aluminium frames



- Ideal for higher wall cabinets with bi-fold fronts
- Cabinet height 480-1200 mm
- Cabinet width up to 1800 mm
- Internal depth of at least 264 mm
- Integrated BLUMOTION setting
- SERVO-DRIVE electrical motion support system
- Light operating forces
- Variable stop
- Integrated opening angle stop
- Standardised position of the lift mechanism and front fixing bracket
- Symmetrical lift mechanism and lever arm
- Tool-free assembly
- Two lift mechanism fixing methods
- 3-dimensional adjustment of both fronts
- Centre hinge with finger safety feature

## Ordering information

### Note

**Power factor (LF) =**  
**cabinet height\* (KH) [mm] x front weight including handle weight [kg]**

\* Calculate with theoretical cabinet height (TKH) for asymmetrical fronts


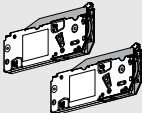
For asymmetrical fronts: **theoretical cabinet height TKH** = front height top FHo (mm) x 2 + gaps


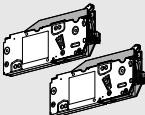
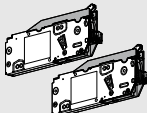
The larger front must be at the top for asymmetrical fronts.

We recommend the more powerful lift mechanism for applications in overlapping ranges.

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

The power factor (LF) can be increased by 50% if you use a third lift mechanism.

1			Lift mechanism set		
		Fixing with pre-mounted system screws			
		LF	OW		
		2700–13500*	81°–116°	22F2510	
		10000–19300	81°–116°	22F2810	
LW Power factor					
OW Opening angle (multi-stage adjustment)					
Consisting of:					
1	2 x	Symmetrical lift mechanism			
		Incl. pre-mounted system screws			
* 1 pc LF 1300–3000 cabinet width KB up to 600 mm					

1	 	Lift mechanism set		
		Fixing with chipboard screws with positioning system		
		LF	OW	
		2700–13500*	81°–116°	22F2500
		10000–19300	81°–116°	22F2800
LW Power factor				
OW Opening angle (multi-stage adjustment)				
Consisting of:				
1	2 x	Symmetrical lift mechanism		
		Incl. positioning system		
-	8 x	Chipboard screws Ø 4 x 35 mm		
* 1 pc LF 1300–3000 cabinet width KB up to 600 mm				

## Wooden fronts and wide aluminium frames

### Ordering information

2		<b>Lever arm set</b>	
		<b>Cabinet height (mm)*</b>	
		480–610	22F3200
		600–910	22F3500
		840–1200	22F3900

#### Consisting of:

2 2 x Symmetrical lever arm

\* For asymmetrical fronts: **theoretical cabinet height TKH** = front height top FHo (mm) x 2 + gaps

3		<b>Mounting plate for lever arm</b>	
		<b>Fixing method</b>	<b>Spacing (mm)</b>
		Screw-on <sup>1</sup>	0
		EXPANDO	0
		Knock-in	0

All horizontal steel mounting plates with 0 mm spacing possible

<sup>1</sup> Use 2 chipboard screws (609.1x00) per side for wooden fronts  
Use 2 countersunk self-tapping screws (660.0950) per side for wide aluminium frames

4		<b>Cover cap set</b>	
		<b>Colour</b>	<b>Material</b>
		SW, HGR, TGR	K

#### Consisting of:

- 1 x Cover cap left
- 4b 1 x Cover cap right
- 4c 2 x Branding element, embossed with Blum logo
- IN-G

4		<b>Cover cap set for SERVO-DRIVE</b>	
		<b>Colour</b>	<b>Material</b>
		SW, HGR, TGR	K

#### Consisting of:

- 4a 1 x SERVO-DRIVE cover cap left
- 4b 1 x Cover cap right
- 4c 2 x Branding element, embossed with Blum logo
- IN-G
- 4d 2 x SERVO-DRIVE switch
- 4e 6 x Blum distance bumper Ø 5 mm

5		<b>CLIP top 120° hinge</b>	
		<b>Boss</b>	<b>Spring</b>
		INSERTA	Unsprung
		Screw-on <sup>1</sup>	Unsprung

#### Boss overlay TO (fixed dimension)

11 mm

3 hinges starting at cabinet width KB 1200 mm and/or 12 kg front weight

4 hinges for cabinet width KB 1800 mm and/or starting at 20 kg front weight

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

#### Alternative to 5

-		<b>CLIP top 120° special hinge for larger front overlay</b>	
		<b>Boss</b>	<b>Spring</b>
		INSERTA	Unsprung
		Screw-on <sup>1</sup>	Unsprung

#### Boss overlay TO (fixed dimension)

13 mm

3 hinges for cabinet width KB 1200 mm and wider  
and/or starting at a 12 kg front weight

4 hinges for cabinet width KB 1800 mm  
and/or starting at a 20 kg front weight

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

6		<b>Mounting plate for CLIP top 120° hinge</b>	
		<b>Fixing method</b>	<b>Spacing (mm)</b>
		Screw-on <sup>1</sup>	0
		EXPANDO	0
		Knock-in	0

Standard mounting plates, spacing depends on the upper front overlay

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

7		<b>CLIP top centre hinge</b>	
		<b>Boss</b>	<b>Spring</b>
		Screw-on <sup>1</sup>	Unsprung
		EXPANDO	Unsprung

3 hinges starting at cabinet width KB 1200 mm and/or 12 kg front weight


4 hinges for cabinet width KB 1800 mm and/or starting at 20 kg front weight

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

## Wooden fronts and wide aluminium frames

### Ordering information

8		Mounting plate for CLIP top centre hinge		
		Fixing method	Spacing (mm)	
		Screw-on <sup>1</sup>	0	175H3100
		EXPANDO	0	177H3100E
		Knock-in	0	177H3100
Standard mounting plates with 0 mm spacing				
Only use cruciform mounting plates for wide aluminium frames with a frame width of less than 57 mm				
<sup>1</sup> Use chipboard screws (609.1x00) for wooden fronts Use countersunk self-tapping screws (660.0950) for wide aluminium frames				

9		SERVO-DRIVE set	
	Colour	Material	
	TGR	K	23.A000
Consisting of:			
9a	1 x	Drive unit	
9b	1 x	SERVO-DRIVE distribution cable, 1500 mm	
9c	1 x	Connecting node	
9d	2 x	Cable end protector	
For three lift mechanisms or more, we recommend two synchronised drive units			
We recommend one drive unit per set for connected fronts.			

10		<b>SERVO-DRIVE power supply unit and accessories</b>
See page 56		

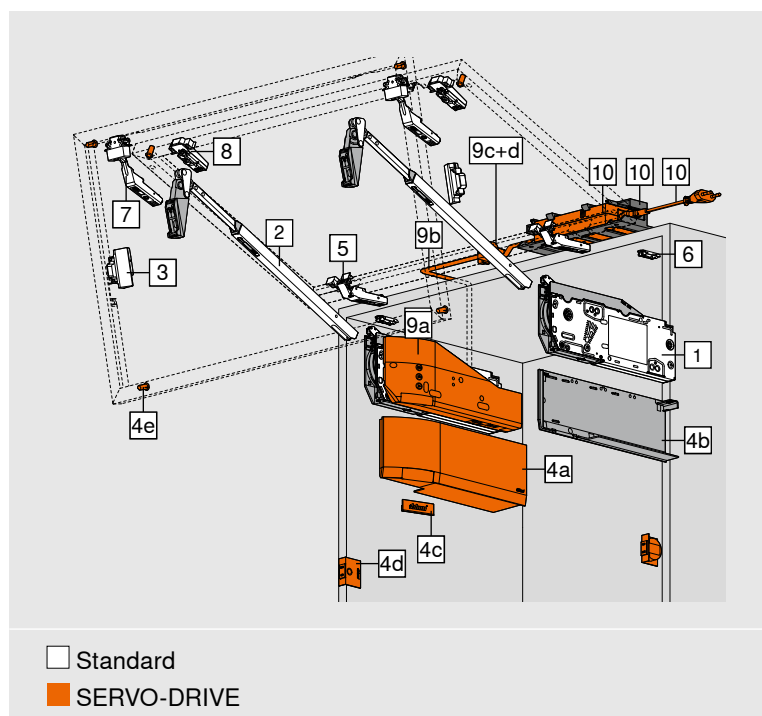
### Optional

4c		Branding element		
		Material	Colour	
		K	SW-M, TGR	IN-G
Printed *	2 x		ABD.1000.BL	ABD.1009.BL
Embossed *	2 x		ABD.1000.BT	ABD.1009.BT
Plain	2 x		ABD.1000	ABD.1009
* With Blum logo				
From 1000 pcs:				
Customised, printed branding element				
From 5000 pcs:				
Customised, embossed branding element				

### Colours and material

Name	
SW	Silk white
HGR	Light grey
TGR	Dark grey
SW-M	Silk white matt
IN-G	In-mould brushed stainless steel
K	Nylon

## Narrow aluminium frames



- Ideal for higher wall cabinets with bi-fold fronts
- Cabinet height 480-1200 mm
- Cabinet width up to 1800 mm
- Internal depth of at least 264 mm
- Integrated BLUMOTION setting
- SERVO-DRIVE electrical motion support system
- Light operating forces
- Variable stop
- Integrated opening angle stop
- Standardised position of the lift mechanism and front fixing bracket
- Symmetrical lift mechanism and lever arm
- Tool-free assembly
- Two lift mechanism fixing methods
- 3-dimensional adjustment of both fronts
- Centre hinge with finger safety feature

## Ordering information

### Note

**Power factor (LF) =**  
cabinet height\* (KH) [mm] x front weight including handle weight [kg]

\* Calculate with theoretical cabinet height (TKH) for asymmetrical fronts


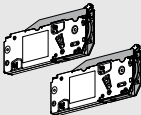
For asymmetrical fronts: **theoretical cabinet height TKH** = front height top FHo (mm) x 2 + gaps


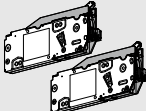
The larger front must be at the top for asymmetrical fronts.

We recommend the more powerful lift mechanism for applications in overlapping ranges.

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

The power factor (LF) can be increased by 50% if you use a third lift mechanism.

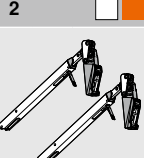
1		Lift mechanism set		
	Fixing with pre-mounted system screws			
	LF		OW	
	2700–13500*		81°–116°	
	10000–19300		81°–116°	
				22F2510
				22F2810
LW Power factor				
OW Opening angle (multi-stage adjustment)				
Consisting of:				
1	2 x	Symmetrical lift mechanism		
		Incl. pre-mounted system screws		
* 1 pc LF 1300–3000				
cabinet width KB up to 600 mm				

1		Lift mechanism set		
		Fixing with chipboard screws with positioning system		
		LF	OW	
		2700–13500*	81°–116°	22F2500
		10000–19300	81°–116°	22F2800
LW Power factor				
OW Opening angle (multi-stage adjustment)				
Consisting of:				
1	2 x	Symmetrical lift mechanism		
		Incl. positioning system		
-	8 x	Chipboard screws Ø 4 x 35 mm		
* 1 pc LF 1300–3000				
cabinet width KB up to 600 mm				

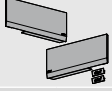


## Narrow aluminium frames

## Ordering information


2		<b>Lever arm set</b>	
		<b>Cabinet height (mm)*</b>	
		480–610	22F3200
		600–910	22F3500
		840–1200	22F3900
<b>Consisting of:</b>			
2	2 x	Symmetrical lever arm	
* For asymmetrical fronts: <b>theoretical cabinet height TKH</b> = front height top FHo (mm) x 2 + gaps			


3		<b>CLIP adapter plate set for lever arms</b>	
		<b>Version</b>	<b>Spacing (mm)</b>
		Left/right	0
			175H5B00


4		<b>Cover cap set</b>	
		<b>Colour</b>	<b>Material</b>
		SW, HGR, TGR	K
			22.8000
<b>Consisting of:</b>			
-	1 x	Cover cap left	
4b	1 x	Cover cap right	
4c	2 x	Branding element, embossed with Blum logo	
		IN-G	


4		<b>Cover cap set for SERVO-DRIVE</b>	
		<b>Colour</b>	<b>Material</b>
		SW, HGR, TGR	K
			23.8000
<b>Consisting of:</b>			
4a	1 x	SERVO-DRIVE cover cap left	
4b	1 x	Cover cap right	
4c	2 x	Branding element, embossed with Blum logo	
		IN-G	
4d	2 x	SERVO-DRIVE switch	
4e	6 x	Blum distance bumper Ø 5 mm	

5		<b>CLIP top 120° aluminium frame door hinge</b>	
		<b>Boss</b>	<b>Spring</b>
		Screw-on	Unsprung
			72T550A.TL
3 hinges starting at cabinet width KB 1200 mm and/or 12 kg front weight			
4 hinges for cabinet width KB 1800 mm and/or starting at 20 kg front weight			
Fixing screws are included			

6		<b>Mounting plate for CLIP top 120° hinge</b>	
		<b>Fixing method</b>	<b>Spacing (mm)</b>
		Screw-on	0
		EXPANDO	0
		Knock-in	0
			175H3100
			177H3100E
			177H3100
Standard mounting plates, spacing depends on the top gap			


7		<b>CLIP top aluminium centre hinge</b>	
		<b>Boss</b>	<b>Spring</b>
		Screw-on	1 Unsprung
			78Z550AT
3 hinges starting at cabinet width KB 1200 mm and/or 12 kg front weight			
4 hinges for cabinet width KB 1800 mm and/or starting at 20 kg front weight			

8		<b>CLIP adapter plate for centre hinges</b>	
		<b>Version</b>	<b>Spacing (mm)</b>
		Symmetrical	0
			175H5A00
Fixing screws are included			

9		<b>SERVO-DRIVE set</b>	
		<b>Colour</b>	<b>Material</b>
		TGR	K
			23.A000
<b>Consisting of:</b>			
9a	1 x	Drive unit	
9b	1 x	SERVO-DRIVE distribution cable, 1500 mm	
9c	1 x	Connecting node	
9d	2 x	Cable end protector	
For three lift mechanisms or more, we recommend two synchronised drive units			
We recommend one drive unit per set for connected fronts.			

10		<b>SERVO-DRIVE power supply unit and accessories</b>	
See page 56			

## Optional

4c		<b>Branding element</b>	
		<b>Material</b>	<b>Colour</b>
		K	SW-M, TGR IN-G
	Printed *	2 x	ABD.1000.BL ABD.1009.BL
	Embossed *	2 x	ABD.1000.BT ABD.1009.BT
	Plain	2 x	ABD.1000 ABD.1009
* With Blum logo			
<b>From 1000 pcs:</b>			
Customised, printed branding element			
<b>From 5000 pcs:</b>			
Customised, embossed branding element			

<sup>1</sup> Use 2 countersunk self-tapping screws (660.0950) per side for narrow aluminium frames

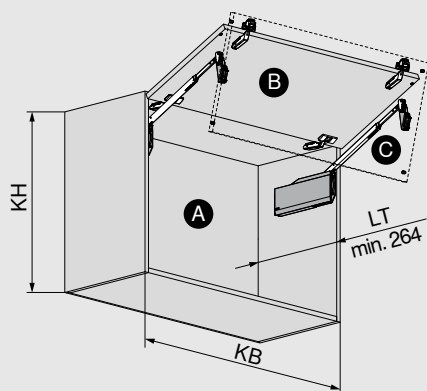
## Colours and material

Name			
SW	Silk white	SW-M	Silk white matt
HGR	Light grey	K	Nylon
TGR	Dark grey	IN-G	In-mould brushed stainless steel

## Wooden fronts, wide and narrow aluminium frames

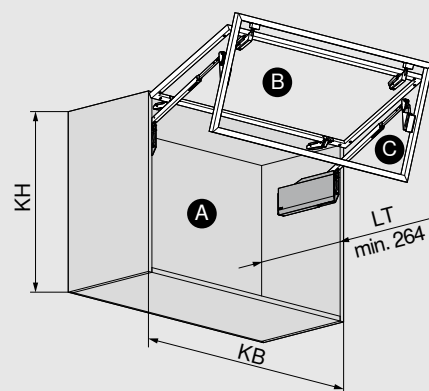
### Planning

#### Wooden fronts and wide aluminium frames



A	Cabinet
B	Top front
C	Bottom front
KB	Cabinet width
KH	Cabinet height
LT	Internal cabinet depth

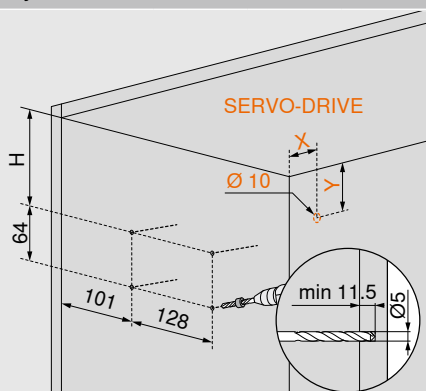
#### Narrow aluminium frames



A	Cabinet
B	Top front
C	Bottom front
KB	Cabinet width
KH	Cabinet height
LT	Internal cabinet depth

#### Drilling position

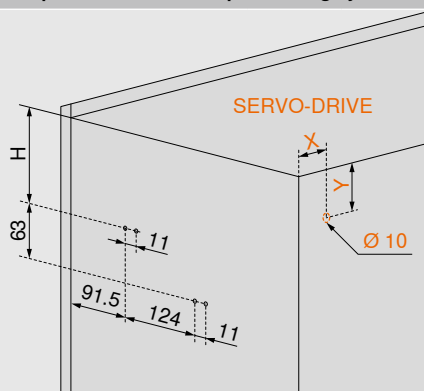
##### System screws



KH (mm)	H (mm)	X (mm)	Y (mm)
480-519	93.5	38.5	102
520-1200	116	38.5	124

KH Cabinet height

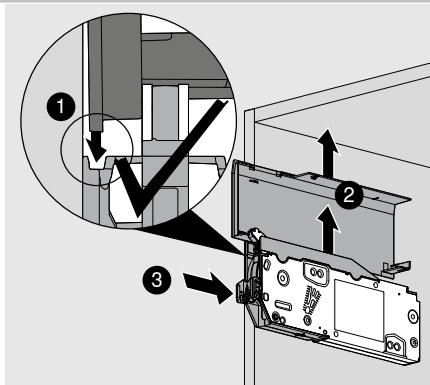
##### Chipboard screws incl. positioning system



KH (mm)	H (mm)	X (mm)	Y (mm)
480-519	93	38.5	102
520-1200	115.5	38.5	124

4 x chipboard screws Ø 4 x 35 mm

KH Cabinet height



KH (mm)

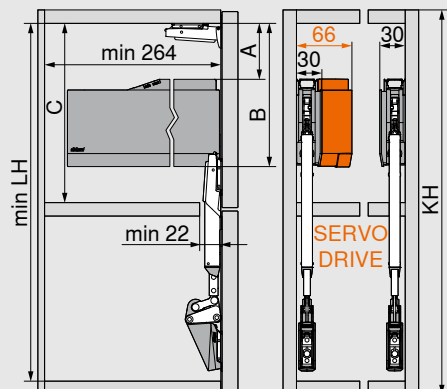
520-1200

KH Cabinet height

## Wooden fronts, wide and narrow aluminium frames

### Planning

#### Space requirement

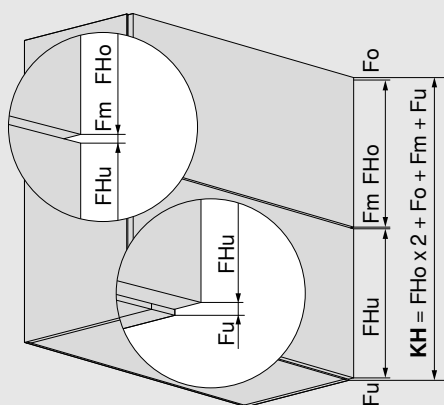


Lever arm set		LH min. (mm)	
22F3200		443	
22F3500		512	
22F3900		632	
KH (mm)	A (mm)	B (mm)	C min. (mm)
480–519	66.5	171.5	172
520–1200	89.0	194.0	195

KH Cabinet height

LH Internal cabinet height

#### Symmetrical front



Fo Top gap

Fm Middle gap

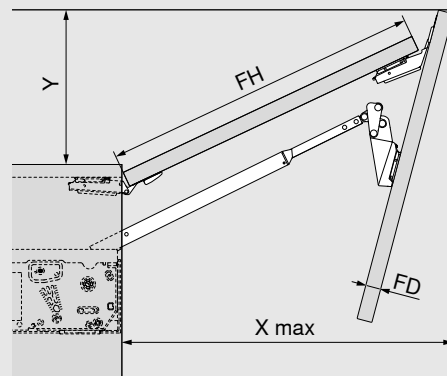
Fu Bottom gap

FHo Front height top

FHu Lower front height

KH Cabinet height

#### Space requirement above



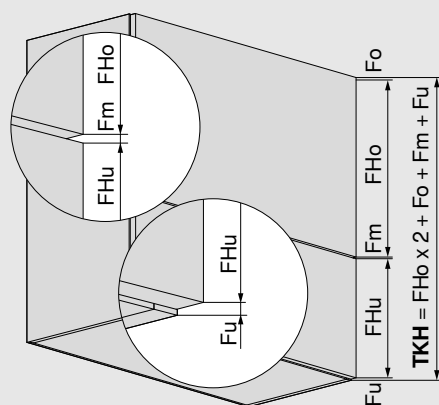
$$X \max = FH \times 0.9 + 1.5 \times FD + 35$$

Opening angle stop	Y (mm)
116°	$FH \times 0.44 + 38$
107°	$FH \times 0.29 + 35$
97°	$FH \times 0.12 + 31$
88°	28
81°	0

FD Front thickness

FH Front height

#### Asymmetrical front



Fo Top gap

Fm Middle gap

Fu Bottom gap

FHo Front height top

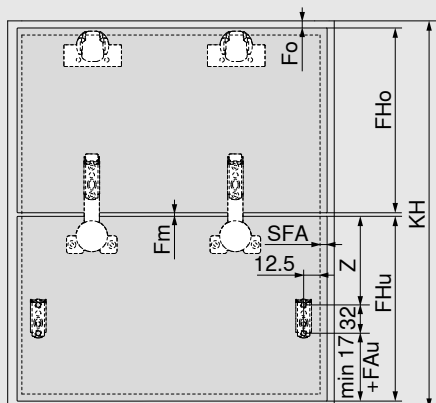
FHu Lower front height

TKH Theoretical cabinet height

## Wooden fronts and wide aluminium frames

### Planning

#### Front assembly



#### Cabinet height KH (mm)

#### Z (mm)

480–519

170

520–1200

189

Fo Top gap

Fm Middle gap

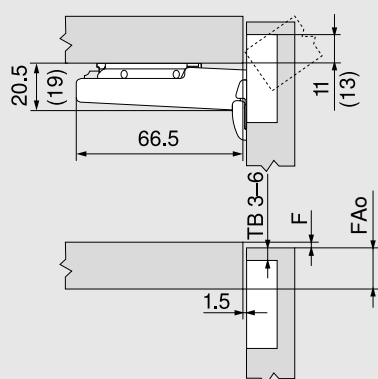
FAu Bottom front overlay

FHo Front height top

FHu Lower front height

SFA Side front overlay

#### CLIP top 120° hinge



TB Boss drilling distance

FAo Upper front overlay

F Gap

() CLIP top 120° special hinge

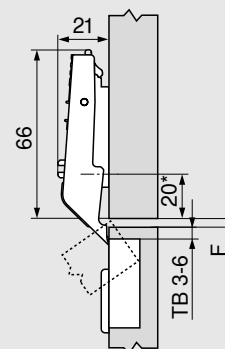
#### Boss drilling distance TB

MD	Front overlay FA (mm)																
	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													

MD Mounting plate spacing (mm)

The front overlay must always be 2 mm bigger for the CLIP top 120° special hinge.

#### CLIP top centre hinge



TB Boss drilling distance

F Min. gap 1.5 mm

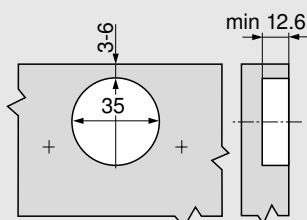
\* 37 mm for cruciform mounting plates (37/32)

#### Boss drilling distance TB

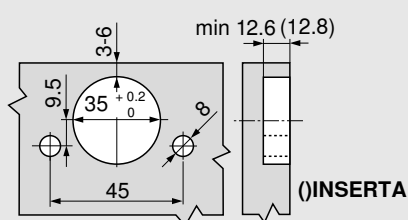
MD	Horizontal gap F between fronts (mm)																
																3	4
0																6	5
3																	4
6																	
9																	

MD Mounting plate spacing (mm)

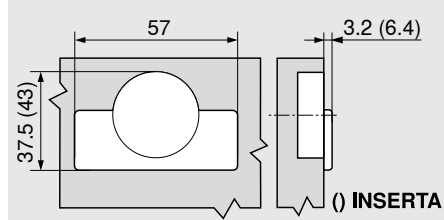
#### Screw-on assembly



#### INSERTA | EXPANDO assembly



#### Hinge boss dimensions

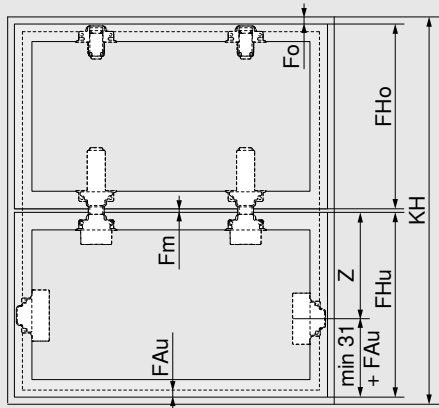




### Narrow aluminium frames

## Planning

### Front assembly



Cabinet height KH (mm)	Z (mm)
480–519	188
520–1200	207

Fo    Top gap

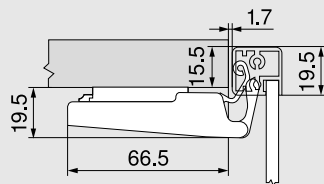
Fm Middle gap

FAu Bottom front overlay

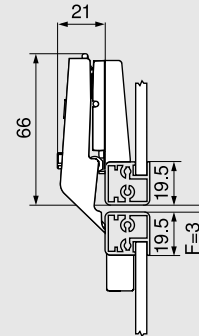
FHo Front height top

FHu Lower front height

### CLIP top 120° aluminium frame door hinge



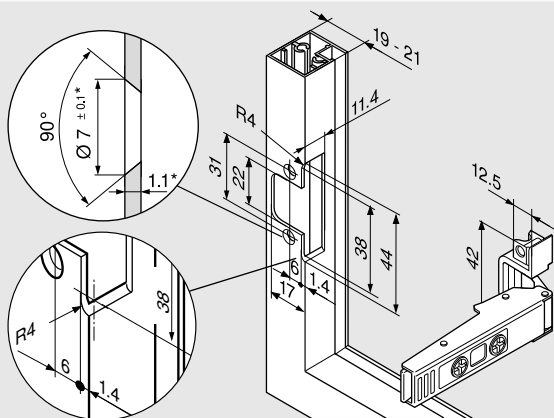
### CLIP top aluminium centre hinge



F Min. gap 1.5 mm

The gap needs to be adjusted for a frame thickness of 20.5 mm or greater

### Screw-on assembly (hinge | adapter plate)



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



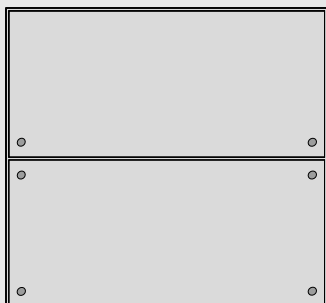
Find more information on  
assembly and adjustment of  
AVENTOS HF top at

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

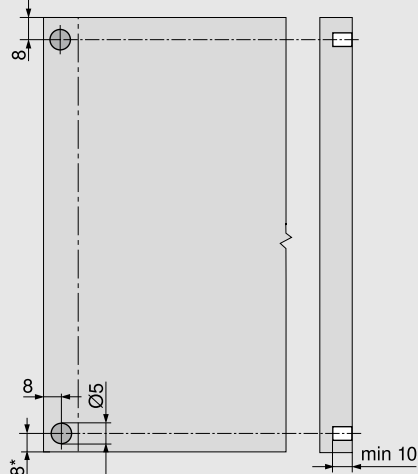
## SERVO-DRIVE for AVENTOS HF top

### Planning

#### Blum distance bumper (SERVO-DRIVE application only)



Insert Blum distance bumper (do not glue)



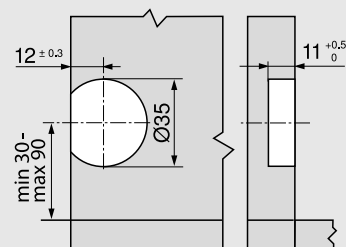
#### Recommendation for aluminium frames

Drill hole into cabinet side for Blum distance bumper

A trial application must be carried out if fixed to the front

\* From cabinet bottom edge for fronts that protrude below

#### SERVO-DRIVE switch



## Accessories for AVENTOS HF top

### Ordering information

#### Hinge set – wooden fronts



#### Ordering information

##### Fixing method

INSERTA | Knock-in | EXPANDO

 78Z5530T11

##### Consisting of:

2x	CLIP top 120° hinge unsprung 70T5590BTL
2 x	CLIP top centre hinge unsprung 78Z5530T
6 x	Horizontal cam mounting plate 177H3100

#### Hinge set – wooden fronts and wide aluminium frames



#### Ordering information

##### Fixing method

Screw-on<sup>1</sup>

 78Z5500T12

##### Consisting of:

2x	CLIP top 120° hinge unsprung 70T5550.TL
2 x	CLIP top centre hinge unsprung 78Z5500T  For wide aluminium frames, an additional cruciform mounting plate is required for the CLIP top centre hinge.
6 x	Horizontal cam mounting plate 175H3100

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

#### Hinge set – narrow aluminium frames



#### Ordering information

##### Fixing method

Screw-on

 78Z550AT11

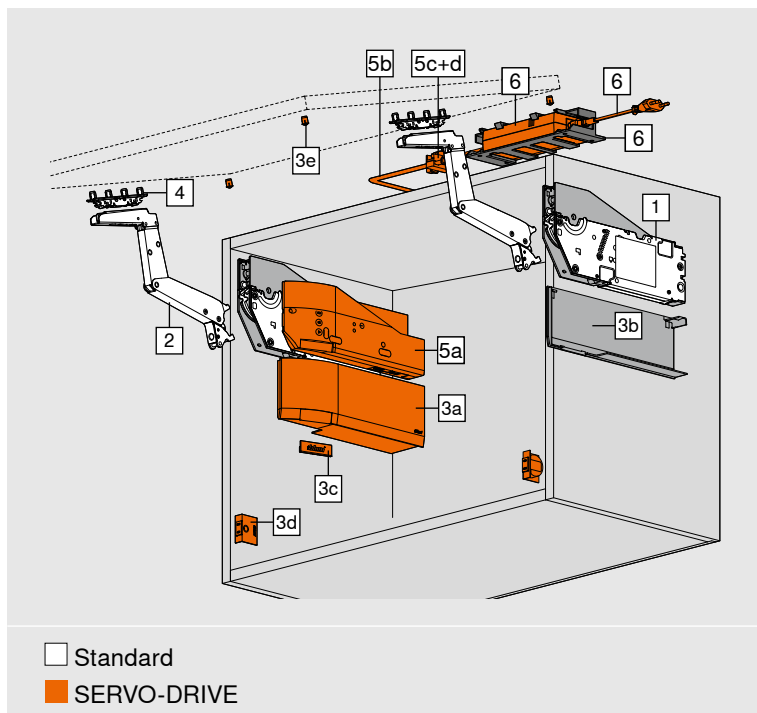
##### Consisting of:

2x	CLIP top 120° aluminium frame door hinge unsprung 72T550A.TL
2 x	CLIP top aluminium centre hinge unsprung 78Z550AT
2 x	Horizontal cam mounting plate 175H5400
2 x	CLIP adapter plate symmetrical 175H5A00
2 x	CLIP adapter plate left/right 175H5B00

# AVENTOS HS top







- Ideal for large, one-part fronts
- Cabinet height 350-800 mm
- Cabinet width up to 1800 mm
- Internal depth of at least 264 mm
- Integrated BLUMOTION setting
- SERVO-DRIVE electrical motion support system
- Light operating forces
- Variable stop
- Standardised position of the lift mechanism and front fixing bracket
- Symmetrical lift mechanism and lever arm
- Tool-free assembly
- Two lift mechanism fixing methods
- 3-dimensional adjustment of the front

## Ordering information

### Note

We recommend the more powerful lift mechanism for applications in overlapping ranges. A trial application is recommended when you are in a borderline area of the individual lift mechanism.

The front weight (FG) can be increased by 50% if you use a third lift mechanism. We recommend a third lift mechanism for wide cabinets. This will prevent the front from sagging when open.

1	<input type="checkbox"/> Standard <input checked="" type="checkbox"/> SERVO-DRIVE	Lift mechanism set		
		Fixing with pre-mounted system screws		
		KH (mm)	FG (kg)	
		350–450	2.00–11.50	22S2210
		450–540	2.50–12.50	
		480–660	2.75–15.25	22S2510
		650–800	3.50–18.50	22S2810
FG Front weight including double handle weight				
KH Cabinet height				
Consisting of:				
1	2 x	Symmetrical lift mechanism Incl. pre-mounted system screws		

1	<input type="checkbox"/> Standard <input checked="" type="checkbox"/> SERVO-DRIVE	Lift mechanism set		
		Fixing with chipboard screws with positioning system		
		KH (mm)	FG (kg)	
		350–450	2.00–11.50	22S2200
		450–540	2.50–12.50	
		480–660	2.75–15.25	22S2500
		650–800	3.50–18.50	22S2800
FG Front weight including double handle weight				
KH Cabinet height				
Consisting of:				
1	2 x	Symmetrical lift mechanism Incl. positioning system		
-	8 x	Chipboard screws Ø 4 x 35 mm		

## Ordering information

2		Lever arm set		
		Colour	Material	
		NI	Steel	22S3500

### Consisting of:

2 2 x Symmetrical lever arm

3		Cover cap set		
		Colour	Material	
		SW, HGR, TGR	K	22.8000

### Consisting of:

- 1 x Cover cap left

3b 1 x Cover cap right

3c 2 x Branding element, embossed with Blum logo  
IN-G

3		Cover cap set for SERVO-DRIVE		
		Colour	Material	
		SW, HGR, TGR	K	23.8000

### Consisting of:

3a 1 x SERVO-DRIVE cover cap left

3b 1 x Cover cap right

3c 2 x Branding element, embossed with Blum logo  
IN-G

3d 2 x SERVO-DRIVE switch

3e 6 x Blum distance bumper Ø 5 mm

4		Front fixing bracket set		
		Version	Fixing method	
		Wooden fronts and wide aluminium frames	Screw-on <sup>1</sup>	20S4200
		Narrow aluminium frames	Screw-on <sup>2</sup>	20S4200A

### Consisting of:

4 2 x Front fixing bracket

<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.

<sup>2</sup> Incl. 8 x countersunk self-tapping screws – 660.0950

-		Front fixing bracket		
		Version	Fixing method	
		Thin fronts	EXPANDO T 2 x	20S42T1

EXPANDO T suitable for thin fronts – see page 54

5		SERVO-DRIVE set		
		Colour	Material	
		TGR	K	23.A000

### Consisting of:

5a 1 x Drive unit

5b 1 x SERVO-DRIVE distribution cable, 1500 mm

5c 1 x Connecting node

5d 2 x Cable end protector

For three lift mechanisms or more, we recommend two synchronised drive units

We recommend one drive unit per set for connected fronts.

6		SERVO-DRIVE power supply unit and accessories
See page 56		

## Optional

3c		Branding element		
		Material	Colour	
		K	SW-M, TGR	IN-G
Printed *		2 x	ABD.1000.BL	ABD.1009.BL
Embossed *		2 x	ABD.1000.BT	ABD.1009.BT
Plain		2 x	ABD.1000	ABD.1009

\* With Blum logo

### From 1000 pcs:

Customised, printed branding element

### From 5000 pcs:

Customised, embossed branding element

## Colours and material

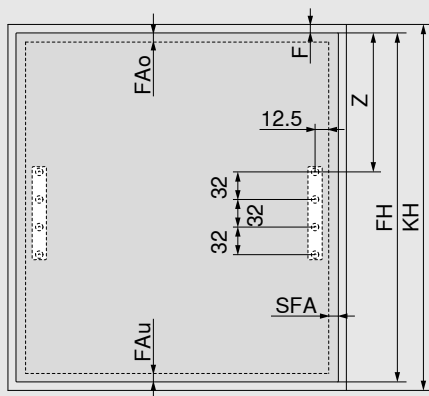
Name	
SW	Silk white
HGR	Light grey
TGR	Dark grey
SW-M	Silk white matt
NI	Nickel plated
IN-G	In-mould brushed stainless steel
K	Nylon



## Planning

### Front assembly

#### Wooden fronts and wide aluminium frames



FAo Upper front overlay

FAu Bottom front overlay

F Gap

Z 195 + FAo

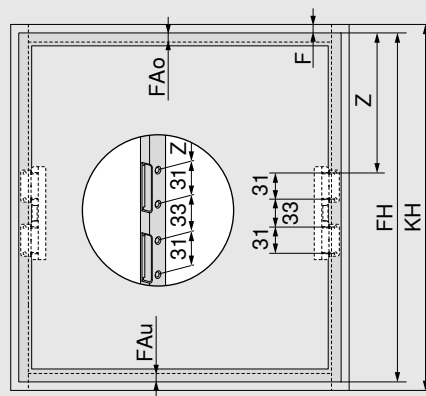
FH Front height

KH Cabinet height

SFA Side front overlay

Application against a wall: minimum 5 mm gap

#### Narrow aluminium frames



FAo Upper front overlay

FAu Bottom front overlay

F Gap

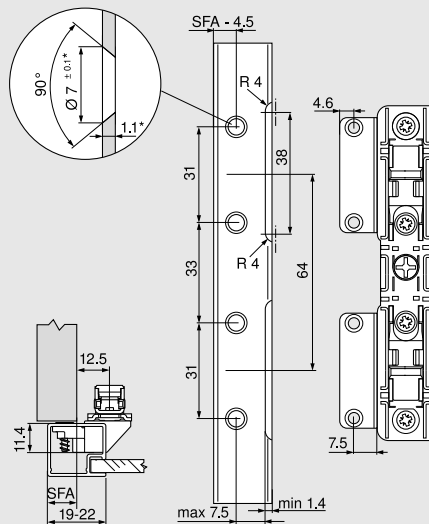
Z 195.5 + FAo

FH Front height

KH Cabinet height

Application against a wall: minimum 5 mm gap

#### Narrow aluminium frames

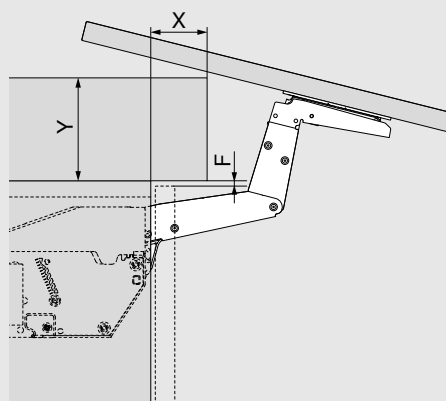


For frame width 19 mm, an SFA of 11-18 mm is possible.

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

SFA Side front overlay

#### Space requirement – cornice | crown moulding



F (mm)	3.0	2.0	1.5
X max. (mm)	31	29	27
Y max. (mm)	117	118	119
F Gap			

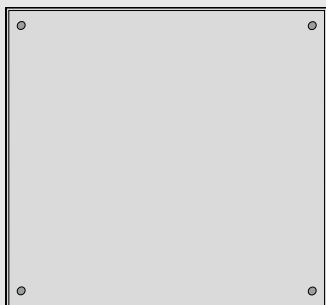


Find more information on  
assembly and adjustment of  
AVENTOS HS top at  
[www.blum.com/hstopassembly](http://www.blum.com/hstopassembly)

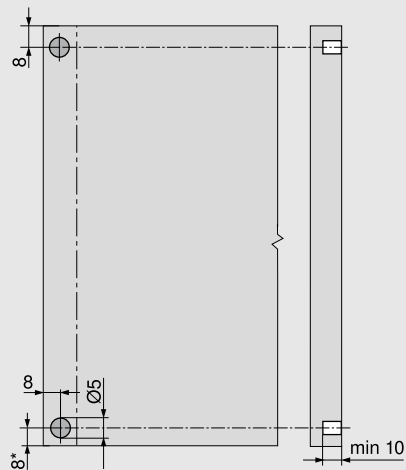
## SERVO-DRIVE for AVENTOS HS top

### Planning

#### Blum distance bumper (SERVO-DRIVE application only)



Insert Blum distance bumper (do not glue)



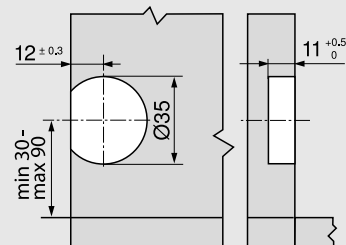
#### Recommendation for aluminium frames

Drill hole into cabinet side for Blum distance bumper

A trial application must be carried out if fixed to the front

\* From cabinet bottom edge for fronts that protrude below

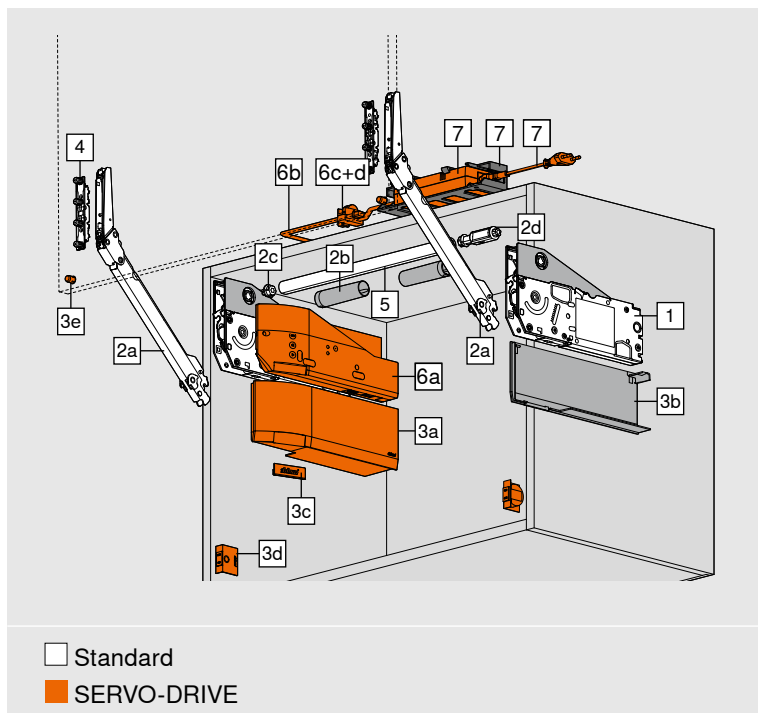
#### SERVO-DRIVE switch



# AVENTOS HL top







- Ideal for small one-part fronts
- Cabinet height 300-580 mm
- Cabinet width up to 1800 mm
- Internal depth of at least 264 mm
- Integrated BLUMOTION setting
- SERVO-DRIVE electrical motion support system
- Light operating forces
- Variable stop
- Standardised position of the lift mechanism and front fixing bracket
- Symmetrical lift mechanism and lever arm
- Tool-free assembly
- Two lift mechanism fixing methods
- 3-dimensional adjustment of the front

### Ordering information

1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Lift mechanism set
Fixing with pre-mounted system screws			
KH (mm)			
300–389			22L2210
390–580			22L2510
KH Cabinet height			
Consisting of:			
1	2 x	Symmetrical lift mechanism Incl. pre-mounted system screws	

1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Lift mechanism set
Fixing with chipboard screws with positioning system			
KH (mm)			
300–389			22L2200
390–580			22L2500
KH Cabinet height			
Consisting of:			
1	2 x	Symmetrical lift mechanism Incl. positioning system	
-	8 x	Chipboard screws Ø 4 x 35 mm	

2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Lever arm set
Colour		Material	
NI		Steel	
KH (mm)		FG (kg)	
300–339		1.50–9.00	22L3200
340–389		1.75–10.00	22L3500
390–540		2.00–12.25	22L3800
480–580		2.50–14.00	22L3900
FG Front weight including handle weight			
KH Cabinet height			
Consisting of:			
2a	2 x	Symmetrical lever arm	
2b	2 x	Cross stabiliser cover cap	
2c	1 x	Adapter for cross stabiliser rod	
2d	1 x	Length adapter for cross stabiliser	

## Ordering information

3		Cover cap set
	<b>Colour</b>	<b>Material</b>
	SW, HGR, TGR	K
		22.8000
<b>Consisting of:</b>		
-	1 x	Cover cap left
3b	1 x	Cover cap right
3c	2 x	Branding element, embossed with Blum logo
		IN-G

3		Cover cap set for SERVO-DRIVE
	<b>Colour</b>	<b>Material</b>
	SW, HGR, TGR	K
		23.8000
<b>Consisting of:</b>		
3a	1 x	SERVO-DRIVE cover cap left
3b	1 x	Cover cap right
3c	2 x	Branding element, embossed with Blum logo
		IN-G
3d	2 x	SERVO-DRIVE switch
3e	6 x	Blum distance bumper Ø 5 mm

4		Front fixing bracket set
	<b>Version</b>	<b>Fixing method</b>
	Wooden fronts and wide aluminium frames	Screw-on 1
	Narrow aluminium frames	Screw-on 2
		20S4200
		20S4200A
<b>Consisting of:</b>		
4	2 x	Front fixing bracket
<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.		
<sup>2</sup> Incl. 8 x countersunk self-tapping screws – 660.0950		

-		Front fixing bracket
	<b>Version</b>	<b>Fixing method</b>
	Thin fronts	EXPANDO T 2 x
		20S42T1
EXPANDO T suitable for thin fronts – see page 54		

5		Cross stabiliser
	<b>Length (mm)</b>	
	1076	22Q1076U
For cutting to size		
<b>Cutting</b>	Internal cabinet width LW - 113 mm	

-		Connecting piece set for cross stabiliser
	Recommended from an internal cabinet width ≥ 1190 mm or a cabinet width ≥ 1228 mm	
	<b>Material</b>	
	Zinc	22Q080Z

<b>Consisting of:</b>		
2b	2 x	Cross stabiliser cover cap
2c	2 x	Adapter for cross stabiliser rod
-	1 x	Connecting piece for cross stabiliser
-	1 x	Cross stabiliser fixing
<b>Cutting for 5</b>	Internal cabinet width LW/2 - 105 mm	

6		SERVO-DRIVE set
	<b>Colour</b>	<b>Material</b>
	TGR	K
		23.A000

<b>Consisting of:</b>		
6a	1 x	Drive unit
6b	1 x	SERVO-DRIVE distribution cable, 1500 mm
6c	1 x	Connecting node
6d	2 x	Cable end protector
We recommend one drive unit per set for connected fronts.		

7		SERVO-DRIVE power supply unit and accessories
See page 56		

## Optional

3c		Branding element
	<b>Material</b>	<b>Colour</b>
	K	SW-M, TGR
		IN-G
Printed *	2 x	ABD.1000.BL
Embossed *	2 x	ABD.1000.BT
Plain	2 x	ABD.1000
		ABD.1009

* With Blum logo		
<b>From 1000 pcs:</b>		
Customised, printed branding element		
<b>From 5000 pcs:</b>		
Customised, embossed branding element		

## Colours and material

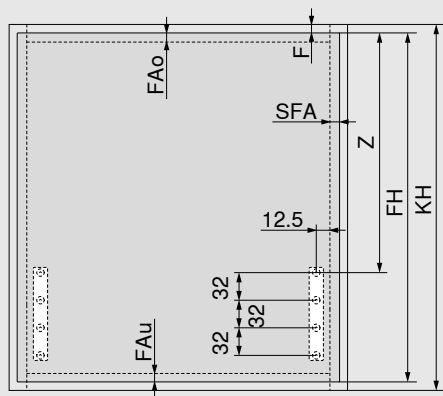
Name	
SW	Silk white
HGR	Light grey
TGR	Dark grey
SW-M	Silk white matt
IN-G	In-mould brushed stainless steel
K	Nylon



## Planning

### Front assembly

#### Wooden fronts and wide aluminium frames



Lever arm set	Z
22L3200	113 + FAo
22L3500	153 + FAo
22L3800	203 + FAo
22L3900	256 + FAo

FAo Upper front overlay

FAu Bottom front overlay

F Gap

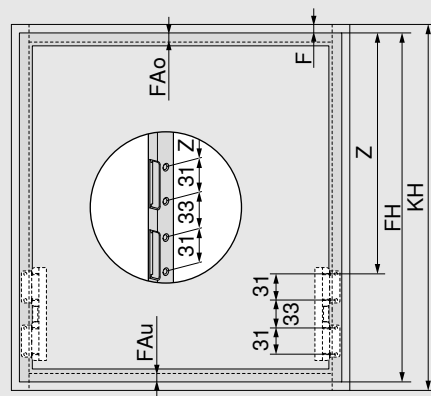
FH Front height

KH Cabinet height

SFA Side front overlay

Application against a wall: minimum 5 mm gap

#### Narrow aluminium frames



Lever arm set	Z
22L3200	113.5 + FAo
22L3500	153.5 + FAo
22L3800	203.5 + FAo
22L3900	256.5 + FAo

FAo Upper front overlay

FAu Bottom front overlay

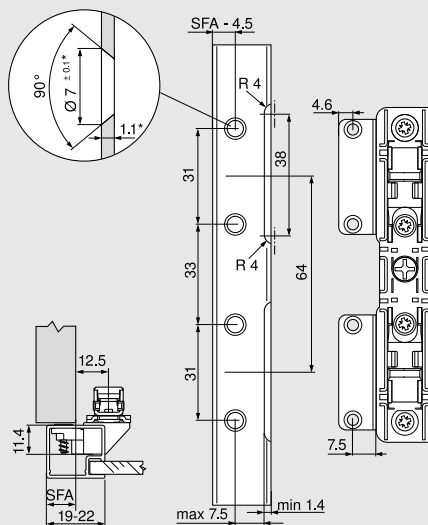
F Gap

FH Front height

KH Cabinet height

Application against a wall: minimum 5 mm gap

#### Narrow aluminium frames

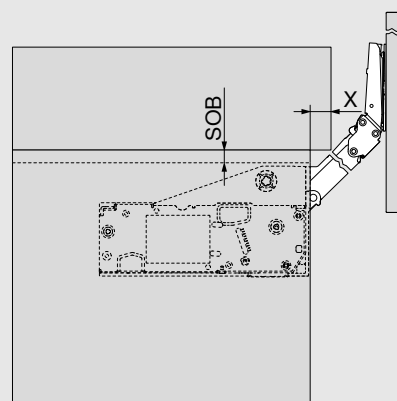


For frame width 19 mm, an SFA of 11-18 mm is possible.

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

SFA Side front overlay

#### Space requirement – cornice | crown moulding



Top panel thickness (SOB)	X (mm)
16 mm	25
17 mm	26
18 mm	27
19 mm	28
20 mm	29

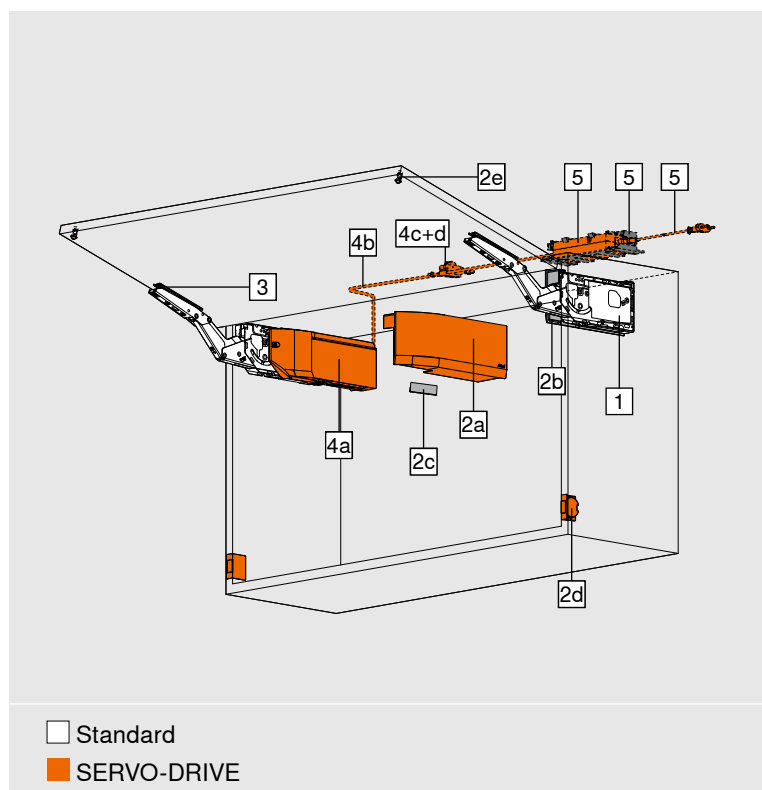


# AVENTOS HK top





## Standard and SERVO-DRIVE



- Ideal for small applications in wall cabinets, tall cabinets and over the refrigerator
- Cabinet height 205-600 mm
- Cabinet width up to 1800 mm
- Soft and effortless closing thanks to BLUMOTION
- SERVO-DRIVE electrical motion support system
- Light operating forces
- Harmonious quality of motion with a variable stop
- Tool-free assembly
- Standardised position of the lift mechanism and front fixing bracket
- Symmetrical lift mechanism
- 3-dimensional front adjustment
- Simple, infinitely variable adjustment of the lift mechanism
- No hinges required
- Integrated safety mechanism
- Integrated infinitely variable opening angle stop

## Ordering information


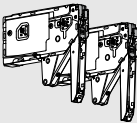
## Note


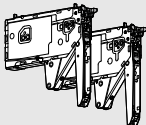
## Power factor (LF) =

cabinet height (KH) [mm] x front weight incl. double handle weight [kg]

We recommend the more powerful lift mechanism for applications in overlapping ranges.  
A trial application is recommended when you are in a borderline area of the individual lift mechanism.

The power factor (LF) can be increased by 50% if you use a third lift mechanism.  
We recommend a third lift mechanism for wide cabinets. This will prevent the front from sagging when open.

1		Lift mechanism set		
	Fixing with pre-mounted system screws			
	LF	OW		
	420–1610	75°–107°	22K2310	
	930–2800	75°–107°	22K2510	
	1730–5200	75°–107°	22K2710	
	3200–9000	75°–107°	22K2910	
Max. front weight 18 kg if using two lift mechanisms.				
LF Power factor				
OW Opening angle (infinitely variable adjustment)				
Consisting of:				
1	2 x	Symmetrical lift mechanism		
		Incl. pre-mounted system screws		

1		Lift mechanism set		
	Fixing with chipboard screws with positioning system			
	LF	OW		
	420–1610	75°–107°	22K2300	
	930–2800	75°–107°	22K2500	
	1730–5200	75°–107°	22K2700	
	3200–9000	75°–107°	22K2900	
Max. front weight 18 kg if using two lift mechanisms.				
LF Power factor				
OW Opening angle (infinitely variable adjustment)				
Consisting of:				
1	2 x	Symmetrical lift mechanism Incl. positioning system		
-	8 x	Chipboard screws Ø 4 x 35 mm		

## Standard and SERVO-DRIVE

### Ordering information

2		Cover cap set
	Colour	Material
	SW, HGR, TGR	K
22K8000		
Consisting of:		
-	1 x	Cover cap left
2b	1 x	Cover cap right
2c	2 x	Branding element, embossed with Blum logo
		IN-G

2		Cover cap set for SERVO-DRIVE
	Colour	Material
	SW, HGR, TGR	K
23K8000		
Consisting of:		
2a	1 x	SERVO-DRIVE cover cap left
2b	1 x	Cover cap right
2c	2 x	Branding element, embossed with Blum logo
		IN-G
2d	2 x	SERVO-DRIVE switch
2e	2 x	Blum distance bumper Ø 5 mm

3		Front fixing bracket set
	Version	Fixing method
	Wooden fronts and wide aluminium frames	Screw-on <sup>1</sup>
20S4200		
	Narrow aluminium frames	Screw-on <sup>2</sup>
		20S4200A

#### Consisting of:

3 2 x Front fixing bracket

<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.

<sup>2</sup> Incl. 8 x countersunk self-tapping screws – 660.0950

-		Front fixing bracket
	Version	Fixing method
	Thin fronts	EXPANDO T 2 x
20S42T1		

EXPANDO T suitable for thin fronts – see page 54

4		SERVO-DRIVE set
	Colour	Material
	TGR	K
23KA000		

#### Consisting of:

4a	1 x	Drive unit
4b	1 x	SERVO-DRIVE distribution cable, 1500 mm
4c	1 x	Connecting node
4d	2 x	Cable end protector

For three lift mechanisms or more, we recommend two synchronised drive units

We recommend one drive unit per set for connected fronts.

5	SERVO-DRIVE power supply unit and accessories
See page 56	

### Optional

2c		Branding element
	Material	Colour
	K	SW-M, TGR IN-G
Printed *	2 x	ABD.1000.BL ABD.1009.BL
Embossed *	2 x	ABD.1000.BT ABD.1009.BT
Plain	2 x	ABD.1000 ABD.1009

\* With Blum logo

#### From 1000 pcs:

Customised, printed branding element

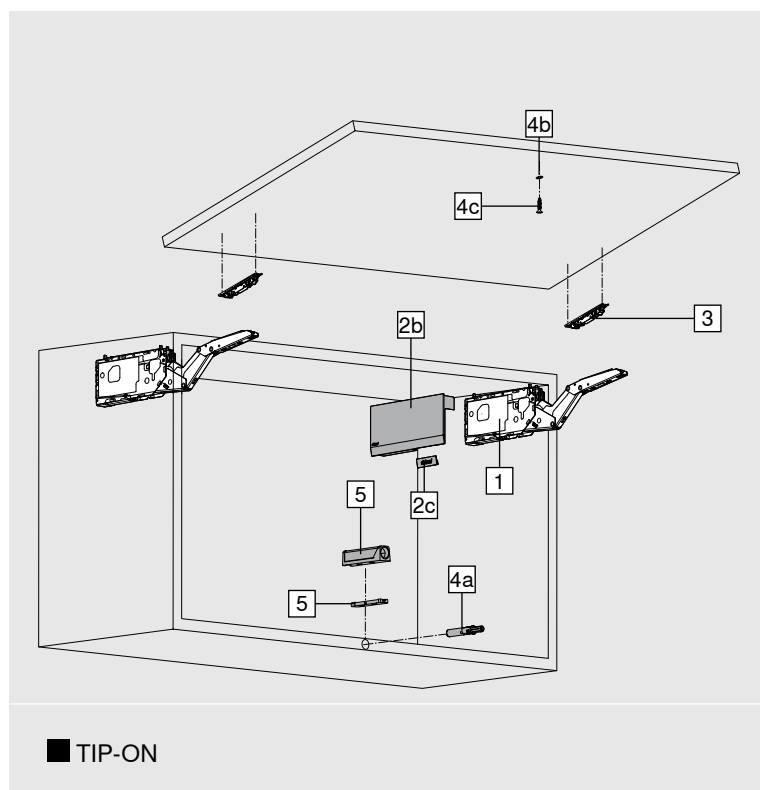
#### From 5000 pcs:

Customised, embossed branding element

### Colours and material

Name	
SW	Silk white
HGR	Light grey
TGR	Dark grey
SW-M	Silk white matt
IN-G	In-mould brushed stainless steel
K	Nylon

## TIP-ON



- Ideal for small applications in wall cabinets, tall cabinets and over the refrigerator
- Cabinet height 205-600 mm
- Cabinet width up to 1800 mm
- Light operating forces
- Harmonious quality of motion with a variable stop
- Tool-free assembly
- Standardised position of the lift mechanism and front fixing bracket
- Symmetrical lift mechanism
- 3-dimensional front adjustment
- Simple, infinitely variable adjustment of the lift mechanism
- No hinges required
- Integrated safety mechanism
- Integrated infinitely variable opening angle stop
- TIP-ON for handle-less stay lifts
- For drilling or in combination with adapter plates

## Ordering information


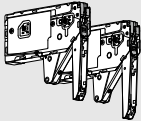
## Note

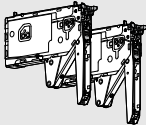
## Power factor (LF) =

cabinet height (KH) [mm] x front weight incl. double handle weight [kg]

We recommend the more powerful lift mechanism for applications in overlapping ranges.  
A trial application is recommended when you are in a borderline area of the individual lift mechanism.

The power factor (LF) can be increased by 50% if you use a third lift mechanism.  
We recommend a third lift mechanism for wide cabinets. This will prevent the front from sagging when open.

1		Lift mechanism set for TIP-ON		
		Fixing with pre-mounted system screws		
		LF	OW	
		420–1610	75°–107°	22K2310T
		930–2800	75°–107°	22K2510T
		1730–5200	75°–100°	22K2710T
		3200–9000	75°–100°	22K2910T
Max. front weight 18 kg if using two lift mechanisms.				
LF Power factor				
OW Opening angle (infinitely variable adjustment)				
Consisting of:				
1	2 x	Symmetrical lift mechanism Incl. pre-mounted system screws		

1		Lift mechanism set for TIP-ON		
		Fixing with chipboard screws with positioning system		
		LF	OW	
		420–1610	75°–107°	22K2300T
		930–2800	75°–107°	22K2500T
		1730–5200	75°–100°	22K2700T
		3200–9000	75°–100°	22K2900T
Max. front weight 18 kg if using two lift mechanisms.				
LF Power factor				
OW Opening angle (infinitely variable adjustment)				
Consisting of:				
1	2 x	Symmetrical lift mechanism		
		Incl. positioning system		
-	8 x	Chipboard screws Ø 4 x 35 mm		

## TIP-ON

### Ordering information

2		Cover cap set
	Colour	Material
	SW, HGR, TGR	K
22K8000		
<b>Consisting of:</b>		
-	1 x	Cover cap left
2b	1 x	Cover cap right
2c	2 x	Branding element, embossed with Blum logo
		IN-G

3		Front fixing bracket set
	Version	Fixing method
	Wooden fronts and wide aluminium frames	Screw-on <sup>1</sup>
	Narrow aluminium frames	Screw-on <sup>2</sup>
<b>Consisting of:</b>		
3	2 x	Front fixing bracket
<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.		
<sup>2</sup> Incl. 8 x countersunk self-tapping screws – 660.0950		

-		Front fixing bracket
	Version	Fixing method
	Thin fronts	EXPANDO T 2 x
20S42T1		
EXPANDO T suitable for thin fronts – see page 54		

4		TIP-ON set
	Colour	KH (mm)
	SW, CS, R7036	Up to 600
	Version	
	Short version	956.1004
KH Cabinet height		
<b>Consisting of:</b>		
4a	1 x	TIP-ON 956. – short version with magnet
4b	1 x	Screw-on catch plate
4c	1 x	Chipboard screws Ø 3.5 x 15 mm, part no. 609.1500
-	1 x	Glue-on catch plate
Not suitable for powder-coated, waxed or oiled surfaces		

### Accessories

5		Adapter plate
	Version	Colour
	Straight adapter plate Short version	SW, CS, R7036, NI-L
	Cruciform adapter plate Long version	R7036
		956.1201
		956A1501

### Optional

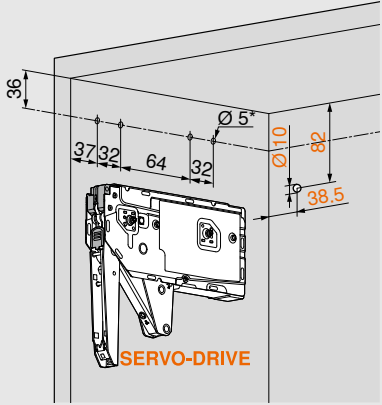
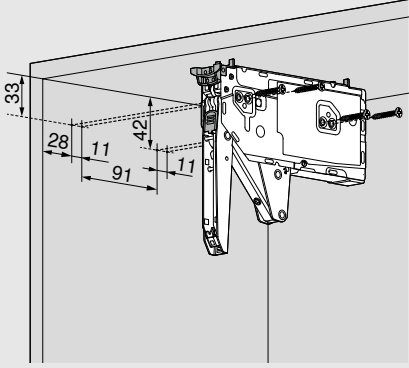
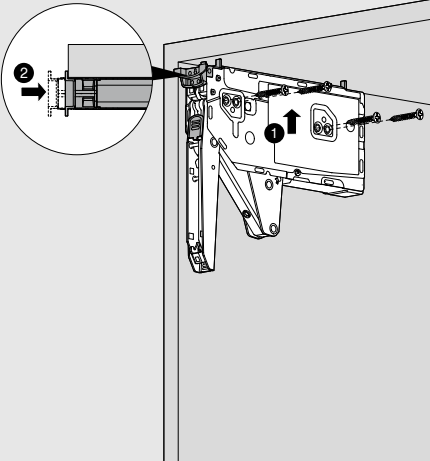
2c		Branding element
	Material	Colour
	K	SW-M, TGR
Printed *	2 x	ABD.1000.BL
Embossed *	2 x	ABD.1000.BT
Plain	2 x	ABD.1000
* With Blum logo		
<b>From 1000 pcs:</b>		
Customised, printed branding element		
<b>From 5000 pcs:</b>		
Customised, embossed branding element		

### Colours and material

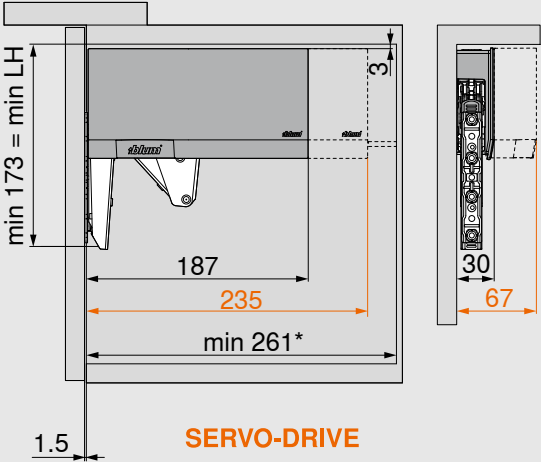
Name	
SW	Silk white
HGR	Light grey
TGR	Dark grey
R7036	RAL 7036 platinum grey
SW-M	Silk white matt
CS	Carbon black
NI-L	Nickel lacquered
IN-G	In-mould brushed stainless steel
K	Nylon

## Standard, SERVO-DRIVE and TIP-ON

### Planning

Drilling position	Chipboard screws incl. positioning system	
<b>System screws</b>  <p>* Drilling depth 11.5 mm</p>	 <p>4 x chipboard screws Ø 4 x 35 mm</p>	
		

**Space requirement**

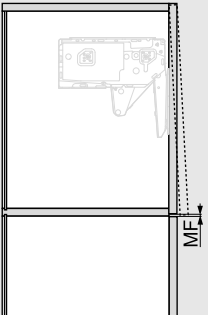


\* Min. 261 mm with visible wall hanging bracket

Note: Cabinet height max. 600 mm

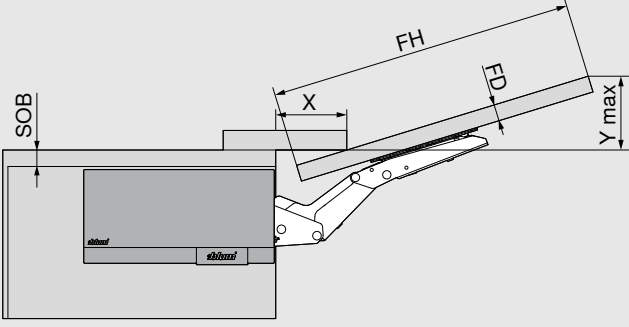
LH Internal cabinet height

**Minimum gap**



Minimum gap MF is 2 mm

**Space requirement – cornice | crown moulding**



**Space requirement (mm)**

At max. opening angle

$$Y = FH \times 0.29 + FD - SOB$$

FD (mm)	16	19	22	26	28
X (mm)	68	57	47	33	27

SOB Top panel thickness

FD Front thickness

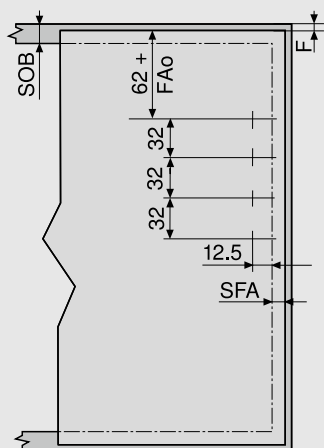
FH Front height

## Standard, SERVO-DRIVE and TIP-ON

### Planning

#### Front assembly

##### Wooden fronts and wide aluminium frames



FAo Max. 25.4 mm

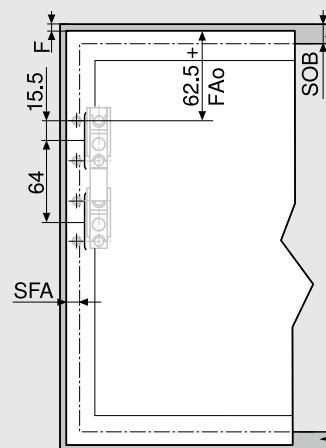
FAo Upper front overlay

SOB Top panel thickness

SFA Side front overlay

F Gap

##### Narrow aluminium frames



FAo Max. 25.4 mm

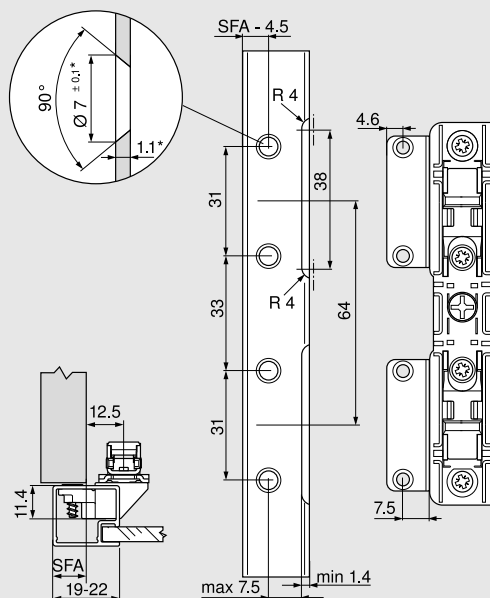
FAo Upper front overlay

SOB Top panel thickness

SFA Side front overlay

F Gap

#### Narrow aluminium frames



For frame width 19 mm, an SFA of 11-18 mm is possible.

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

SFA Side front overlay

Further planning information for TIP-ON – see page 52



Find more information on  
assembly and adjustment of  
AVENTOS HK top at  
[www.blum.com/hktopassembly](http://www.blum.com/hktopassembly)



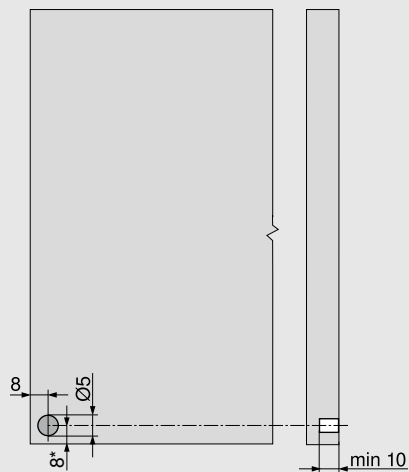
## SERVO-DRIVE for AVENTOS HK top

### Planning

#### Blum distance bumper (SERVO-DRIVE application only)



Insert Blum distance bumper (do not glue)  
Do not use bumpers in the upper third



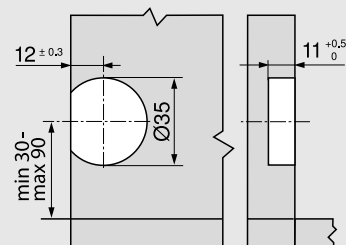
#### Recommendation for aluminium frames

Drill hole into cabinet side for Blum distance bumper

A trial application must be carried out if fixed to the front

\* From cabinet bottom edge for fronts that protrude below

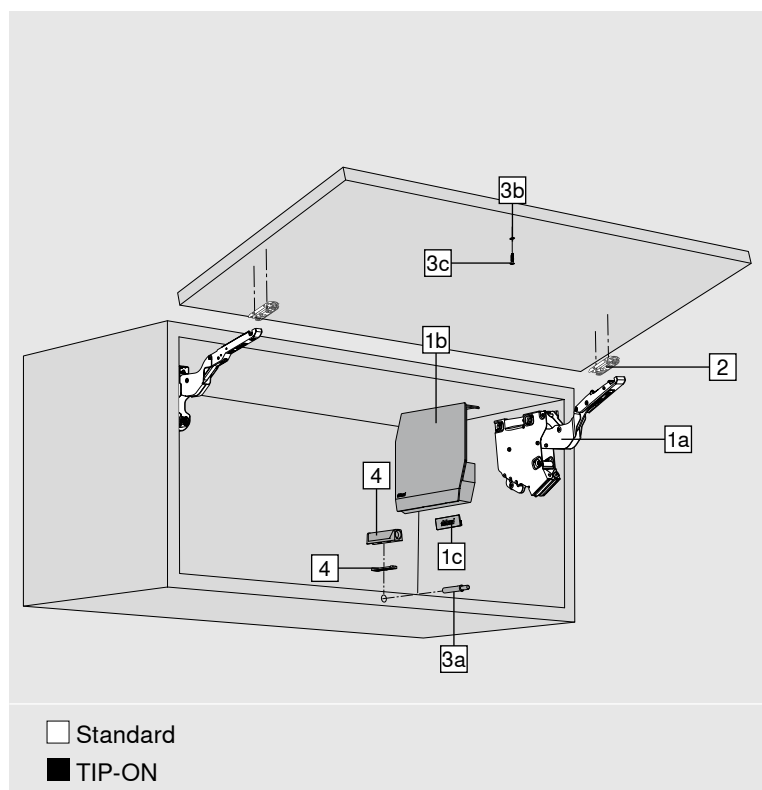
#### SERVO-DRIVE switch



# AVENTOS HK-S



## Standard and TIP-ON



- Ideal for small applications in wall cabinets, tall cabinets and over the refrigerator
- Cabinet height max. 600 mm
- Soft and effortless closing thanks to BLUMOTION
- Light operating forces
- Harmonious quality of motion with a variable stop
- Tool-free assembly
- 3-dimensional front adjustment
- Simple, infinitely variable adjustment of the lift mechanism
- No hinges required
- TIP-ON for handle-less stay lifts

## Ordering information

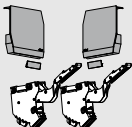
### Note

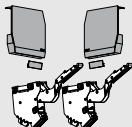
#### Power factor (LF) =

cabinet height (KH) [mm] x front weight incl. double handle weight [kg]

We recommend the more powerful lift mechanism for applications in overlapping ranges.  
A trial application is recommended when you are in a borderline area of the individual lift mechanism.

The power factor (LF) can be increased by 50% if you use a third lift mechanism.

1		Lift mechanism set	
	LF	OW	
	220–500	107°	<sup>1</sup> 20K2B00.06
	400–1000	107°	20K2C00.06
	960–2215	107°	20K2E00.06
<sup>1</sup> One lift mechanism is unsprung			
LF Power factor			
OW Opening angle			
Consisting of:			
1a	2 x	Symmetrical lift mechanism	
1b	2 x	Cover cap left/right	
		SW, HGR, TGR	
1c	2 x	Branding element, embossed with Blum logo	
		IN-G	
-	6 x	Chipboard screw Ø 4 x 35 mm	

1		Lift mechanism set for TIP-ON		
	LF	OW		
	220–500	107°	<sup>1</sup> 20K2B00T06	
	400–1000	107°	20K2C00T06	
	960–2215	107°	20K2E00T06	
<sup>1</sup> One lift mechanism is unsprung				
LF Power factor				
OW Opening angle				
Consisting of:				
1a	2 x	Symmetrical lift mechanism		
1b	2 x	Cover cap left/right		
		SW, HGR, TGR		
1c	2 x	Branding element, embossed with Blum logo		
		IN-G		
-	6 x	Chipboard screw Ø 4 x 35 mm		

## Standard and TIP-ON


### Ordering information

2		Front fixing bracket		
	Version		Fixing method	
	Wooden fronts <sup>1</sup> and wide aluminium frames	Screw-on	2 x	175H3100
	Wooden fronts	EXPANDO	2 x	177H3100E
		Knock-in	2 x	177H3100

#### Spacing 0 mm

All horizontal steel mounting plates with 0 mm spacing possible

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

-		Front fixing bracket set	
	Version	Fixing method	
	Narrow aluminium frames	Screw-on	20K4A00A02
Spacing 0 mm			
Consisting of:			
-	2 x	Front fixing bracket	
-	4 x	Countersunk self-tapping screw – Ø 3.5 mm	

3		TIP-ON set		
	Colour		KH (mm)	
	SW, CS, R7036		Up to 600	
	Version			
	Short version		956.1004	

KH Cabinet height

#### Consisting of:

3a	1 x	TIP-ON 956. – short version with magnet		
3b	1 x	Screw-on catch plate		
3c	1 x	Chipboard screws Ø 3.5 x 15 mm, part no. 609.1500		
-	1 x	Glue-on catch plate Not suitable for powder-coated, waxed or oiled surfaces		

### Accessories

4		Adapter plate		
	Version		Colour	
	Straight adapter plate Short version		SW, CS, R7036, NI-L	956.1201
	Cruciform adapter plate Long version		R7036	956A1501

-		Opening angle stop		
	Opening angle		Colour	
	100°		TGR	20K7A41
	75°		R7037	20K7A11

### Optional

1c		Branding element		
	Material		Colour	
	K		SW-M, TGR	IN-G
Printed *	2 x	ABD.1000.BL	ABD.1009.BL	
Embossed *	2 x	ABD.1000.BT	ABD.1009.BT	
Plain	2 x	ABD.1000	ABD.1009	
* With Blum logo				
From 1000 pcs:				
Customised, printed branding element				
From 5000 pcs:				
Customised, embossed branding element				

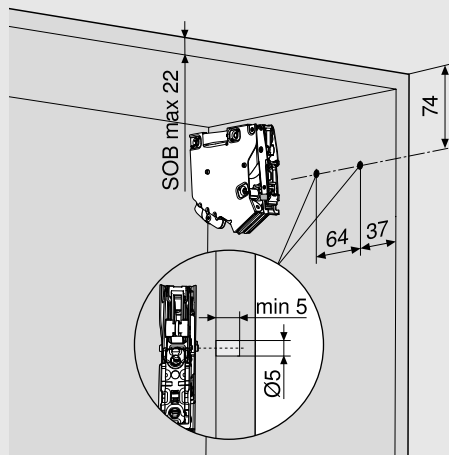
### Colours and material

Name	
SW	Silk white
HGR	Light grey
TGR	Dark grey
R7036	RAL 7036 platinum grey
SW-M	Silk white matt
CS	Carbon black
NI-L	Nickel lacquered
IN-G	In-mould brushed stainless steel
K	Nylon

## Standard and TIP-ON

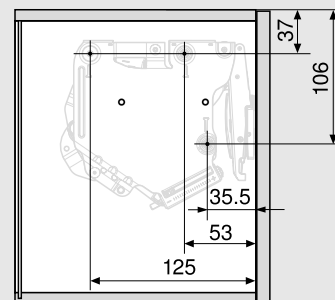
### Planning

#### Peg position



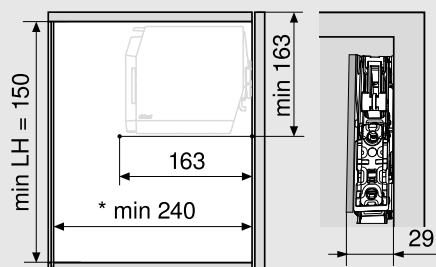
SOB Top panel thickness

#### Fixing position



3 x chipboard screws Ø 4 x 35 mm

#### Space requirement



\* Min. 240 mm with visible wall hanging bracket

Note: Cabinet height max. 600 mm

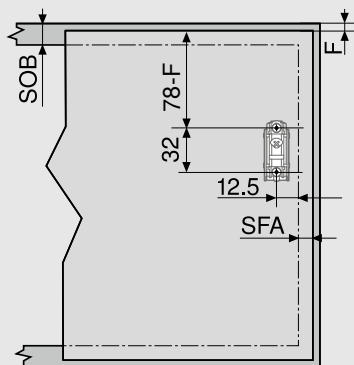
LH Internal cabinet height

## Standard and TIP-ON

### Planning

#### Front assembly

Wooden fronts and wide aluminium frames

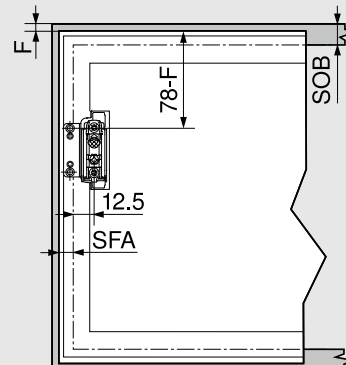


SOB Top panel thickness

SFA Side front overlay

F Gap

Narrow aluminium frames

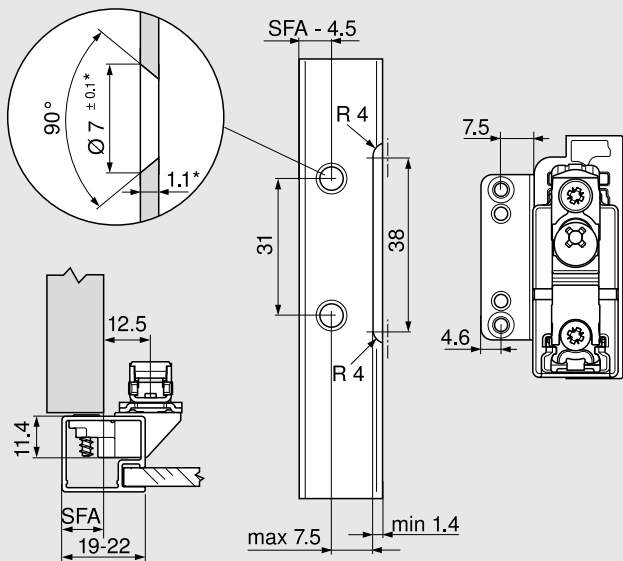


SOB Top panel thickness

SFA Side front overlay

F Gap

#### Narrow aluminium frames

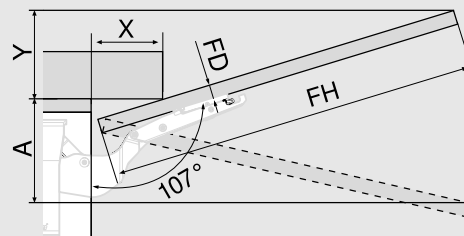


For frame width 19 mm, an SFA of 11-18 mm is possible.

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

SFA Side front overlay

#### Space requirement – cornice | crown moulding



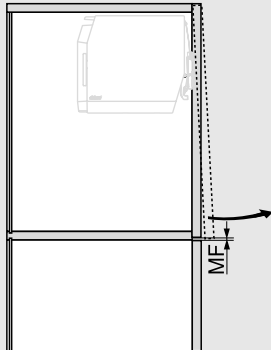
Opening angle stop			Space requirement (mm)		
Unsprung			$Y = FH \times 0.29 - 15 + FD$		
100°			$Y = FH \times 0.17 - 15 + FD$		
75°			$A = FH \times 0.26 + 15 - FD$		
FD (mm)	16	19	22	26	-
X (mm)	70	59	49	35	-
FD Front thickness					
FH Front height					



## Standard and TIP-ON

### Planning

#### Minimum gap



Minimum gap MF is 2 mm

Further planning information for TIP-ON –  
see page 52



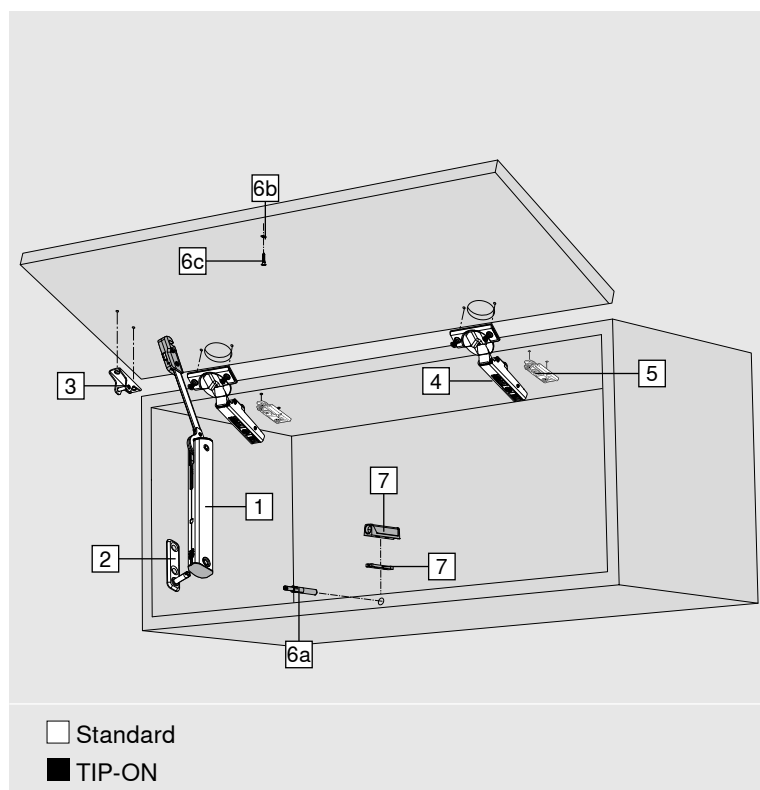
Find more information on  
assembly and adjustment of  
AVENTOS HK-S at

[www.blum.com/aventos-hks-assembly](http://www.blum.com/aventos-hks-assembly)

# AVENTOS HK-XS



## Standard and TIP-ON



- Ideal for small applications in wall cabinets, tall cabinets and over the refrigerator
- Cabinet height 240-600 mm
- Internal cabinet depth min. 125 mm
- An internal cabinet depth of 100 mm or more is possible if you use a special drilling position
- Symmetrical lift mechanism, can be used on one or both sides
- Closes softly and effortlessly in conjunction with CLIP top BLUMOTION hinges
- TIP-ON for handle-less stay lifts with CLIP top unsprung hinges
- Light operating forces
- Harmonious quality of motion with a variable stop
- Simple, infinitely variable adjustment of the lift mechanism

## Ordering information


### Note


#### Power factor (LF) =

cabinet height (KH) [mm] x front weight incl. double handle weight [kg]

We recommend the more powerful lift mechanism for applications in overlapping ranges.


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


1	<input type="checkbox"/>	Lift mechanism		
	LF	OW		
	200–1000	<sup>1</sup> 105°	20K1101	
	500–1500	<sup>1</sup> 105°	20K1301	
	800–1800	<sup>1</sup> 105°	20K1501	
The power factor (LF) is doubled when used on both sides				
<sup>1</sup> For hinges with smaller opening angles, the opening angle will depend on the hinge used				
LF Power factor				
OW Opening angle				

1		Lift mechanism for TIP-ON		
	LF	OW		
	180–800 <sup>1</sup>	105°	20K1101T	
	500–1200 <sup>1</sup>	105°	20K1301T	
	800–1600 <sup>1</sup>	105°	20K1501T	
The power factor (LF) is doubled when used on both sides				
<sup>1</sup> For hinges with smaller opening angles, the opening angle will depend on the hinge used				
LF Power factor				
OW Opening angle				

## Standard and TIP-ON

### Ordering information

2		Cabinet fixing		
		Fixing method		
		Screw-on		20K5101
		EXPANDO		20K51E1

3		Front fixing bracket		
		Version	Fixing method	
		Wooden fronts and wide aluminium frames	Screw-on <sup>1</sup>	20K4101
		Wooden fronts	EXPANDO	20K41E1
		Narrow aluminium frames	Screw-on	20K4101A

4		CLIP top BLUMOTION 110° hinge		
		Boss	Spring	
		INSERTA	With spring	71B3590
		Screw-on <sup>1</sup>	With spring	71B3550

3 hinges starting at cabinet width KB 900 mm and/or power factor LF 1800

4 hinges starting at cabinet width KB 1200 mm and/or power factor LF 2700

#### Alternative

CLIP top BLUMOTION hinges: 107°, profile/thick door, 95° aluminium frame door hinge or CLIP top hinges: 107°, profile/thick door, 95° aluminium frame door hinge in combination with BLUMOTION 973A – for clip on and/or CLIP hinges: 100°


4		CLIP top 110° hinge		
		Boss	Spring	
		INSERTA	Unsprung	70T3590.TL
		Screw-on <sup>1</sup>	Unsprung	70T3550.TL

3 hinges starting at cabinet width KB 900 mm and/or power factor LF 1800

4 hinges starting at cabinet width KB 1200 mm and/or power factor LF 2700

#### Alternative

CLIP top hinges: 107°, profile/thick door, 95° aluminium frame door hinge and/or CLIP 100° (each hinge unsprung)

5		Mounting plate		
		Fixing method	Spacing (mm)	
		Screw-on <sup>1</sup>	0	175H3100
		EXPANDO	0	177H3100E

Standard mounting plates, spacing depends on the top gap


3		TIP-ON set	
		Colour	KH (mm)
		SW, CS, R7036	Up to 600
		Version	
		Short version	956.1004


KH Cabinet height

#### Consisting of:

3a	1 x	TIP-ON 956. – short version with magnet	
3b	1 x	Screw-on catch plate	
3c	1 x	Chipboard screws Ø 3.5 x 15 mm, part no. 609.1500	
-	1 x	Glue-on catch plate Not suitable for powder-coated, waxed or oiled surfaces	

#### Accessories

7		Adapter plate		
		Version	Colour	
		Straight adapter plate Short version	SW, CS, R7036, NI-L	956.1201
		Cruciform adapter plate Long version	R7036	956A1501

-		Opening angle stop		
		Opening angle	Colour	
		86°	SZ	70T3553

For CLIP top BLUMOTION 110° | CLIP top 110° hinge

#### Colours and material

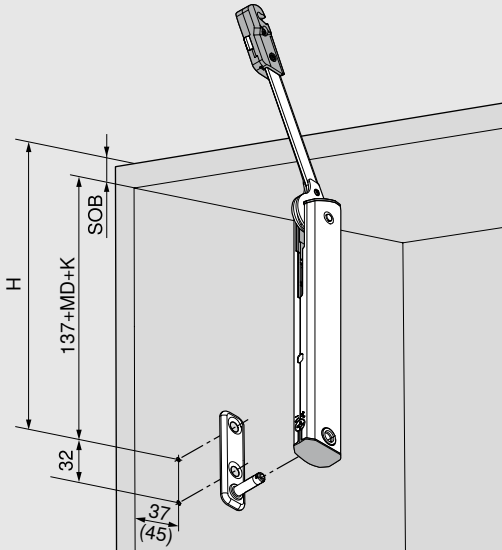
Name	
SW	Silk white
SZ	Black
R7036	RAL 7036 platinum grey
CS	Carbon black
NI-L	Nickel lacquered

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

Standard and TIP-ON

Planning

Drilling position



H = 137 + MD + K + SOB

MD Mounting plate spacing

K Cranking of hinge arm

Straight hinge arm 0 mm

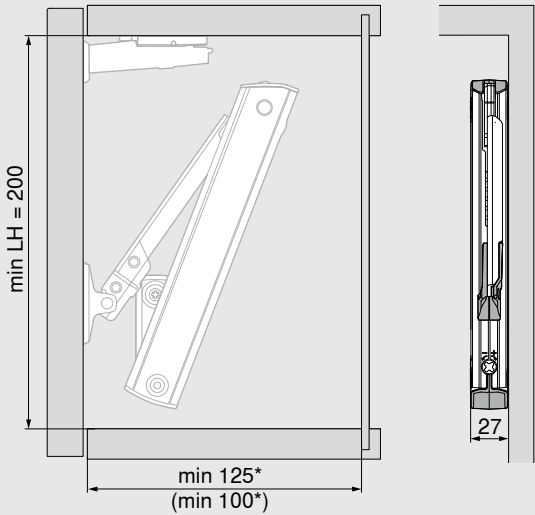
Cranked hinge arm 9.5 mm

Double cranked arm 18 mm

SOB Top panel thickness

() Internal cabinet depth 100 mm

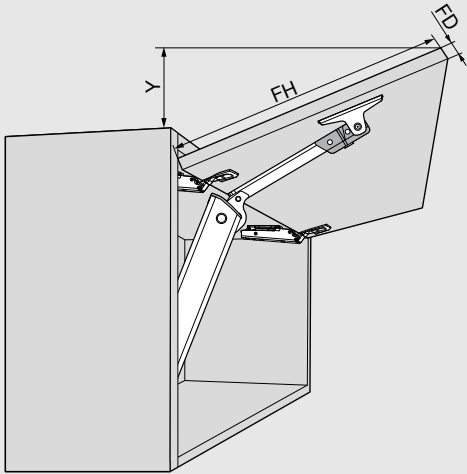
Space requirement



LH Internal cabinet height

\* Min. 200 mm with visible wall hanging bracket

() Internal cabinet depth 100 mm



CLIP top BLUMOTION 110° hinge

$Y = (FH - X) \times 0.3$

FD (mm)	16	19	22	24
X (mm)	45	34	23	15

FD Front thickness

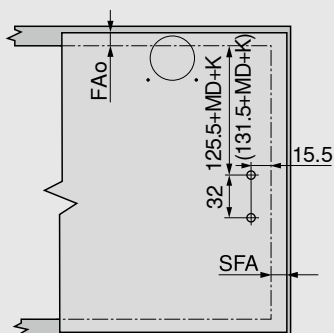
FH Front height

## Standard and TIP-ON

### Planning

#### Front assembly

##### Wooden fronts and wide aluminium frames



FAo Upper front overlay

SFA Side front overlay

MD Mounting plate spacing

K Cranking of hinge arm

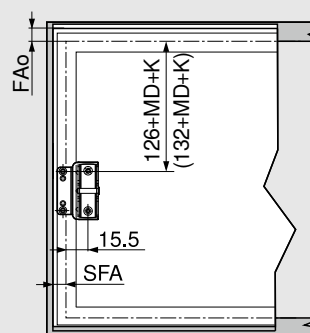
Straight hinge arm 0 mm

Cranked hinge arm 9.5 mm

Double cranked arm 18 mm

() Internal cabinet depth 100 mm

##### Narrow aluminium frames



FAo Upper front overlay

SFA Side front overlay

MD Mounting plate spacing

K Cranking of hinge arm

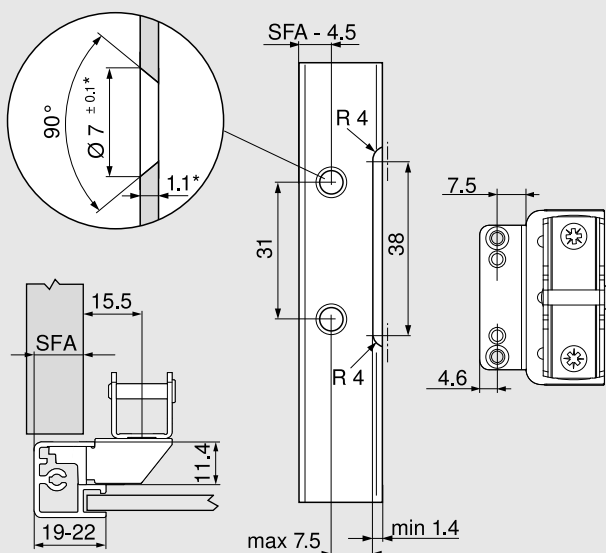
Straight hinge arm 0 mm

Cranked hinge arm 9.5 mm

Double cranked arm 18 mm

() Internal cabinet depth 100 mm

#### Narrow aluminium frames

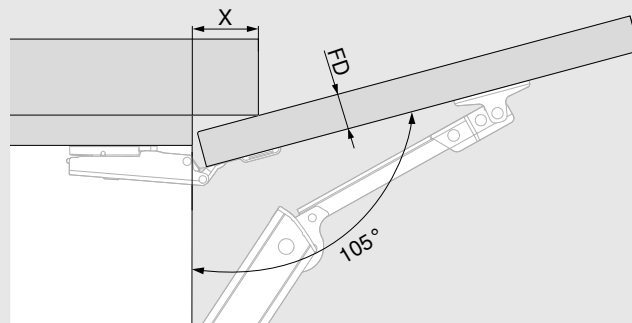


For frame width 19 mm, an SFA of 11-18 mm is possible.

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

SFA Side front overlay

#### Space requirement – cornice | crown moulding



#### CLIP top BLUMOTION 110° hinge

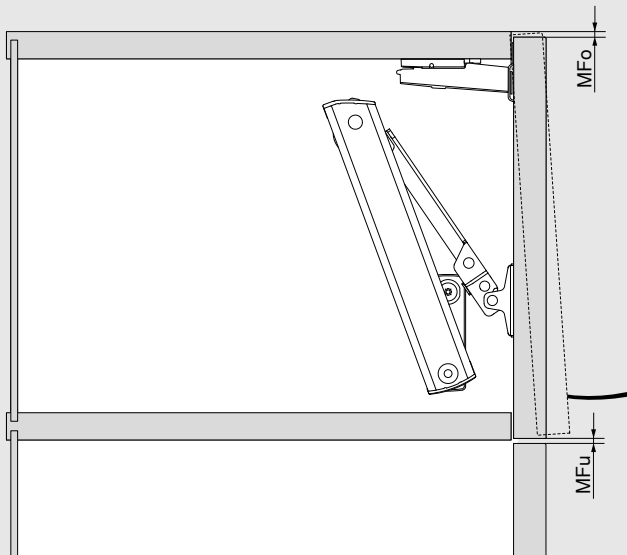
FD (mm)	16	19	22	24
X (mm)	45	34	23	15

FD Front thickness

## Standard and TIP-ON

### Planning

#### Minimum gap

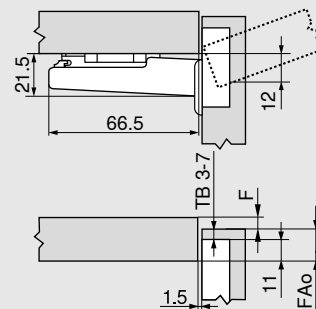


MFo Minimum gap at the top depending on the hinge used

MFu Minimum gap at the bottom 1.5 mm

#### Overlay application with CLIP top BLUMOTION 110° | CLIP top 110°

Hinge dimensions and gap calculation based on factory setting  
(mounting plate spacing = 0 mm)  
Front protrusion at full opening angle



F Gap

FAo Upper front overlay

TB Boss drilling distance

#### Boss drilling distance TB

MD	Front overlay FA (mm)													
	5	6	7	8	9	10	11	12	13	14	15	16	17	18
0										3	4	5	6	7
3							3	4	5	6	7			
6				3	4	5	6	7						
9	3	4	5	6	7									

MD Mounting plate spacing (mm)

#### Minimum gap F for fronts with a front radius (R = 1 mm) based on the factory setting



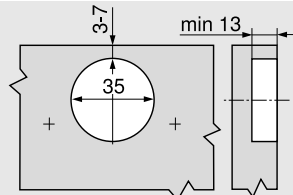
Boss drilling distance TB (mm)	Front thickness FD (mm)													
	16	18	19	20	21	22	23	24	25	26	28	30		
3	0.5	0.8	1.0	1.2	1.5	1.8	2.2	2.7	3.5	4.3	Δ	Δ		
4	0.5	0.8	1.0	1.2	1.4	1.7	2.0	2.5	3.1	3.8	Δ	Δ		
5	0.5	0.8	0.9	1.2	1.4	1.7	2.0	2.4	2.9	3.4	Δ	Δ		
6	0.5	0.8	0.9	1.2	1.3	1.6	1.9	2.3	2.7	3.2	Δ	Δ		
7	0.5	0.8	0.9	1.1	1.3	1.6	1.9	2.2	2.6	3.0	Δ	Δ		

Δ A trial application is recommended

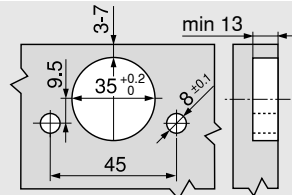
#### For +2 mm height adjustment, add:

+0.2	+0.4	+0.4	+0.5	+0.5	+0.5	+0.5	+0.5	+0.5	+0.5	+0.5				
------	------	------	------	------	------	------	------	------	------	------	--	--	--	--

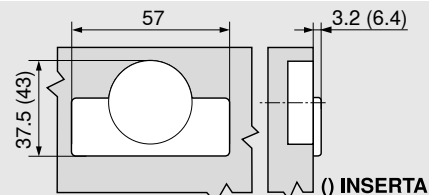
#### Screw-on assembly



#### INSERTA assembly



#### Hinge boss dimensions



Further planning information for TIP-ON – see page 52



Find more information on  
assembly and adjustment of  
AVENTOS HK-XS at

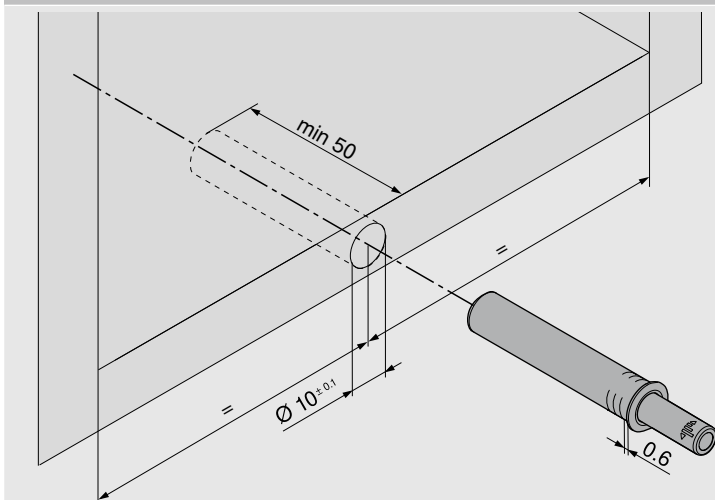
[www.blum.com/aventos-hkxs-assembly](http://www.blum.com/aventos-hkxs-assembly)



## TIP-ON

### Planning

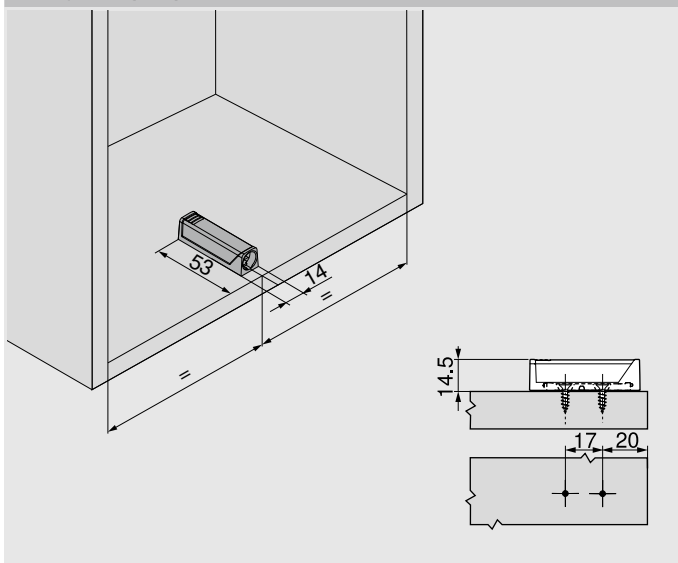
#### TIP-ON for drilling fixing position



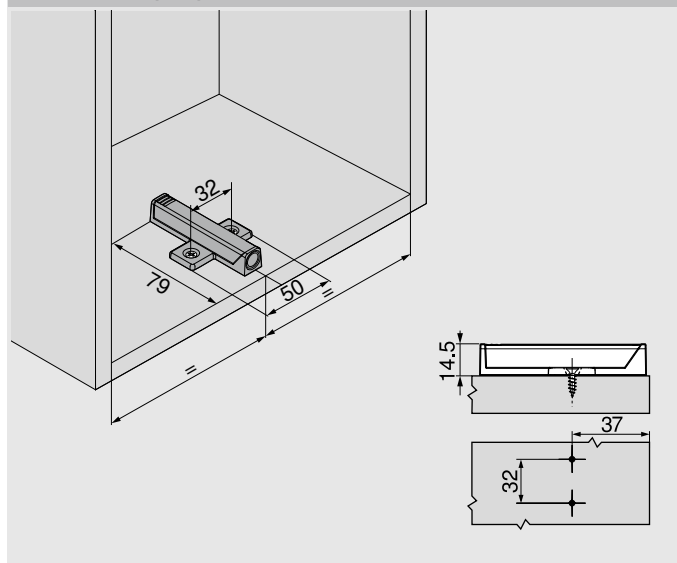
For stay lifts up to and including a height of 600 mm

#### TIP-ON adapter plate fixing position

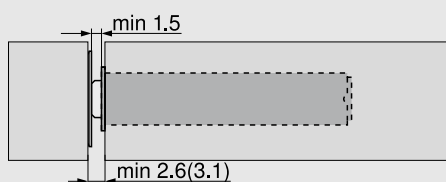
##### Straight adapter plate – short version



##### Cruciform adapter plate



#### Installation dimensions for front gap



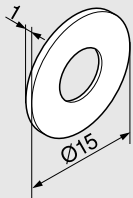
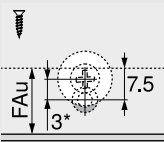
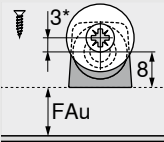
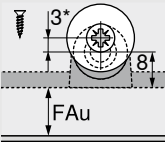
min. 2.6 mm with glue-on catch plate

() min. 3.1 mm with screw-on catch plate

TIP-ON

Planning

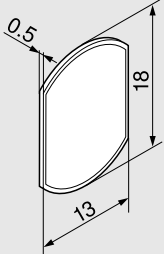
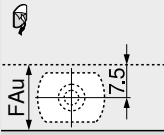
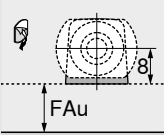
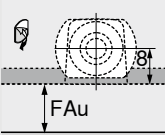
Screw-on catch plate planning

	 For drilling	 Straight adapter plate	 Cruciform adapter plate
---	---	--	--

\* For the screw-on catch plate we recommend positioning the catch plate 3 mm away from TIP-ON.

FAu Bottom front overlay

Glue-on catch plate planning

	 For drilling	 Straight adapter plate	 Cruciform adapter plate
--	---	--	--

FAu Bottom front overlay

## EXPANDO T



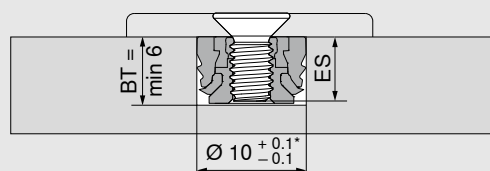
- EXPANDO T – pre-assembled fixing system
- Thin fronts of 8 mm or more
- Different front materials
- 3 different applications –  
lift systems | hinge systems | box systems

### Front fixing bracket for AVENTOS HS top | HL top | HK top

	Version	Material	
	Symmetrical	Steel	20S42T1

Fixing positions as per the details in the respective planning information

### Drilling depth | Screw selection – EXPANDO T



BT Drilling depth

ES Screw penetration depth

ES Min. 4 mm

ES Max. drilling depth – 0.5 mm

\* Stone and ceramic +0.2/-0.1 mm

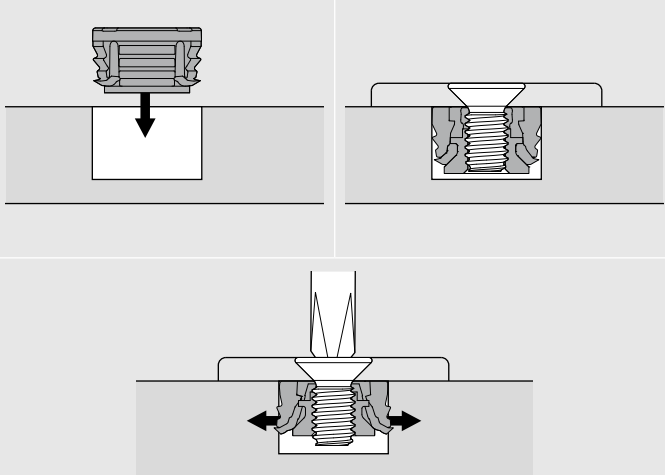
Screws with M4 thread have to be used for EXPANDO T single

Select the lowest possible drilling depth to suit the screw length when using the single dowel

### EXPANDO T – single

	Colour	Material	
	Dark grey	Nylon/steel	70T4532T

### Assembly – EXPANDO T



### Area of application and assembly recommendation

EXPANDO T is suitable for fixing Blum fittings to thin cabinet fronts of all types of materials. Front materials can be just 8 mm thick or more, provided they are sufficiently stable and strong.

Nm Minimum tightening torque

Materials tested by Blum	Nm
Chipboard (transverse tensile strength > 0.4 N/mm <sup>2</sup> )	1.5
MDF (transverse tensile strength > 0.6 N/mm <sup>2</sup> )	1.5
HDF	2
HPL	2
Mineral composites	2
Granite stone – nero assoluto	3
Artificial stone – quartz composite	3
Ceramic panels	3

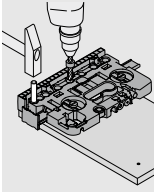
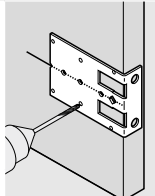
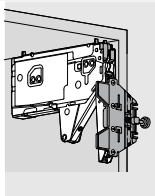
### Limitation of liability

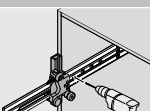
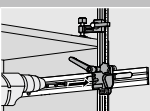

Blum accepts no liability for the use of EXPANDO T in combination with materials not listed or fittings from other manufacturers. It is recommended that assembly be carried out by an experienced furniture manufacturer.

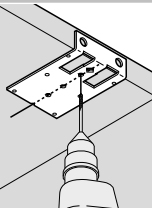
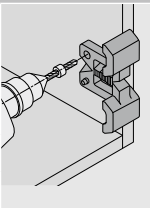
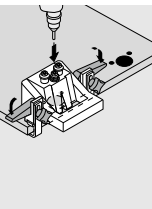
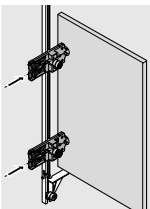
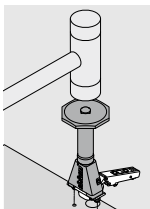
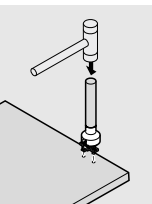
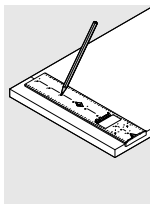


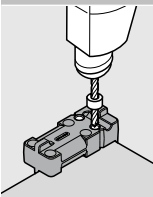
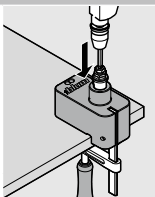
Find more information on  
assembly and adjustment of EXPANDO T at  
[www.blum.com/expando-t-9](http://www.blum.com/expando-t-9)

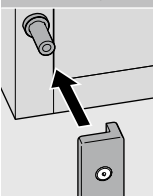
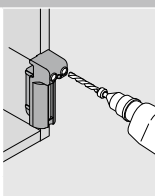
## Assembly devices

Front assembly			
	Universal drilling template		Angle template
ZML.0040.02		65.5300	
	Marking template for AVENTOS HK top front fixing bracket		ZML.2200

Cabinet assembly					
	Universal individual template			Universal drilling template	
	65.1051.02			65.1000.01	
	Universal marking template		65.5340.01		

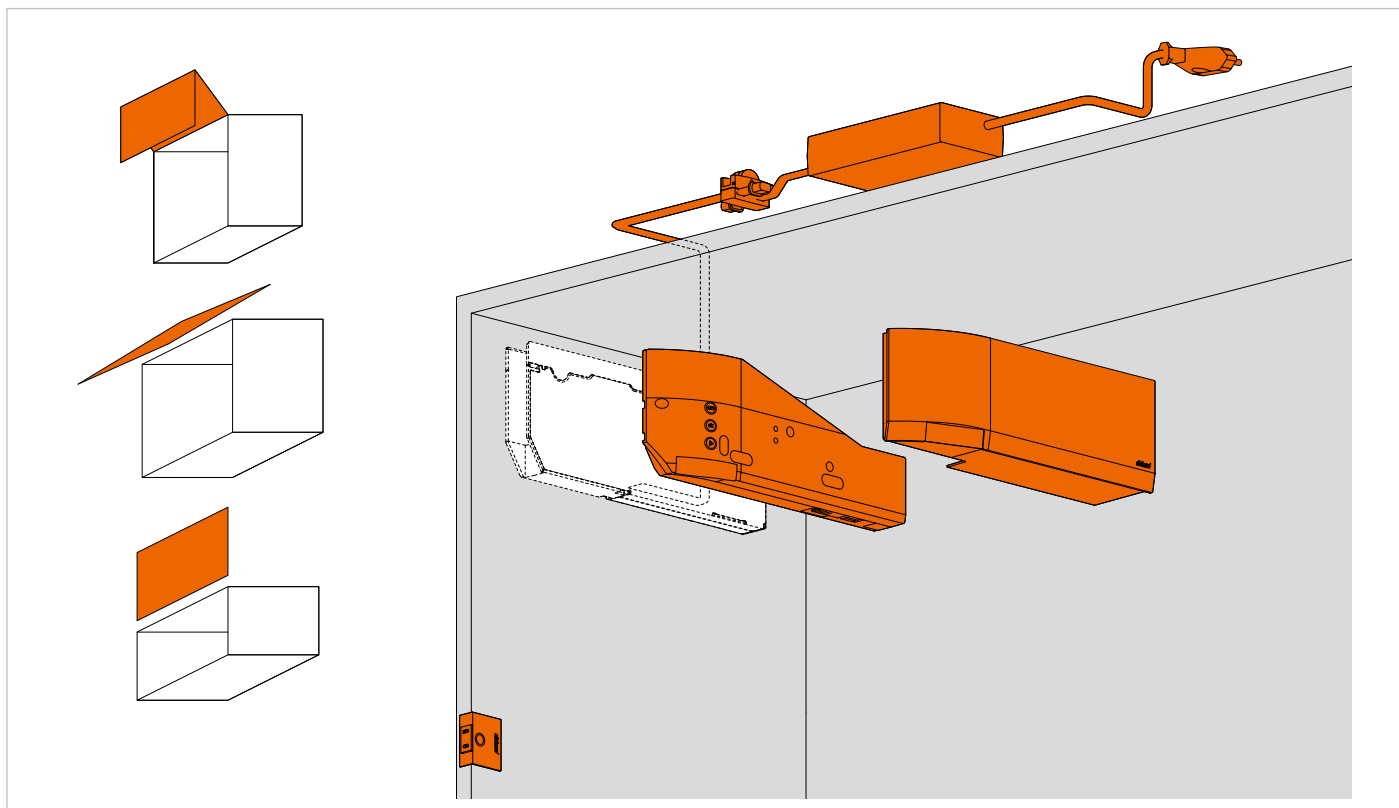
Assembly – hinge systems					
	Angle template			Drilling template for mounting plates	
	65.5300			65.5070	
	ECODRILL			Drilling template for hinges	
	M31.1000			Ø (mm)	
				8   2.5	65.059A
			2.5	65.055A	
			Insertion tool for hinges		
			ZME.0710		
	Insertion tool for mounting plates			Universal marking template	
	Mounting plate			65.6100	
	Steel horizontal mounting plate			ZME.0730	
				65.5340.01	

Assembly – SERVO-DRIVE			
	Drilling template for Blum distance bumper		Drilling template for the SERVO-DRIVE switch
	ZML.1090		M31.2000

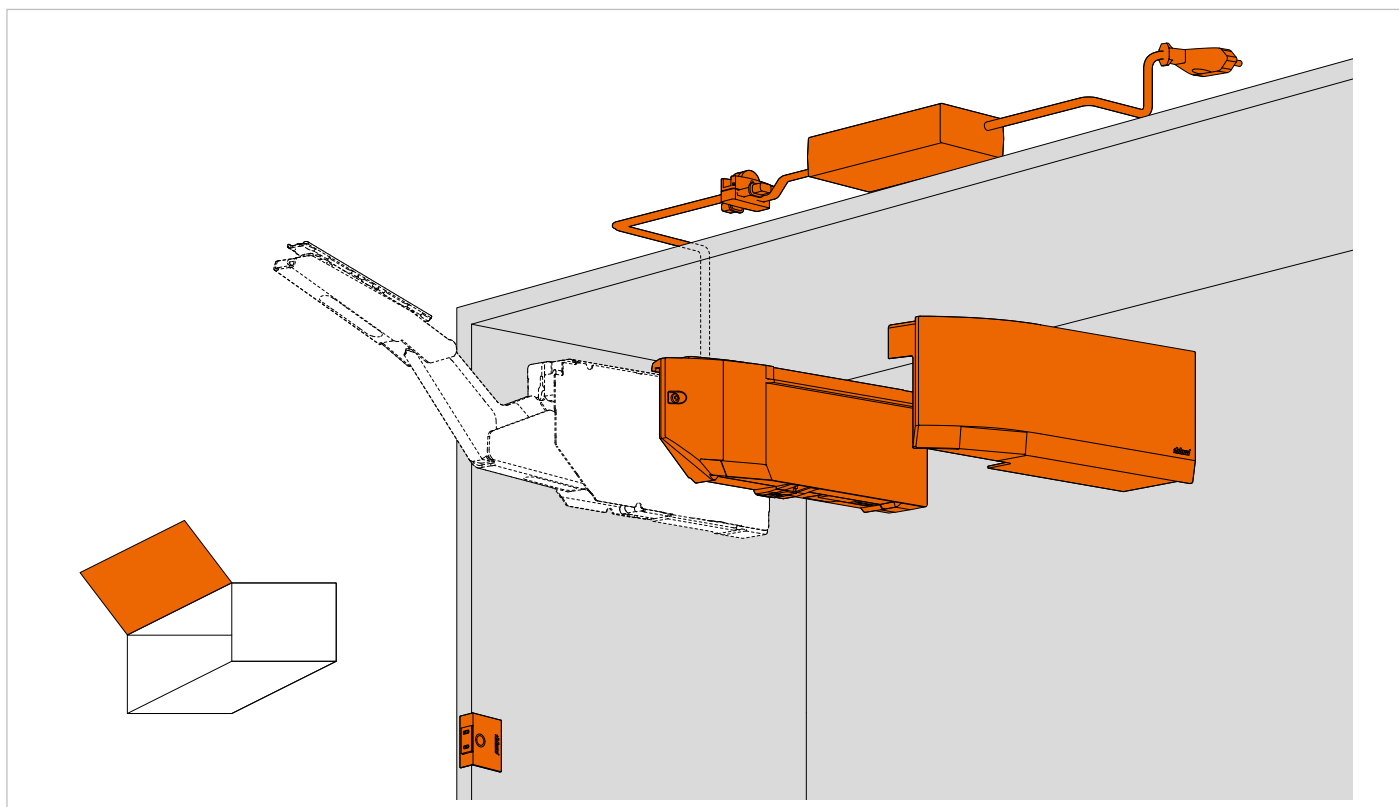
Assembly – TIP-ON			
	Positioning template for catch plate		Drilling template for BLUMOTION   TIP-ON
65.5210.01		65.5010	

## SERVO-DRIVE power supply unit and accessories

### SERVO-DRIVE for AVENTOS HF top, HS top, HL top



### SERVO-DRIVE for AVENTOS HK top



## SERVO-DRIVE power supply unit and accessories


### Ordering information

SERVO-DRIVE power supply unit incl. flex					
Market	Language package		Market	Language package	
E	A	Z10NE04EA	I	A	Z10NE04IA
E	B	Z10NE04EB	K	I	Z10NE04KI
E	C	Z10NE04EC	N	H	Z10NE04NH
E	D	Z10NE04ED	R	H	Z10NE04RH
E	E	Z10NE04EE	S	K	Z10NE04SK
E	F	Z10NE04EF	T	H	Z10NE04TH
E	I	Z10NE04EI	U	G	Z10NE04UG
B	A	Z10NE04BA	U	J	Z10NE04UJ
B	I	Z10NE04BI	Z	I	Z10NE04ZI
H	I	Z10NE04HI			
Consisting of:					
1a	1 x	SERVO-DRIVE power supply unit Incl. operating and installation instructions			
1b	1 x	Flex Length 1.5–1.8 m, incl. plug			

Power supply unit housing			
	Colour	Material	
	WGR	K	Z10NG120
For SERVO-DRIVE power supply unit			

SERVO-DRIVE plug-in power supply unit					
Only suitable for one drive unit					
Market	Language package		Market	Language package	
E	A	☎ Z10NA40EA	E	F	☎ Z10NA40EF
E	B	☎ Z10NA40EB	B	A	☎ Z10NA40BA
E	C	☎ Z10NA40EC	K	I	☎ Z10NA40KI
E	D	☎ Z10NA40ED	N	H	☎ Z10NA40NH
E	E	☎ Z10NA40EE	U	G	☎ Z10NA40UG
☎ Item available on request					
Consisting of:					
-	1 x	SERVO-DRIVE plug-in power supply unit Incl. cable, 1120 mm (with SERVO-DRIVE distribution cable extendable to max. 2000 mm) Incl. operating and installation instructions			

### Accessories

SERVO-DRIVE distribution cable and cable end protector			
	Colour	Length (m)	
	SZ	8	Z10K800AE
Consisting of:			
4a	1 x	SERVO-DRIVE distribution cable	
4b	5 x	Cable end protector	
For cutting to size			

Connecting node and cable end protector			
	Colour	Material	
	SZ	K	Z10V100E.01
Consisting of:			
4a	1 x	Connecting node	
4b	2 x	Cable end protector	

Cable holder			
	Colour	Material	
	WS	K	Z10K0009
E.g. for fixing the SERVO-DRIVE distribution cable			

### Markets and language packages

Name		
Markets	Language packages*	
E	Europa	A DE, EN, FR, IT, NL
B	UK	B DA, EN, FI, NO, SV
H	IN	C EL, EN, HR, SR, SL, TR
I	IL	D EN, ES, FR, IT, PT
K	AU	E CS, HU, PL, SK
N	CN	F BG, ET, LV, LT, RO, RU, UK
R	KR	G EN, ES, FR
S	BR	H EN, ZH, KO
T	TW	I EN
U	US   CA   JP	J JA
Z	ZA	K EN, ES, PT

\* Language descriptions as per ISO-639

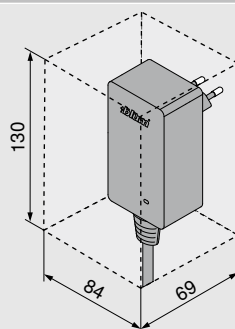
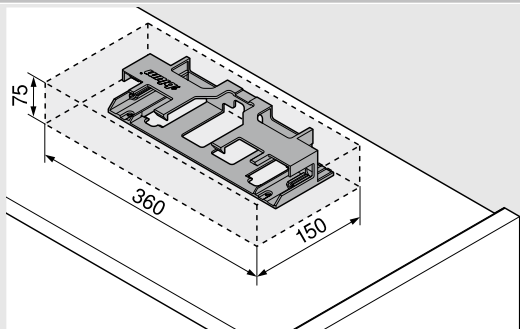
### Colours and material

Name	
WGR	White grey
SZ	Black
WS	White
K	Nylon

## SERVO-DRIVE power supply unit and accessories

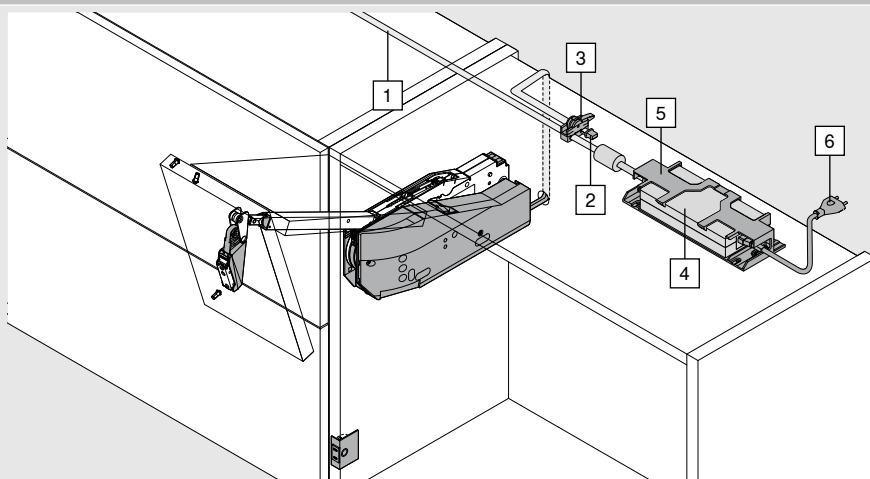
### Planning

#### Space requirement and safety distance



**i** A safety distance of 30 mm must be maintained for air circulation (see graphic); otherwise, there is a risk that the SERVO-DRIVE power supply unit or SERVO-DRIVE plug-in power supply unit could overheat.

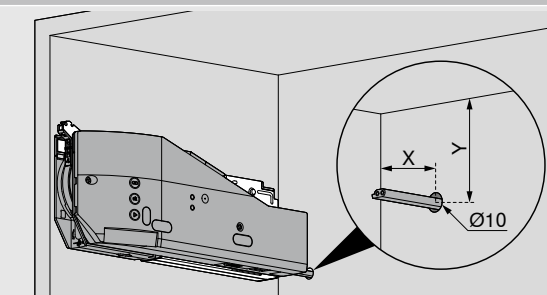
#### Assembly on the cabinet top panel



- 1 SERVO-DRIVE distribution cable
- 2 Connecting node
- 3 Cable end protector
- 4 SERVO-DRIVE power supply unit
- 5 Power supply unit housing
- 6 Flex

**i** Only one SERVO-DRIVE power supply unit can be connected to each SERVO-DRIVE distribution cable!

#### Back cabling



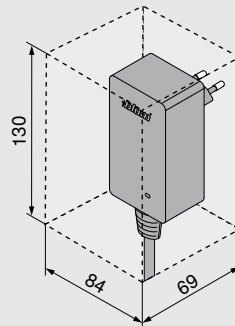
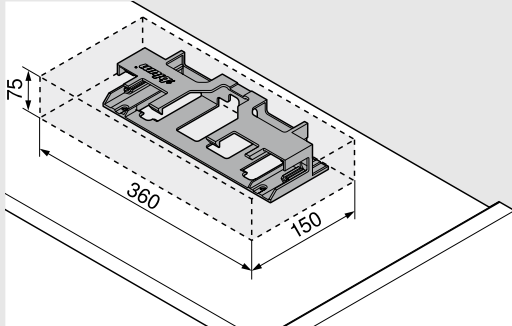
			X (mm)	Y (mm)
AVENTOS HF top	Cabinet height KH (mm)	480–519	38.5	102
		520–1200	38.5	124
AVENTOS HS top			38.5	45
AVENTOS HL top			38.5	71



## SERVO-DRIVE power supply unit and accessories

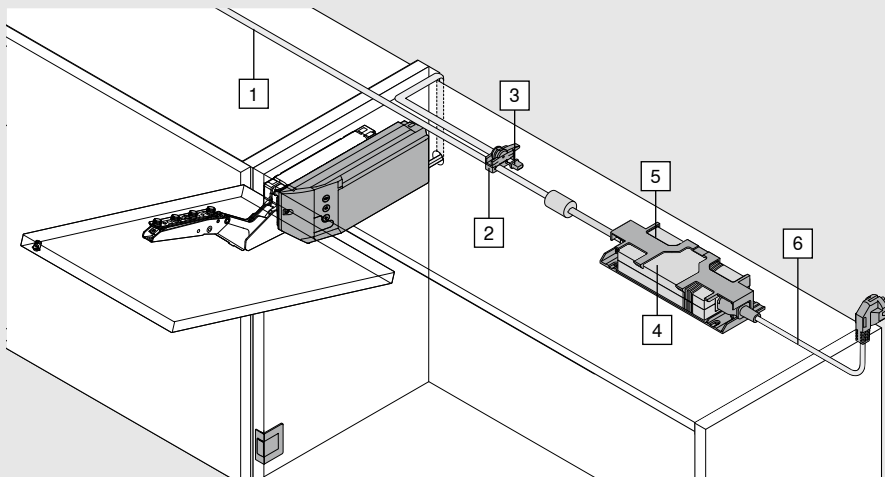
### Planning

#### Space requirement and safety distance



**i** A safety distance of 30 mm must be maintained for air circulation (see graphic); otherwise, there is a risk that the SERVO-DRIVE power supply unit or SERVO-DRIVE plug-in power supply unit could overheat.

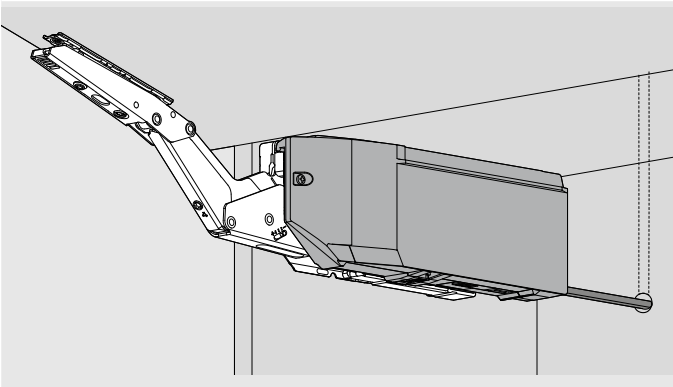
#### Assembly on the cabinet top panel



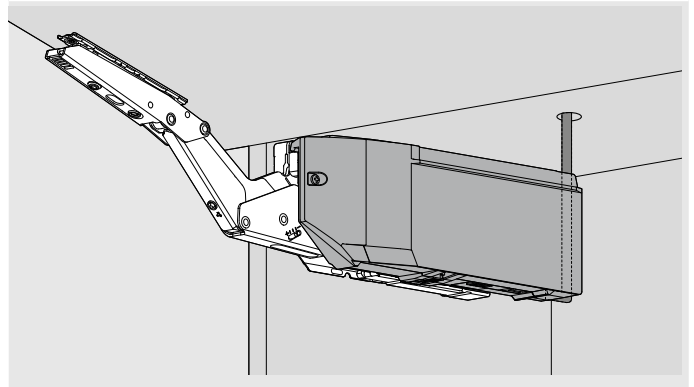
- 1 SERVO-DRIVE distribution cable
- 2 Connecting node
- 3 Cable end protector
- 4 SERVO-DRIVE power supply unit
- 5 Power supply unit housing
- 6 Flex

**i** Only one SERVO-DRIVE power supply unit can be connected to each SERVO-DRIVE distribution cable!

#### Back cabling



#### Top cabling



Find more information on assembly and adjustment of SERVO-DRIVE for AVENTOS top at  
[www.blum.com/servodrive-aventos-assembly](http://www.blum.com/servodrive-aventos-assembly)

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

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Our site in the USA is certified to ISO 9001.  
Our site in Brazil is certified to ISO 9001, ISO 14001 and ISO 45001.



**ISO 9001**  
Certified Quality  
System



**ISO 14001**  
Certified Environmental  
System



**ISO 50001**  
Certified Energy  
System



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FSC®-certified  
products

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