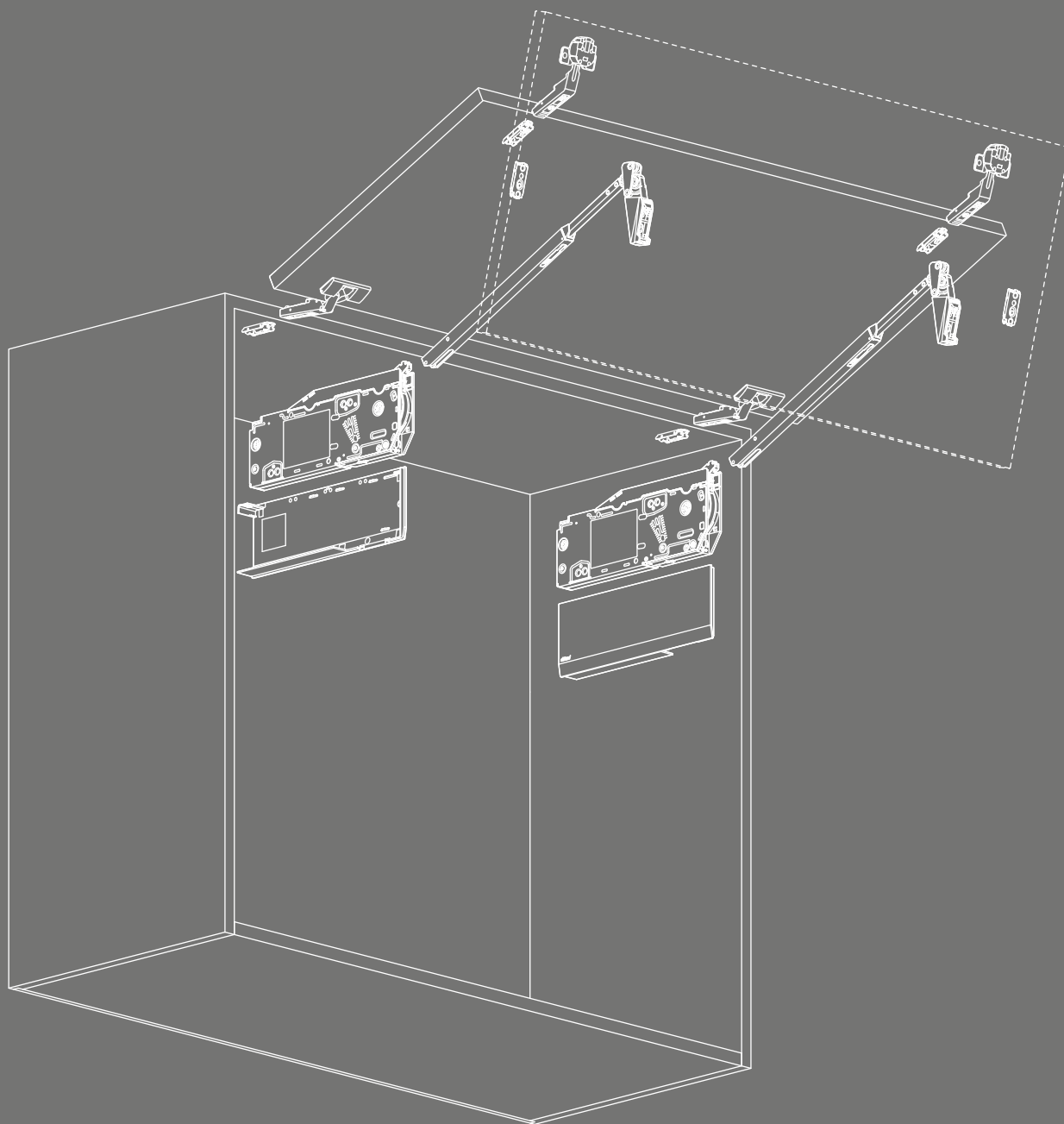


AVENTOS top

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
- 54** EXPANDO T
- 55** Assembly devices
- 56** SERVO-DRIVE



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

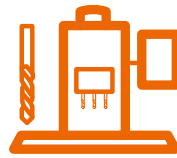
Our services at a glance

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

The right tool for every composition

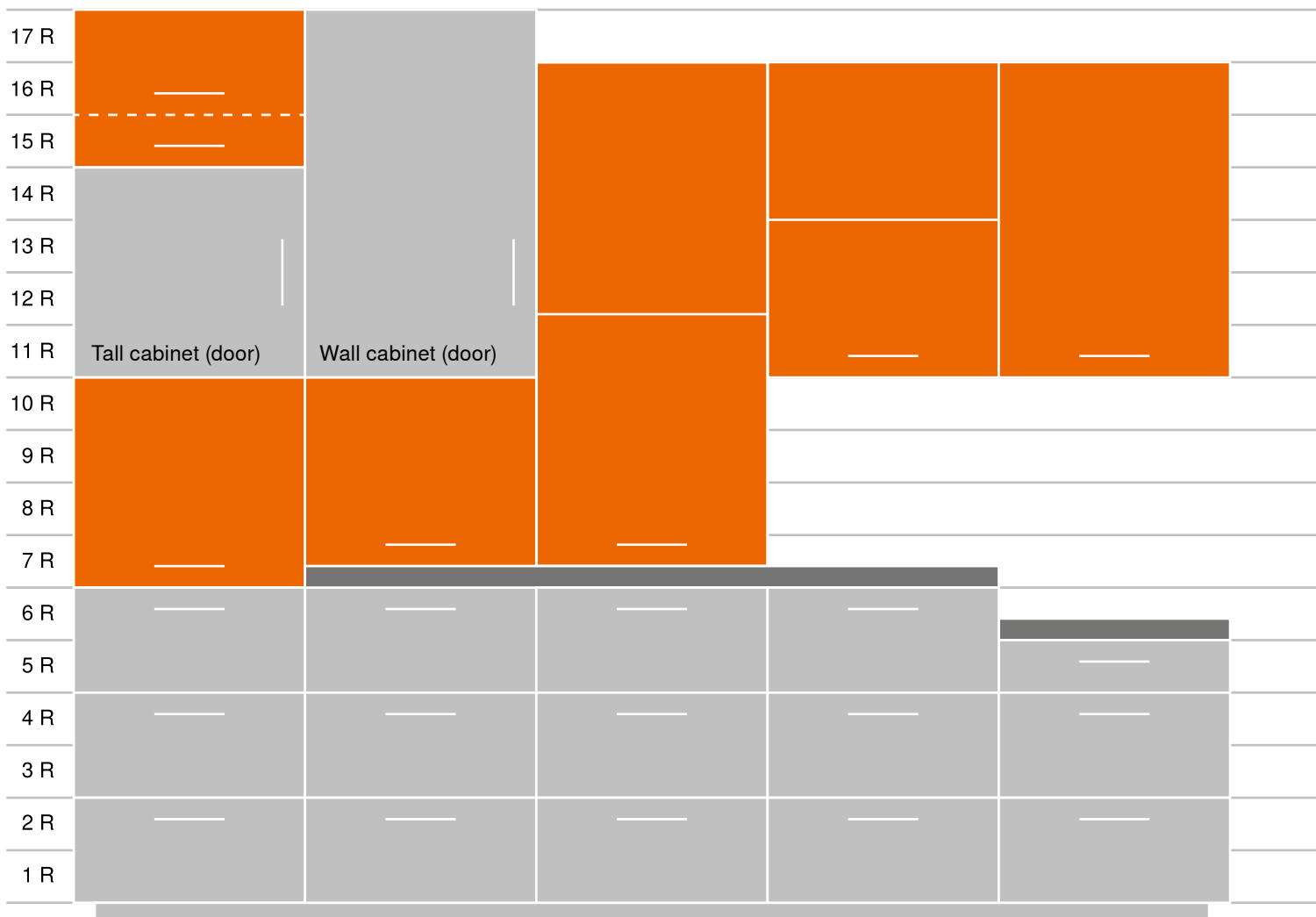
AVENTOS HK-S
AVENTOS HL top
AVENTOS HK top

AVENTOS HL top

AVENTOS HF top

AVENTOS HF top

AVENTOS HS top



R = tier system

AVENTOS HS top

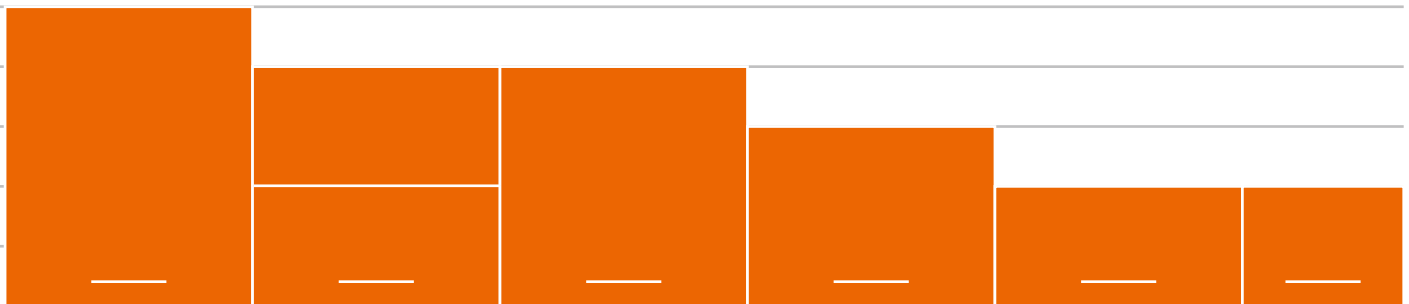
AVENTOS HF top

AVENTOS HS top
AVENTOS HL top
AVENTOS HK top

AVENTOS HS top
AVENTOS HL top
AVENTOS HK top

AVENTOS HK top

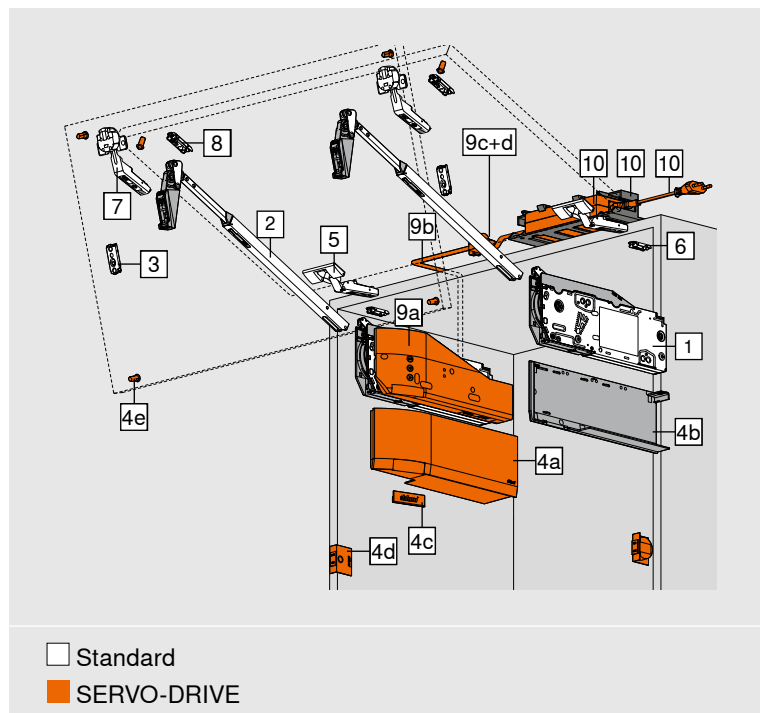
AVENTOS HK-S
AVENTOS HK-XS



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


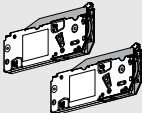
For asymmetrical fronts: **theoretical cabinet height TKH** = front height top FHo (mm) x 2 + gaps


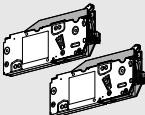
The larger front must be at the top for asymmetrical fronts.

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		Lever arm set	
		Cabinet height (mm)*	
		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		Mounting plate for lever arm	
		Fixing method	Spacing (mm)
		Screw-on ¹	0
		EXPANDO	0
		Knock-in	0

All horizontal steel mounting plates with 0 mm spacing possible

¹ 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		Cover cap set	
		Colour	Material
		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		Cover cap set for SERVO-DRIVE	
		Colour	Material
		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		CLIP top 120° hinge	
		Boss	Spring
		INSERTA	Unsprung
		Screw-on ¹	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

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

Alternative to 5

-		CLIP top 120° special hinge for larger front overlay	
		Boss	Spring
		INSERTA	Unsprung
		Screw-on ¹	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

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

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

Standard mounting plates, spacing depends on the upper front overlay

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

7		CLIP top centre hinge	
		Boss	Spring
		Screw-on ¹	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

¹ 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 ¹	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				
¹ 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		SERVO-DRIVE power supply unit and accessories
See page 56		

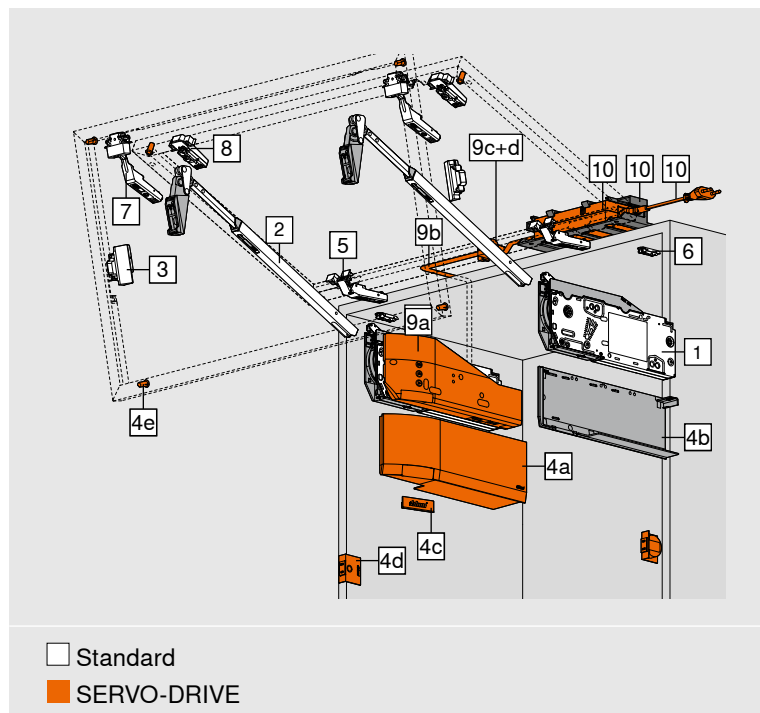
Optional

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


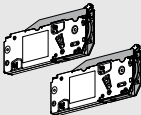
For asymmetrical fronts: **theoretical cabinet height TKH** = front height top FHo (mm) x 2 + gaps


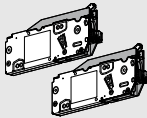
The larger front must be at the top for asymmetrical fronts.

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°	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				

Narrow aluminium frames

Ordering information

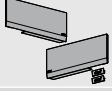
2		Lever arm set
		
Cabinet height (mm)*		
480–610		22F3200
600–910		22F3500
840–1200		22F3900

Consisting of:

2 2 x Symmetrical lever arm

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

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


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

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

Consisting of:


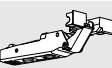
4a 1 x SERVO-DRIVE cover cap left

4b 1 x Cover cap right

4c 2 x Branding element, embossed with Blum logo
IN-G

4d 2 x SERVO-DRIVE switch


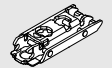
4e 6 x Blum distance bumper Ø 5 mm

5		CLIP top 120° aluminium frame door hinge
		
Boss		Spring
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		Mounting plate for CLIP top 120° hinge
		
Fixing method		Spacing (mm)
Screw-on		0
EXPANDO		0
Knock-in		0
		175H3100
		177H3100E
		177H3100

Standard mounting plates, spacing depends on the top gap



7		CLIP top aluminium centre hinge
		
Boss		Spring
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		CLIP adapter plate for centre hinges
		
Version		Spacing (mm)
Symmetrical		0
		175H5A00

Fixing screws are included

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		SERVO-DRIVE power supply unit and accessories
		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

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

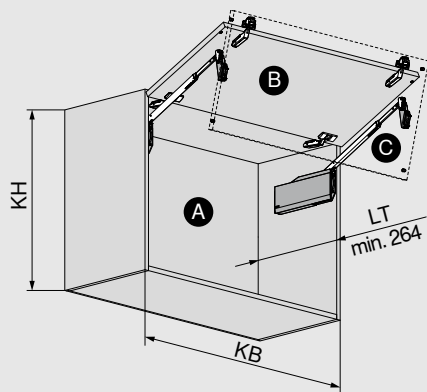
Colours and material

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

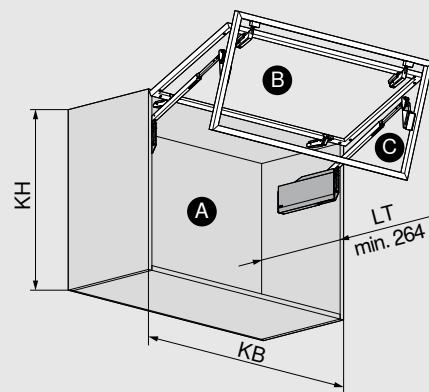
Planning

Wooden fronts and wide aluminium frames



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

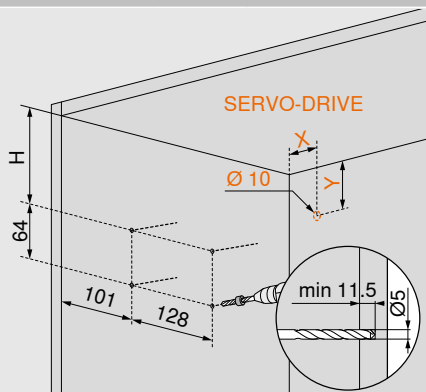
Narrow aluminium frames



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

Drilling position

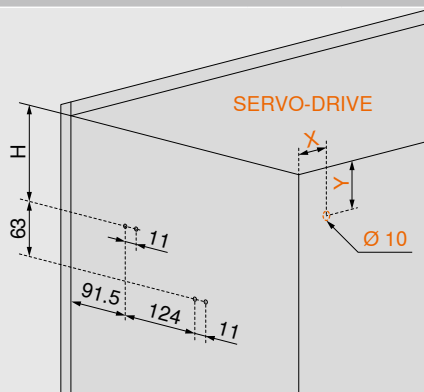
System screws



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

KH Cabinet height

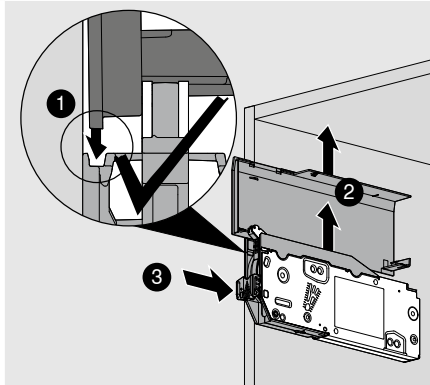
Chipboard screws incl. positioning system



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)

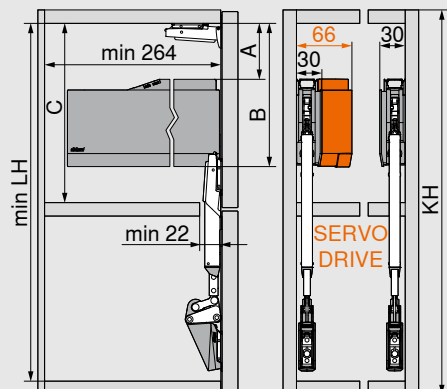
520-1200

KH Cabinet height

Wooden fronts, wide and narrow aluminium frames

Planning

Space requirement

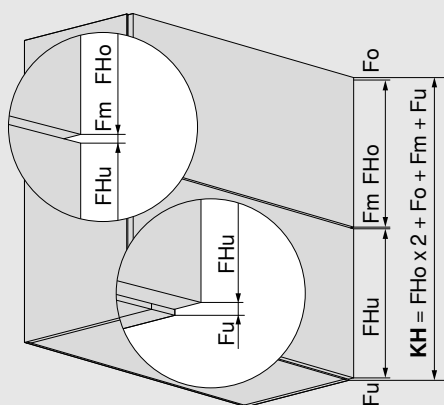


Lever arm set		LH min. (mm)	
22F3200		443	
22F3500		512	
22F3900		632	
KH (mm)	A (mm)	B (mm)	C min. (mm)
480–519	66.5	171.5	172
520–1200	89.0	194.0	195

KH Cabinet height

LH Internal cabinet height

Symmetrical front



Fo Top gap

Fm Middle gap

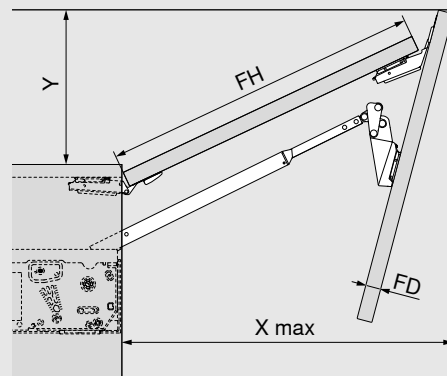
Fu Bottom gap

FHo Front height top

FHu Lower front height

KH Cabinet height

Space requirement above



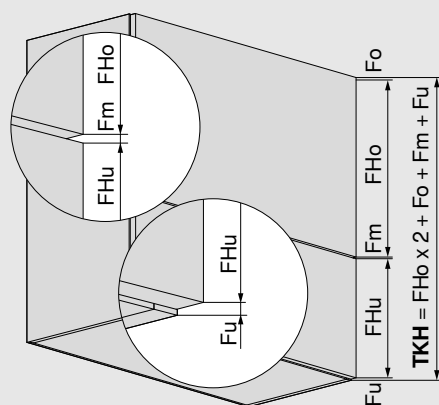
$$X \max = FH \times 0.9 + 1.5 \times FD + 35$$

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

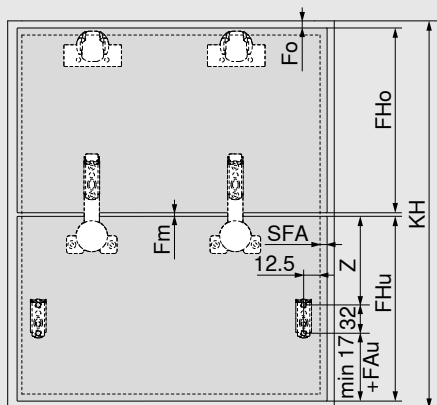
FHu Lower front height

TKH Theoretical cabinet height

Wooden fronts and wide aluminium frames

Planning

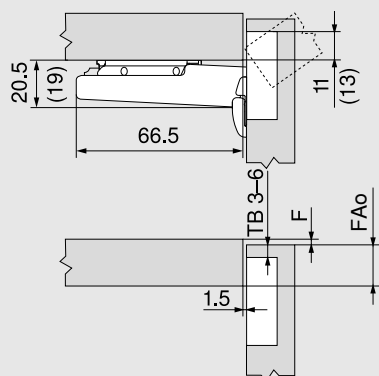
Front assembly



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

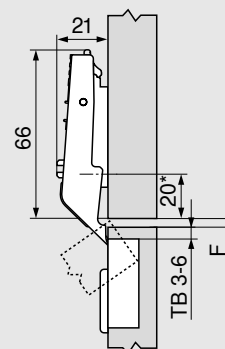
Boss drilling distance TB

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

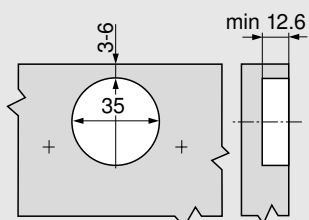
* 37 mm for cruciform mounting plates (37/32)

Boss drilling distance TB

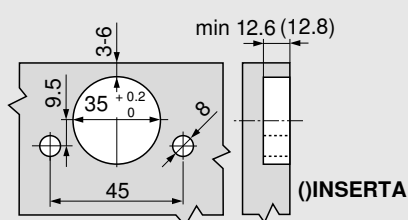
MD	Horizontal gap F between fronts (mm)																
																3	4
0																6	5
3																	4
6																	
9																	

MD Mounting plate spacing (mm)

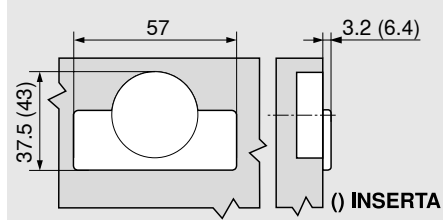
Screw-on assembly



INSERTA | EXPANDO assembly



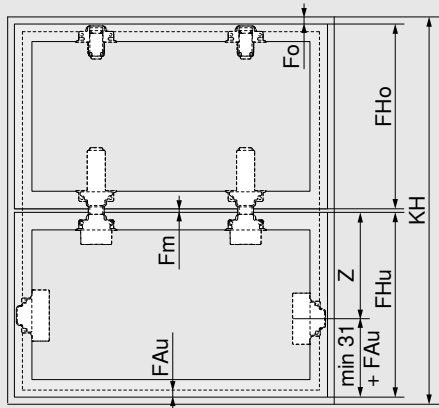
Hinge boss dimensions



Narrow aluminium frames

Planning

Front assembly



Cabinet height KH (mm)

Z (mm)

480–519

188

520–1200

207

Fo Top gap

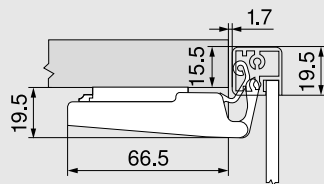
Fm Middle gap

FAu Bottom front overlay

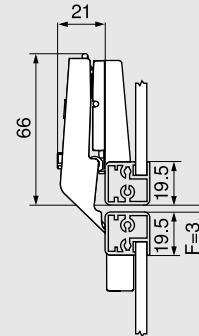
FHo Front height top

FHu Lower front height

CLIP top 120° aluminium frame door hinge



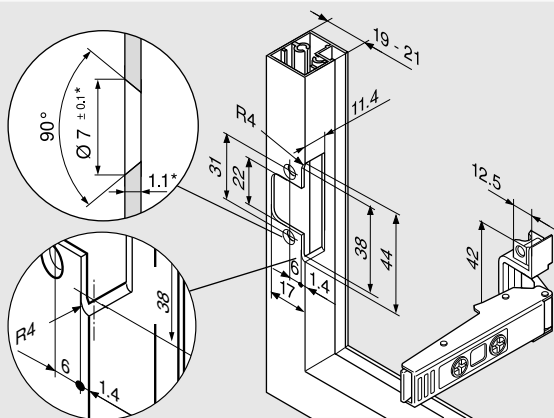
CLIP top aluminium centre hinge



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



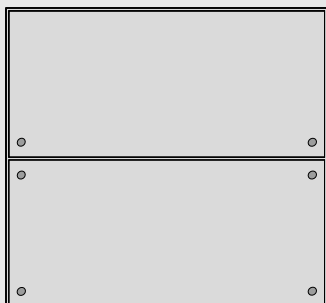
Find more information on
assembly and adjustment of
AVENTOS HF top at

www.blum.com/hftopassembly

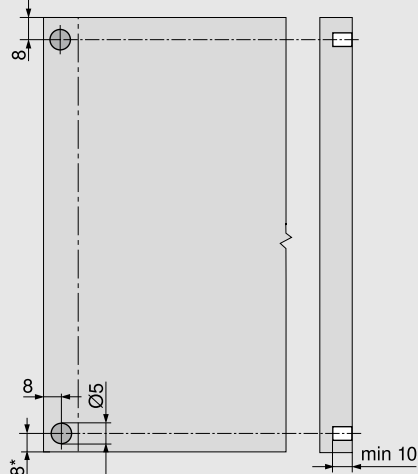
SERVO-DRIVE for AVENTOS HF top

Planning

Blum distance bumper (SERVO-DRIVE application only)



Insert Blum distance bumper (do not glue)



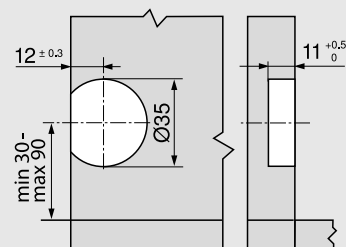
Recommendation for aluminium frames

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-on¹

 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

¹ 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

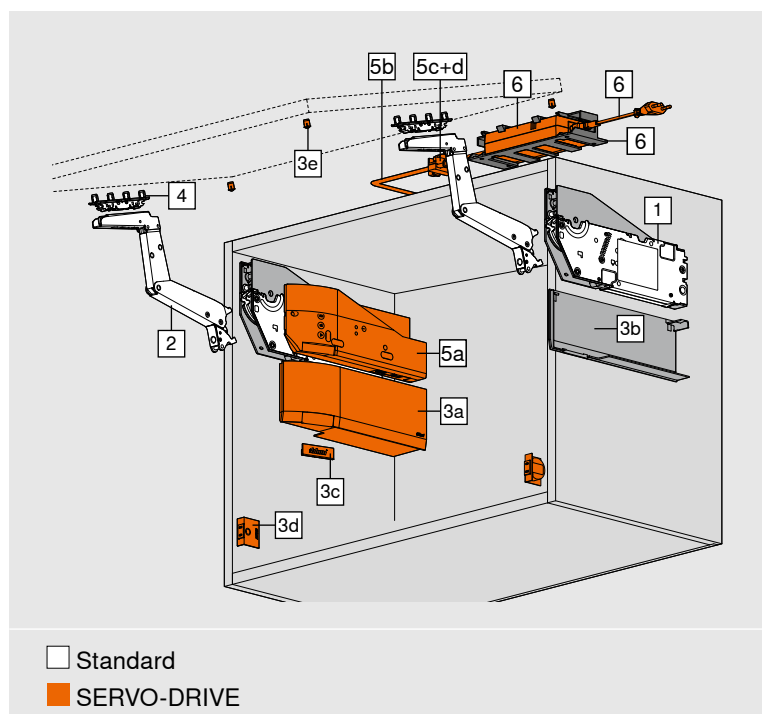
 78Z550AT11

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		Lift mechanism set
		Fixing with pre-mounted system screws
	KH (mm)	FG (kg)
	350–450	2.00–11.50
	450–540	2.50–12.50
	480–660	2.75–15.25
	650–800	3.50–18.50
FG Front weight including double handle weight		
KH Cabinet height		
Consisting of:		
1	2 x	Symmetrical lift mechanism Incl. pre-mounted system screws


1		Lift mechanism set
		Fixing with chipboard screws with positioning system
	KH (mm)	FG (kg)
	350–450	2.00–11.50
	450–540	2.50–12.50
	480–660	2.75–15.25
	650–800	3.50–18.50
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 ¹	20S4200
	Narrow aluminium frames	Screw-on ²	20S4200A
Consisting of:			
4	2 x	Front fixing bracket	
¹ 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.			
² 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

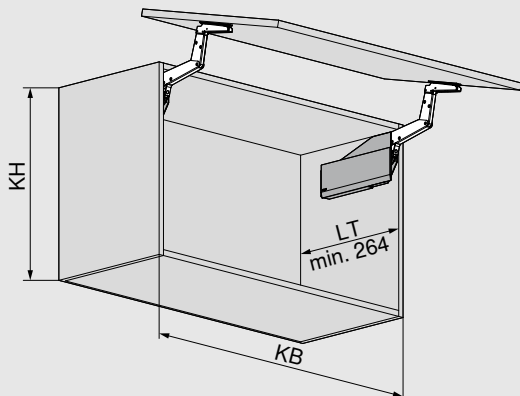
3c		Branding element		
		Material	Colour	
		K	SW-M, TGR	IN-G
Printed *		2 x	ABD.1000.BL	ABD.1009.BL
Embossed *		2 x	ABD.1000.BT	ABD.1009.BT
Plain		2 x	ABD.1000	ABD.1009
* With Blum logo				
From 1000 pcs:				
Customised, printed branding element				
From 5000 pcs:				
Customised, embossed branding element				

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

Wooden fronts and wide aluminium frames

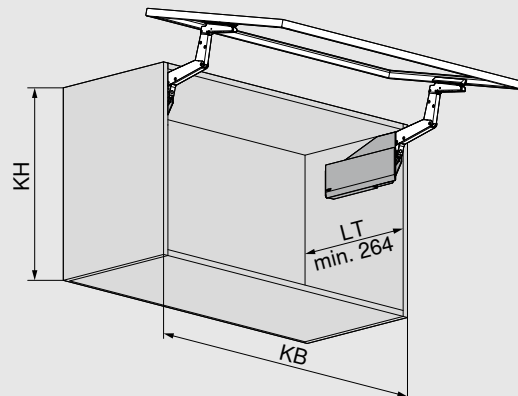


KB Cabinet width

KH Cabinet height

LT Internal cabinet depth

Narrow aluminium frames



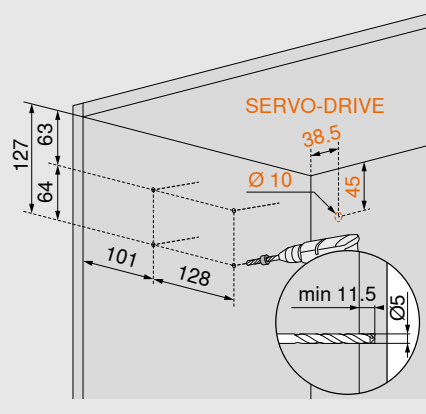
KB Cabinet width

KH Cabinet height

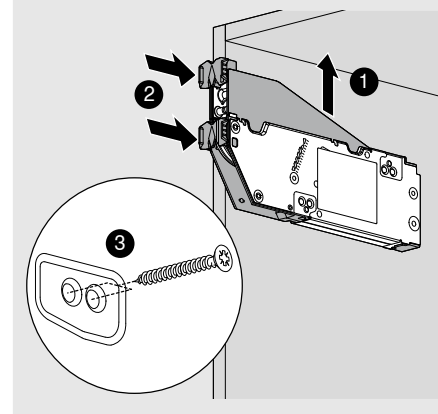
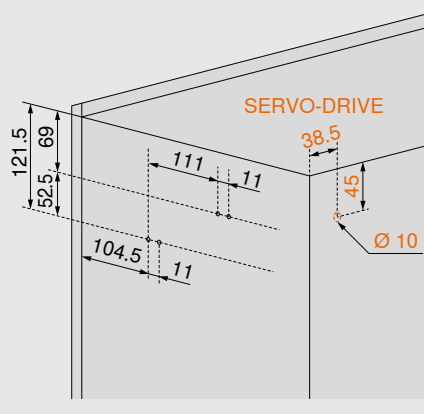
LT Internal cabinet depth

Drilling position

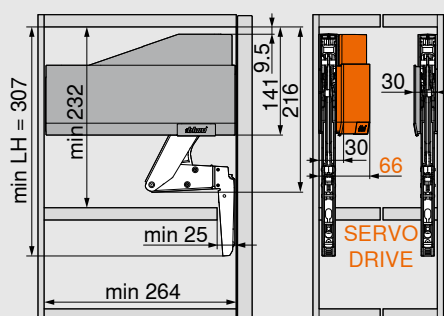
System screws



Chipboard screws incl. positioning system

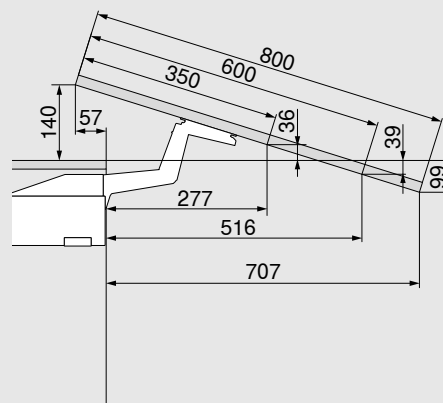


Space requirement



LH Internal cabinet height

Front setting

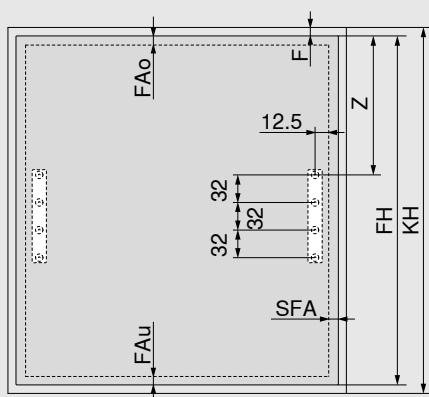


Dimensions depend on tilt adjustment

Planning

Front assembly

Wooden fronts and wide aluminium frames



FAo Upper front overlay

FAu Bottom front overlay

F Gap

Z 195 + FAo

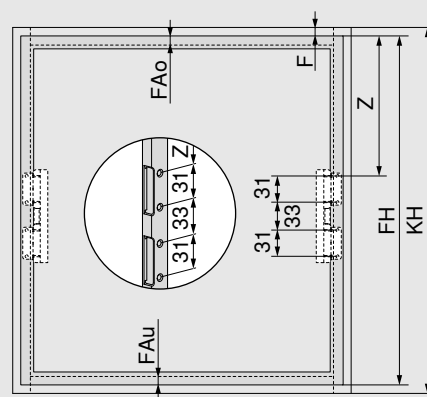
FH Front height

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

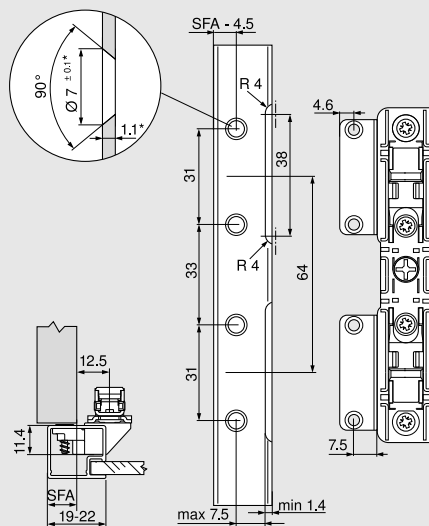
Z 195.5 + FAo

FH Front height

KH Cabinet height

Application against a wall: minimum 5 mm gap

Narrow aluminium frames

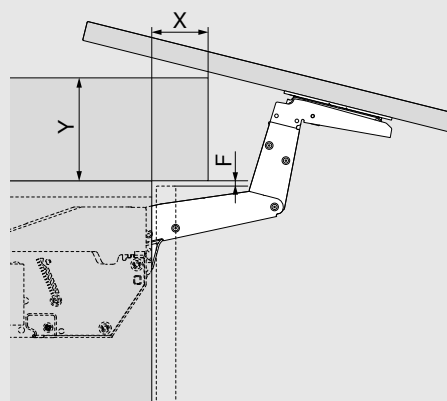


For frame width 19 mm, an SFA of 11-18 mm is possible.

* 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			

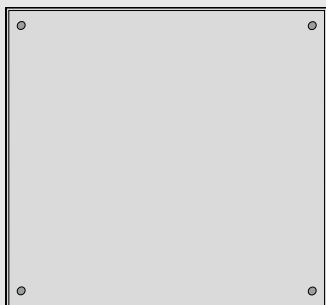


Find more information on
assembly and adjustment of
AVENTOS HS top at
www.blum.com/hstopassembly

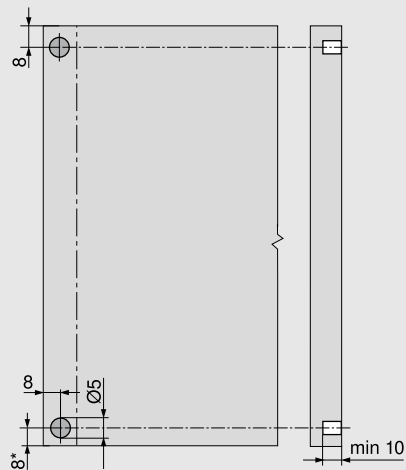
SERVO-DRIVE for AVENTOS HS top

Planning

Blum distance bumper (SERVO-DRIVE application only)



Insert Blum distance bumper (do not glue)



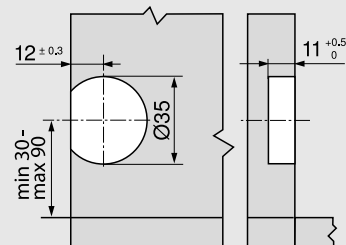
Recommendation for aluminium frames

Drill hole into cabinet side for Blum distance bumper

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

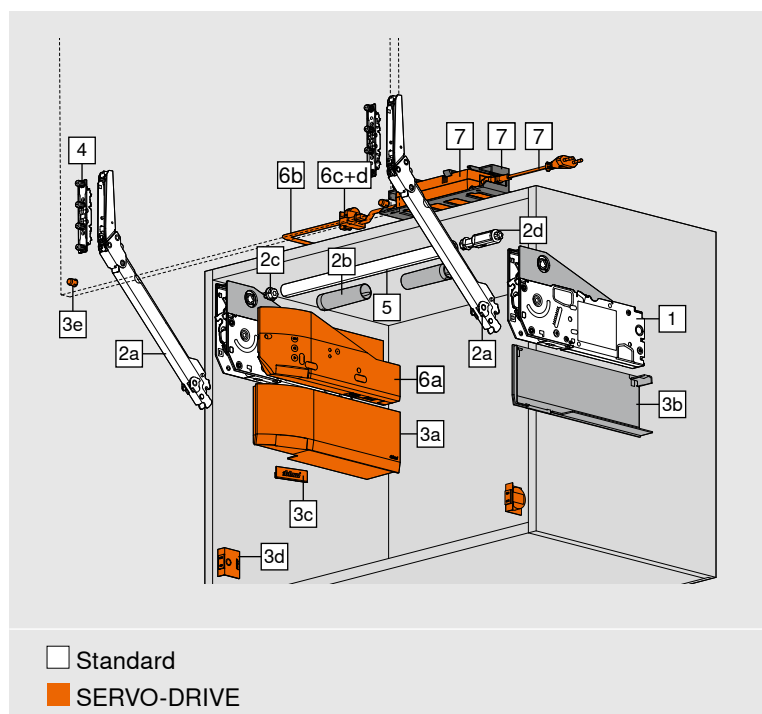
* From cabinet bottom edge for fronts that protrude below

SERVO-DRIVE switch



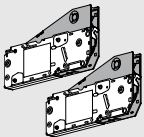
AVENTOS HL top

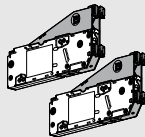


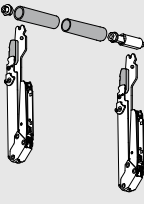


- Ideal for small one-part fronts
- Cabinet height 300-580 mm
- Cabinet width up to 1800 mm
- Internal depth of at least 264 mm
- Integrated BLUMOTION setting
- SERVO-DRIVE electrical motion support system
- Light operating forces
- Variable stop
- Standardised position of the lift mechanism and front 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"/> Standard <input checked="" type="checkbox"/> SERVO-DRIVE	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"/> Standard <input checked="" type="checkbox"/> SERVO-DRIVE	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"/> Standard <input checked="" type="checkbox"/> SERVO-DRIVE	Lever arm set
		
Colour		Material
NI		Steel
KH (mm)		FG (kg)
300–339		1.50–9.00
340–389		1.75–10.00
390–540		2.00–12.25
480–580		2.50–14.00
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		
		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 1	20S4200
		Narrow aluminium frames	Screw-on 2	20S4200A
Consisting of:				
4	2 x	Front fixing bracket		
¹ 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.				
² 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		Cross stabiliser		
		Length (mm)		
		1076		22Q1076U
For cutting to size				
Cutting		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		
		Material		
		Zinc		22Q080Z

Consisting of:				
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		
Cutting for 5		Internal cabinet width LW/2 - 105 mm		

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

Consisting of:				
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		
		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

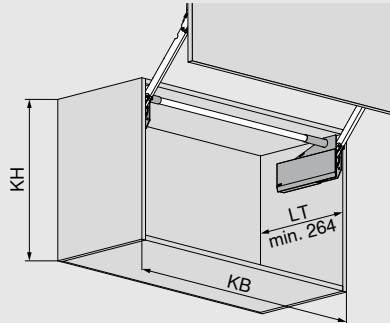
* With Blum logo				
From 1000 pcs:				
Customised, printed branding element				
From 5000 pcs:				
Customised, embossed branding element				

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

Planning

Wooden fronts and wide aluminium frames

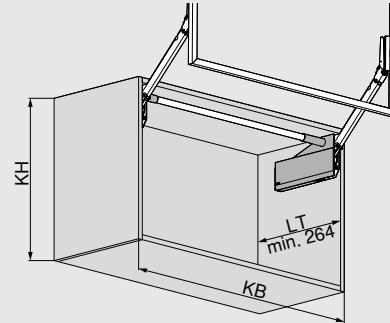


KB Cabinet width

KH Cabinet height

LT Internal cabinet depth

Narrow aluminium frames



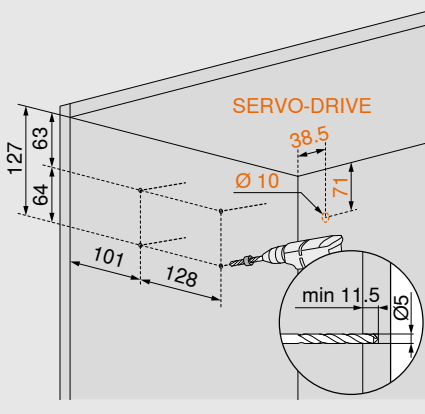
KB Cabinet width

KH Cabinet height

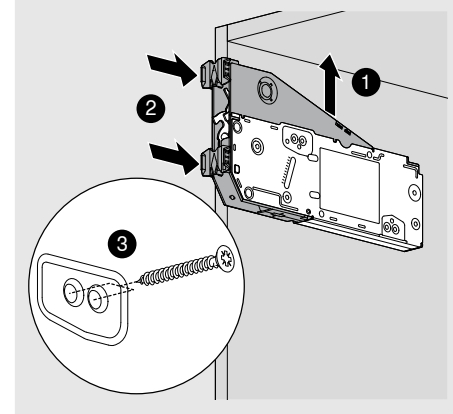
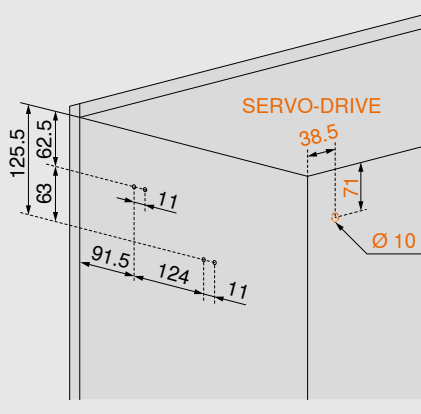
LT Internal cabinet depth

Drilling position

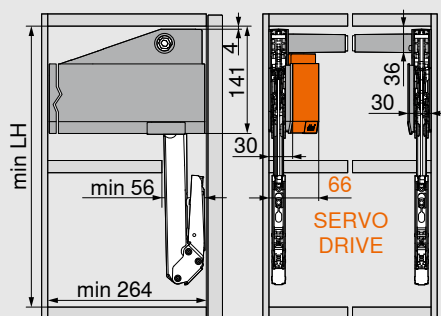
System screws



Chipboard screws incl. positioning system



Space requirement



Lever arm set

LH min. (mm)¹

22L3200

255

22L3500

295

22L3800

345

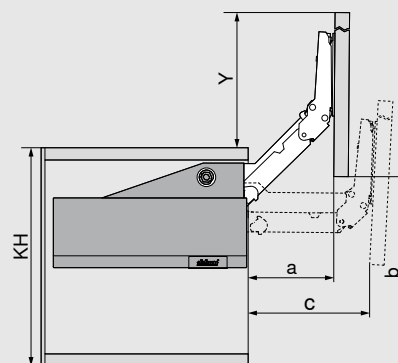
22L3900

399

¹ Dimensions based on lower gap F = 0 mm

LH Internal cabinet height

Front setting



Lever arm set

a (mm)

b (mm)¹

c (mm)

Y (mm)²

22L3200

112

272.5

155.5

272.5

22L3500

140.5

340

195

340

22L3800

176

425

245

425

22L3900

214.5

517

297.5

517

¹ Dimensions based on lower gap F = 0 mm

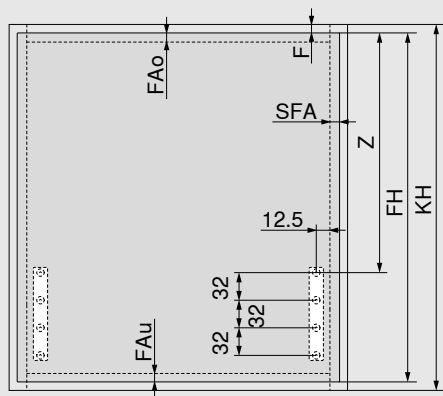
² Dimensions based on top gap F = 0 mm

KH Cabinet height

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

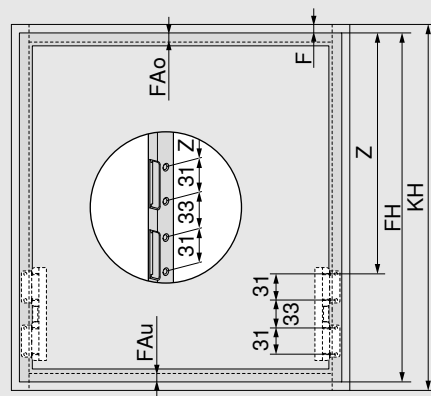
FH Front height

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

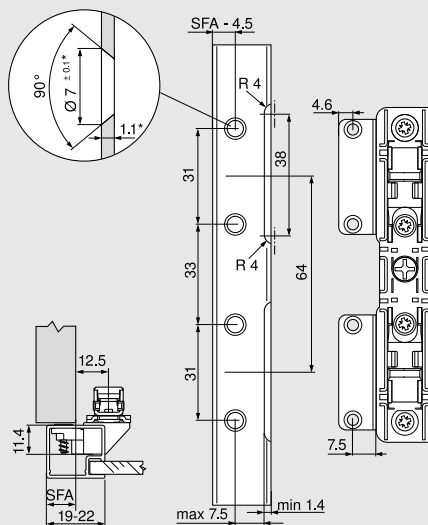
F Gap

FH Front height

KH Cabinet height

Application against a wall: minimum 5 mm gap

Narrow aluminium frames

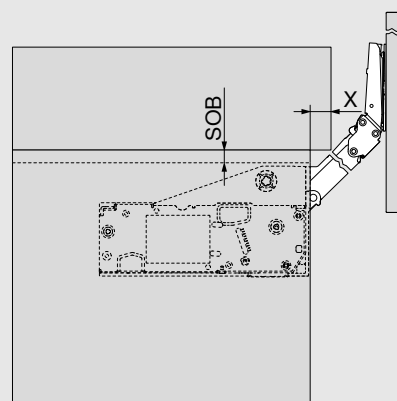


For frame width 19 mm, an SFA of 11-18 mm is possible.

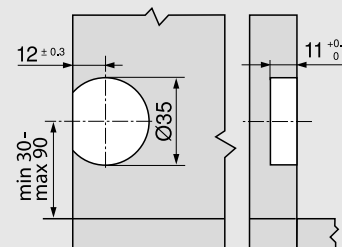
* When changing material thickness, adjust the assembly dimensions accordingly

SFA Side front overlay

Space requirement – cornice | crown moulding



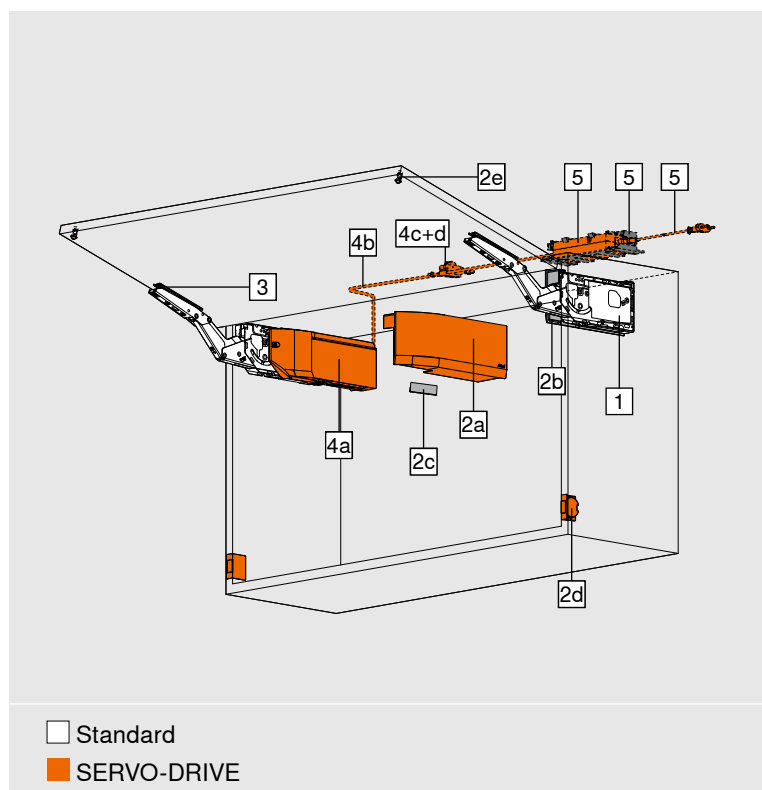
Top panel thickness (SOB)	X (mm)
16 mm	25
17 mm	26
18 mm	27
19 mm	28
20 mm	29



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.

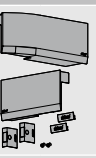
1		Lift mechanism set		
		Fixing with pre-mounted system screws		
		LF	OW	
		420–1610	75°–107°	22K2310
		930–2800	75°–107°	22K2510
		1730–5200	75°–107°	22K2710
		3200–9000	75°–107°	22K2910
Max. front weight 18 kg if using two lift mechanisms.				
LF Power factor				
OW Opening angle (infinitely variable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

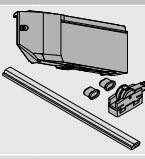
3		Front fixing bracket set		
		Version	Fixing method	
		Wooden fronts and wide aluminium frames	Screw-on ¹	20S4200
		Narrow aluminium frames	Screw-on ²	20S4200A
Consisting of:				
3	2 x	Front fixing bracket		

¹ 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.

² 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

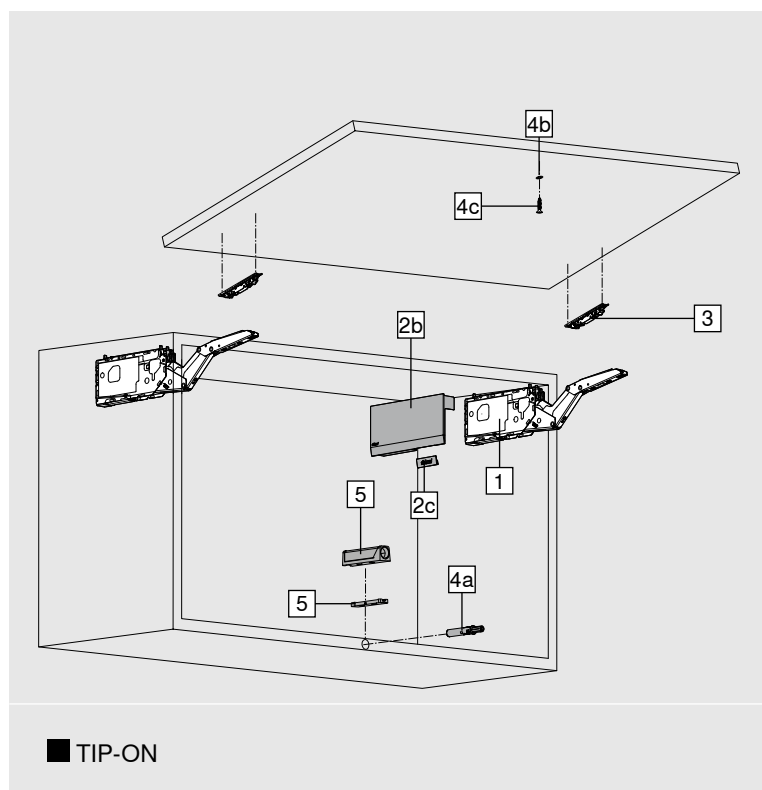
From 5000 pcs:

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


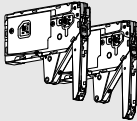
Note

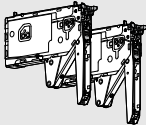
Power factor (LF) =

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		
Consisting of:		
-	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 ¹
	Narrow aluminium frames	Screw-on ²
20S4200		
20S4200A		
Consisting of:		
3	2 x	Front fixing bracket
¹ 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.		
² 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		
Consisting of:		
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

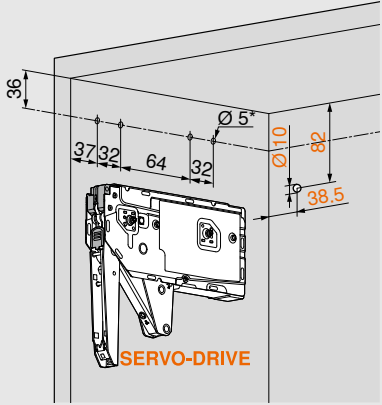
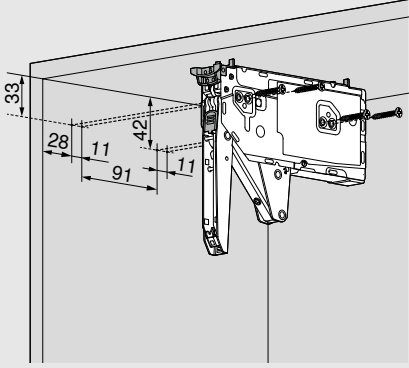
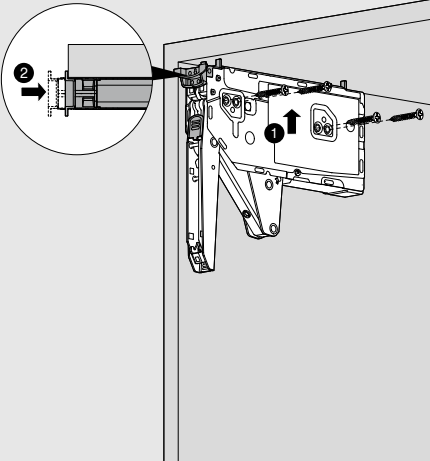
2c		Branding element
	Material	Colour
	K	SW-M, TGR
Printed *	2 x	ABD.1000.BL
Embossed *	2 x	ABD.1000.BT
Plain	2 x	ABD.1000
* With Blum logo		
From 1000 pcs:		
Customised, printed branding element		
From 5000 pcs:		
Customised, embossed branding element		

Colours and material

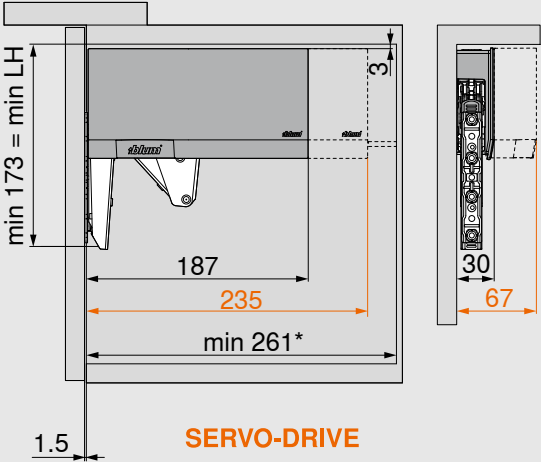
Name	
SW	Silk white
HGR	Light grey
TGR	Dark grey
R7036	RAL 7036 platinum grey
SW-M	Silk white matt
CS	Carbon black
NI-L	Nickel lacquered
IN-G	In-mould brushed stainless steel
K	Nylon

Standard, SERVO-DRIVE and TIP-ON

Planning

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

Space requirement

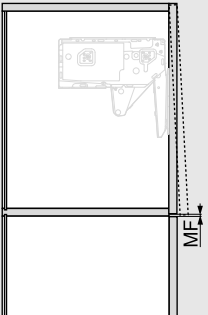


* Min. 261 mm with visible wall hanging bracket

Note: Cabinet height max. 600 mm

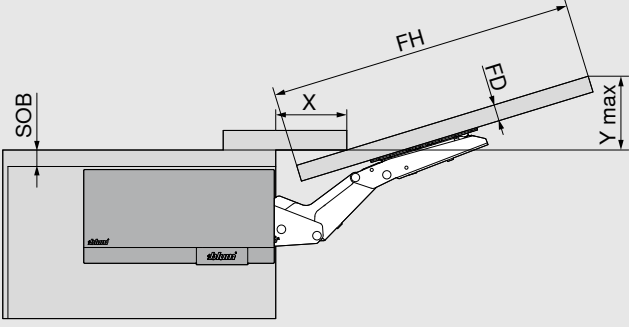
LH Internal cabinet height

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

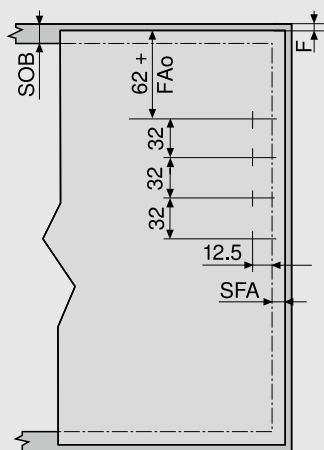
FH Front height

Standard, SERVO-DRIVE and TIP-ON

Planning

Front assembly

Wooden fronts and wide aluminium frames



FAo Max. 25.4 mm

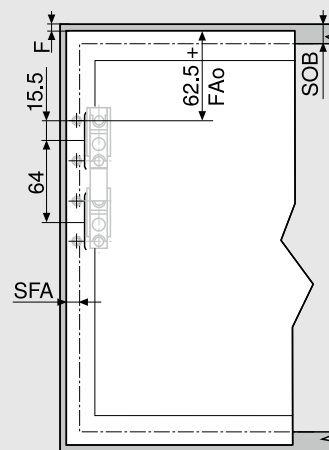
FAo Upper front overlay

SOB Top panel thickness

SFA Side front overlay

F Gap

Narrow aluminium frames



FAo Max. 25.4 mm

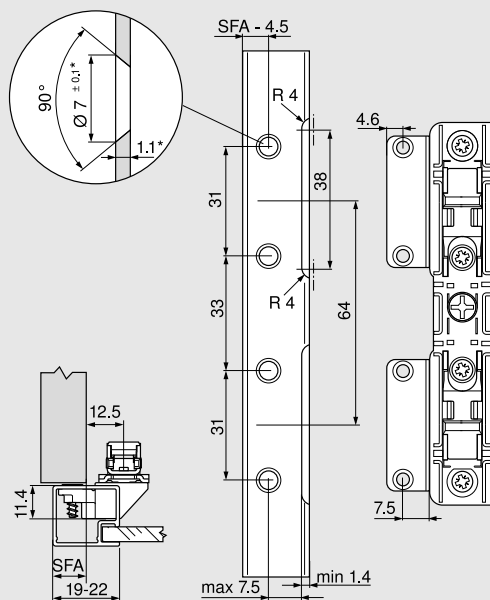
FAo Upper front overlay

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

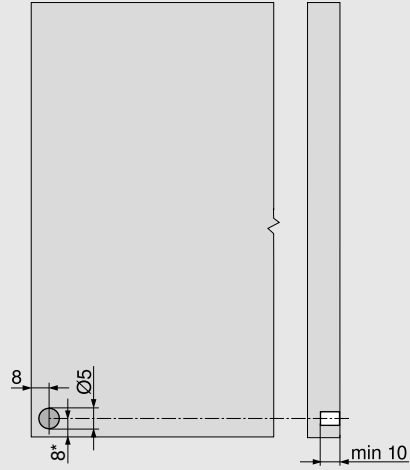
SERVO-DRIVE for AVENTOS HK top

Planning

Blum distance bumper (SERVO-DRIVE application only)



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



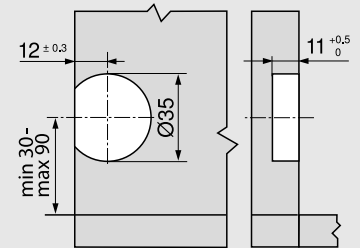
Recommendation for aluminium frames

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

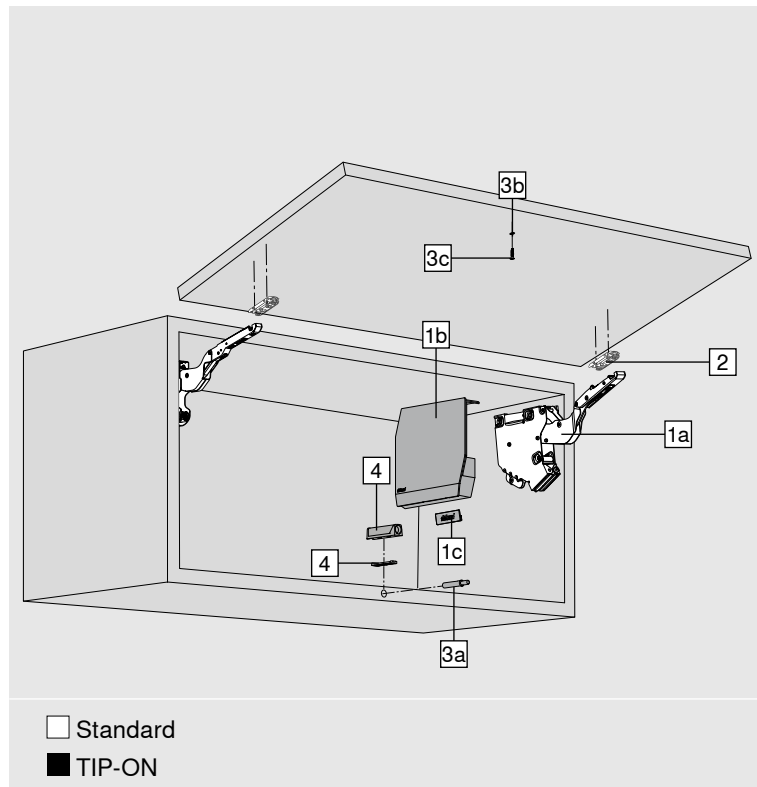
SERVO-DRIVE switch



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


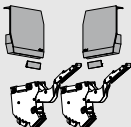
Note


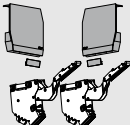

Power factor (LF) =

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°	¹	20K2B00.06
	400–1000	107°		20K2C00.06
	960–2215	107°		20K2E00.06
¹ 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° ¹	20K2B00T06
		400–1000	107°	20K2C00T06
		960–2215	107°	20K2E00T06
¹ 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 ¹ 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

¹ 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

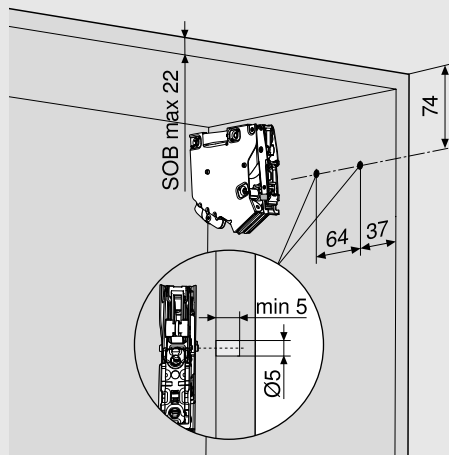
Colours and material

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

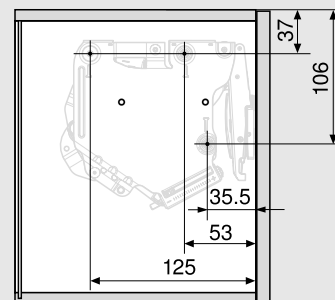
Planning

Peg position



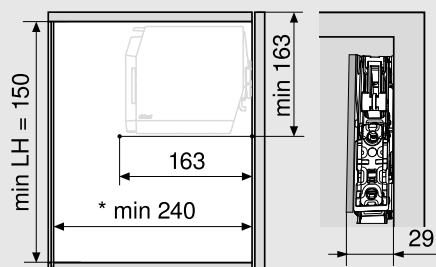
SOB Top panel thickness

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

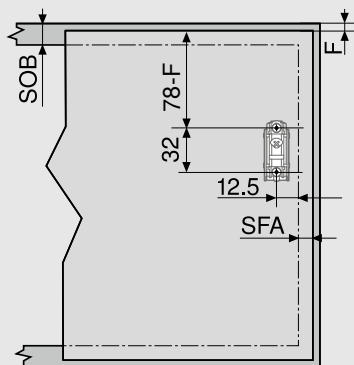
LH Internal cabinet height

Standard and TIP-ON

Planning

Front assembly

Wooden fronts and wide aluminium frames

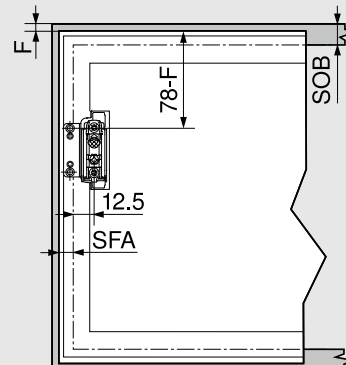


SOB Top panel thickness

SFA Side front overlay

F Gap

Narrow aluminium frames

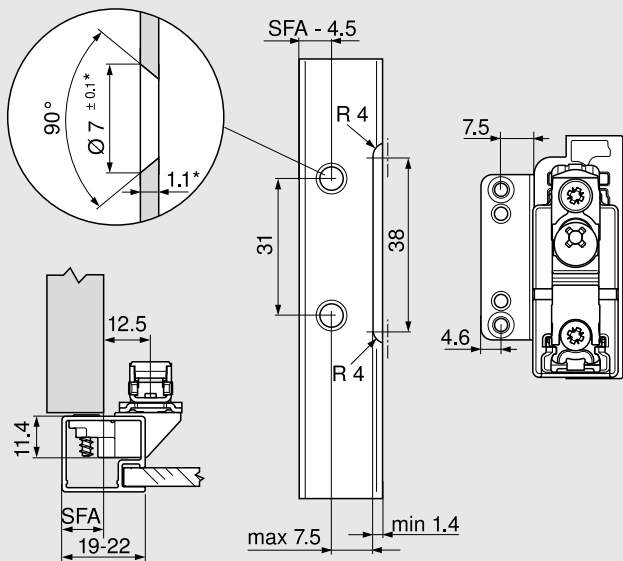


SOB Top panel thickness

SFA Side front overlay

F Gap

Narrow aluminium frames

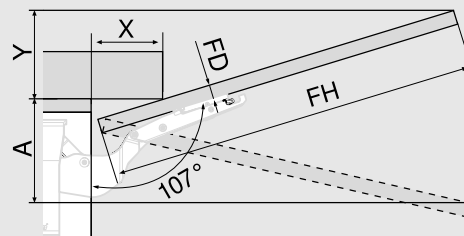


For frame width 19 mm, an SFA of 11-18 mm is possible.

* When changing material thickness, adjust the assembly dimensions accordingly

SFA Side front overlay

Space requirement – cornice | crown moulding

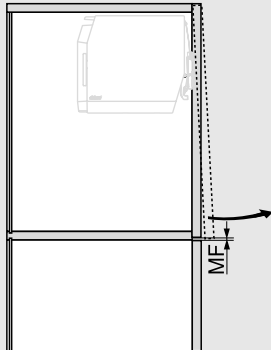


Opening angle stop			Space requirement (mm)		
Unsprung			$Y = FH \times 0.29 - 15 + FD$		
100°			$Y = FH \times 0.17 - 15 + FD$		
75°			$A = FH \times 0.26 + 15 - FD$		
FD (mm)	16	19	22	26	-
X (mm)	70	59	49	35	-
FD Front thickness					
FH Front height					

Standard and TIP-ON

Planning

Minimum gap



Minimum gap MF is 2 mm

Further planning information for TIP-ON –
see page 52



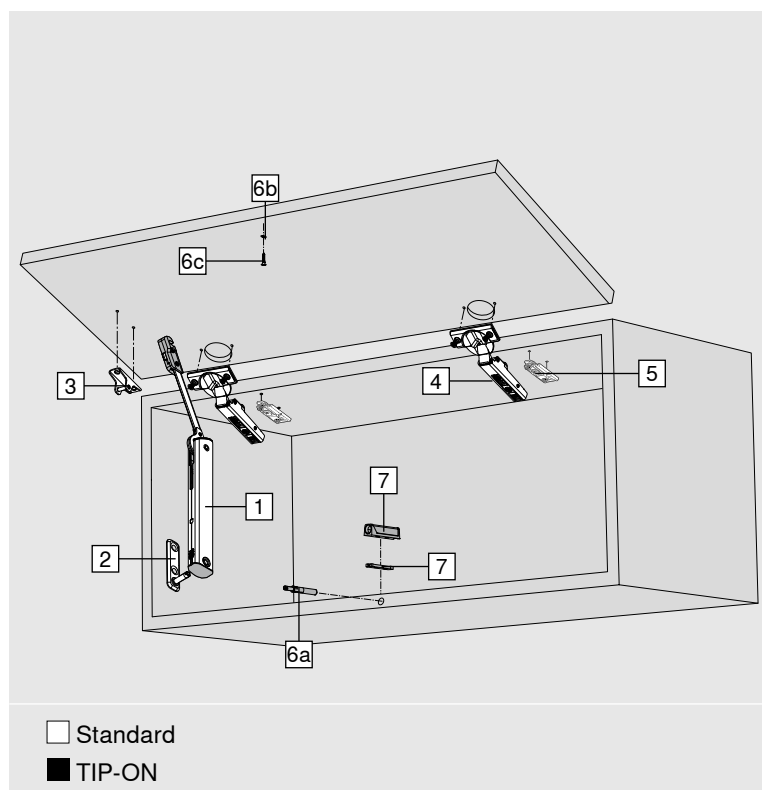
Find more information on
assembly and adjustment of
AVENTOS HK-S at

www.blum.com/aventos-hks-assembly

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 ¹	105°	20K1101	
	500–1500 ¹	105°	20K1301	
	800–1800 ¹	105°	20K1501	

The power factor (LF) is doubled when used on both sides


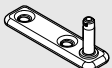
¹ For hinges with smaller opening angles, the opening angle will depend on the hinge used



LF	Power factor
OW	Opening angle

1		Lift mechanism for TIP-ON		
	LF	OW		
	180–800 ¹	105°	20K1101T	
	500–1200 ¹	105°	20K1301T	
	800–1600 ¹	105°	20K1501T	
The power factor (LF) is doubled when used on both sides				
¹ 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 ¹
		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 ¹		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°


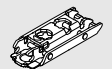
4		CLIP top 110° hinge
		
Boss		Spring
INSERTA		Unsprung
		70T3590.TL
Screw-on ¹		Unsprung
		70T3550.TL

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 ¹		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

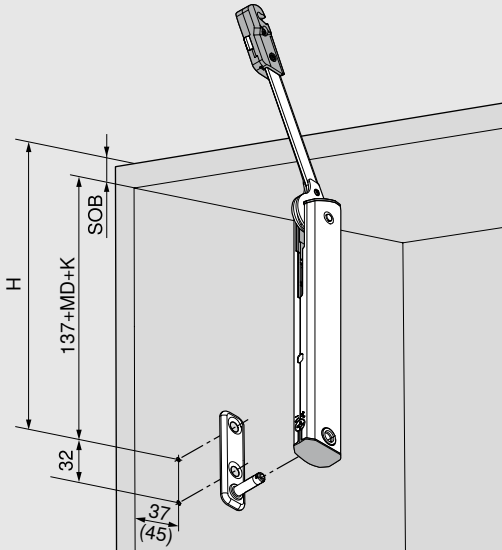
Name	
SW	Silk white
SZ	Black
R7036	RAL 7036 platinum grey
CS	Carbon black
NI-L	Nickel lacquered

¹ 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

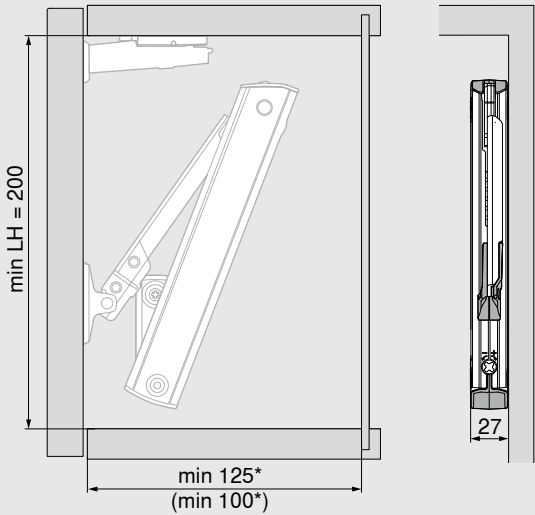
Cranked hinge arm 9.5 mm

Double cranked arm 18 mm

SOB Top panel thickness

() Internal cabinet depth 100 mm

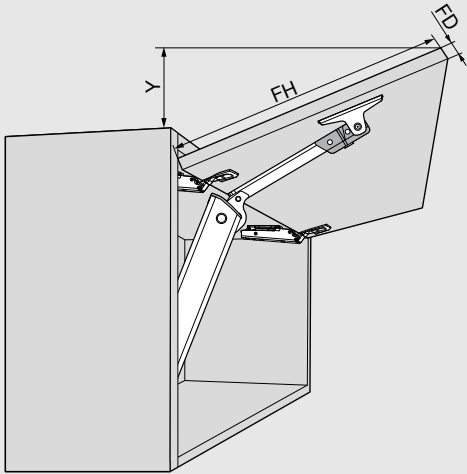
Space requirement



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

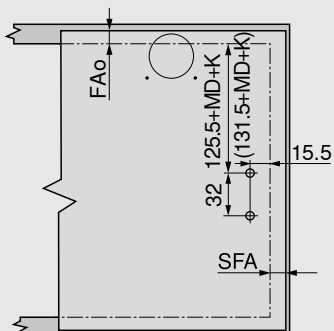
FH Front height

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

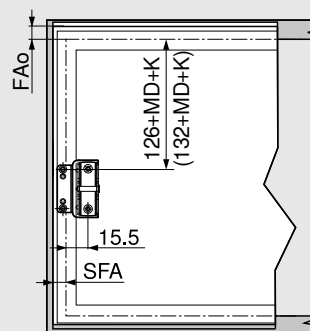
Straight hinge arm 0 mm

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

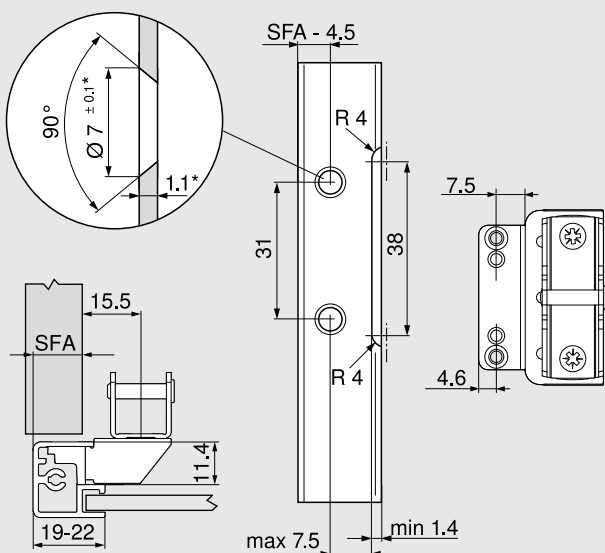
Straight hinge arm 0 mm

Cranked hinge arm 9.5 mm

Double cranked arm 18 mm

() Internal cabinet depth 100 mm

Narrow aluminium frames

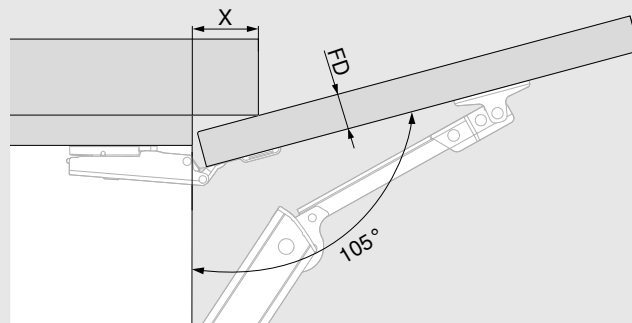


For frame width 19 mm, an SFA of 11-18 mm is possible.

* When changing material thickness, adjust the assembly dimensions accordingly

SFA Side front overlay

Space requirement – cornice | crown moulding



CLIP top BLUMOTION 110° hinge

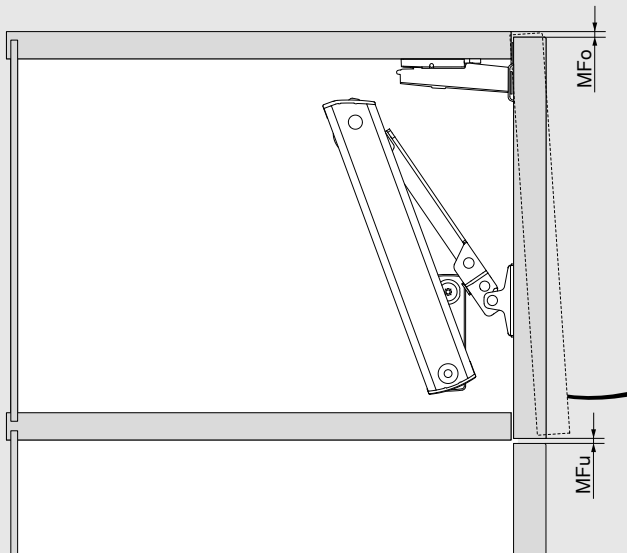
FD (mm)	16	19	22	24
X (mm)	45	34	23	15

FD Front thickness

Standard and TIP-ON

Planning

Minimum gap

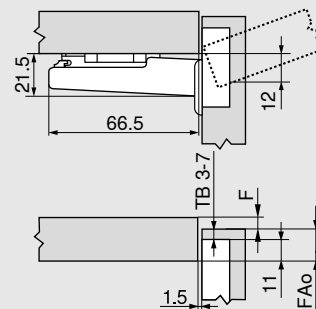


MFo Minimum gap at the top depending on the hinge used

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



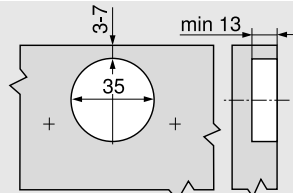
Boss drilling distance TB (mm)	Front thickness FD (mm)													
	16	18	19	20	21	22	23	24	25	26	28	30		
3	0.5	0.8	1.0	1.2	1.5	1.8	2.2	2.7	3.5	4.3	Δ	Δ		
4	0.5	0.8	1.0	1.2	1.4	1.7	2.0	2.5	3.1	3.8	Δ	Δ		
5	0.5	0.8	0.9	1.2	1.4	1.7	2.0	2.4	2.9	3.4	Δ	Δ		
6	0.5	0.8	0.9	1.2	1.3	1.6	1.9	2.3	2.7	3.2	Δ	Δ		
7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

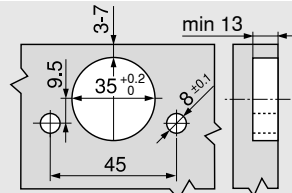
For +2 mm height adjustment, add:

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

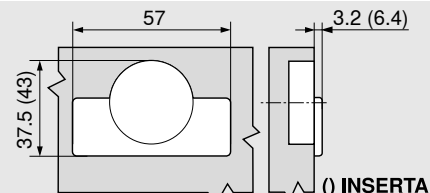
Screw-on assembly



INSERTA assembly



Hinge boss dimensions



Further planning information for TIP-ON – see page 52



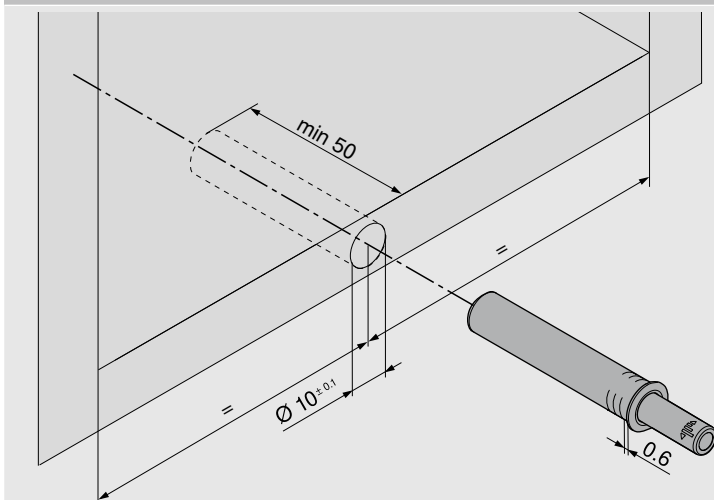
Find more information on
assembly and adjustment of
AVENTOS HK-XS at

www.blum.com/aventos-hkxs-assembly

TIP-ON

Planning

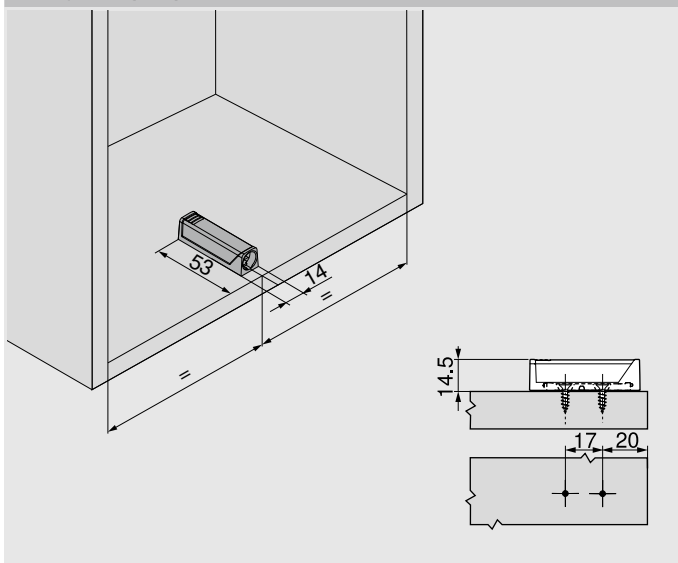
TIP-ON for drilling fixing position



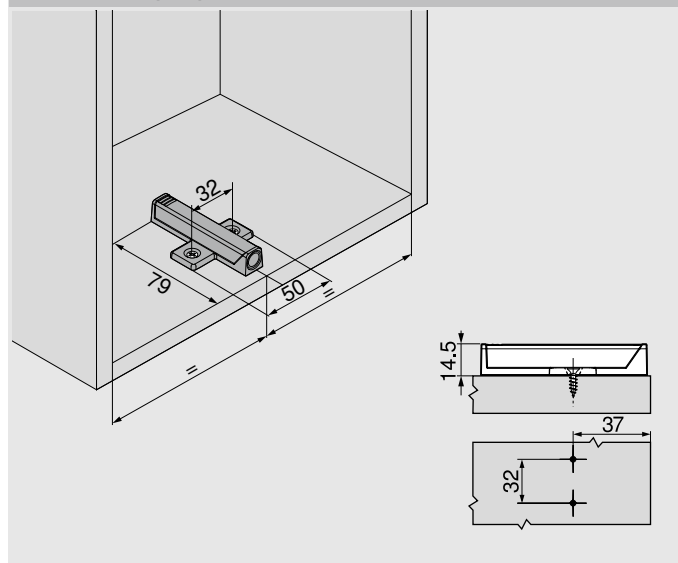
For stay lifts up to and including a height of 600 mm

TIP-ON adapter plate fixing position

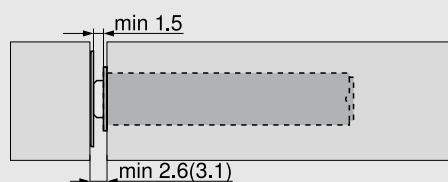
Straight adapter plate – short version



Cruciform adapter plate



Installation dimensions for front gap



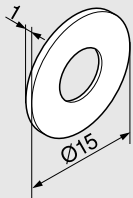
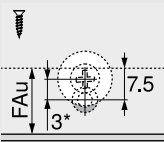
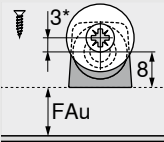
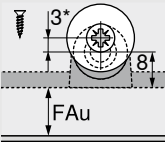
min. 2.6 mm with glue-on catch plate

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

TIP-ON

Planning

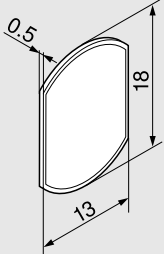
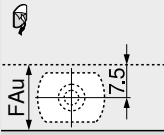
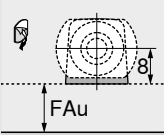
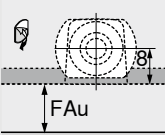
Screw-on catch plate planning

	 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



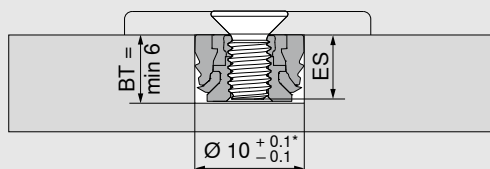
- EXPANDO T – pre-assembled fixing system
- Thin fronts of 8 mm or more
- Different front materials
- 3 different applications –
lift systems | hinge systems | box systems

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

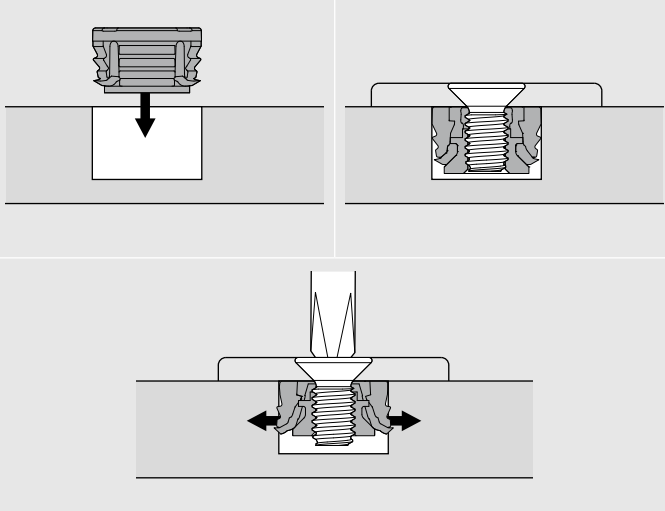
Screws with M4 thread have to be used for EXPANDO T single

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 ²)	1.5
MDF (transverse tensile strength > 0.6 N/mm ²)	1.5
HDF	2
HPL	2
Mineral composites	2
Granite stone – nero assoluto	3
Artificial stone – quartz composite	3
Ceramic panels	3

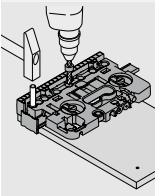
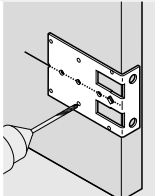
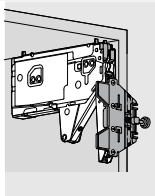
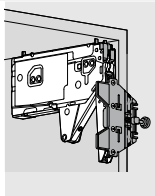
Limitation of liability

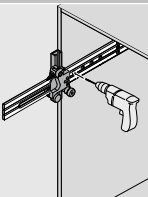
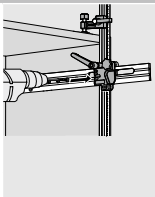
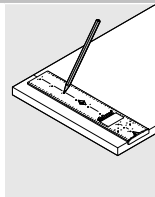
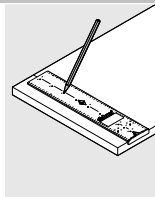
Blum accepts no liability for the use of EXPANDO T in combination with materials not listed or fittings from other manufacturers. It is recommended that assembly be carried out by an experienced furniture manufacturer.

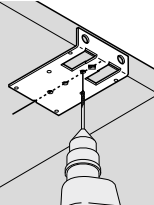
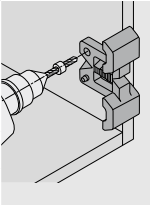
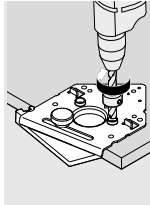
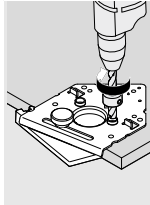
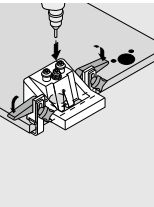
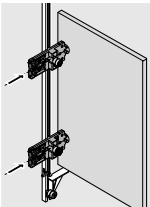
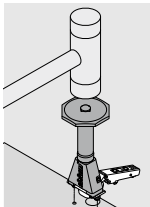
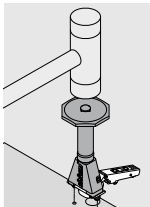
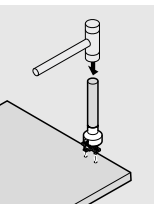
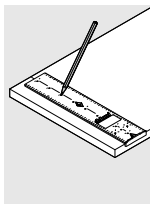


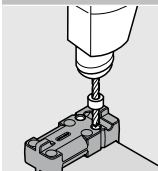
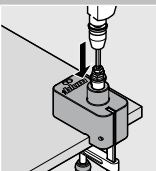
Find more information on
assembly and adjustment of EXPANDO T at
www.blum.com/expando-t-9

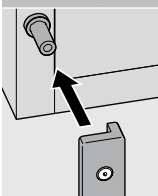
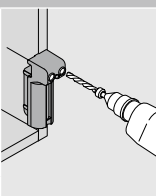
Assembly devices

Front assembly					
	Universal drilling template			Template	
	ZML.0040.02				
	Marking template for AVENTOS HK top front fixing bracket			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			Universal marking template	
	65.5340.01			65.5340.01	

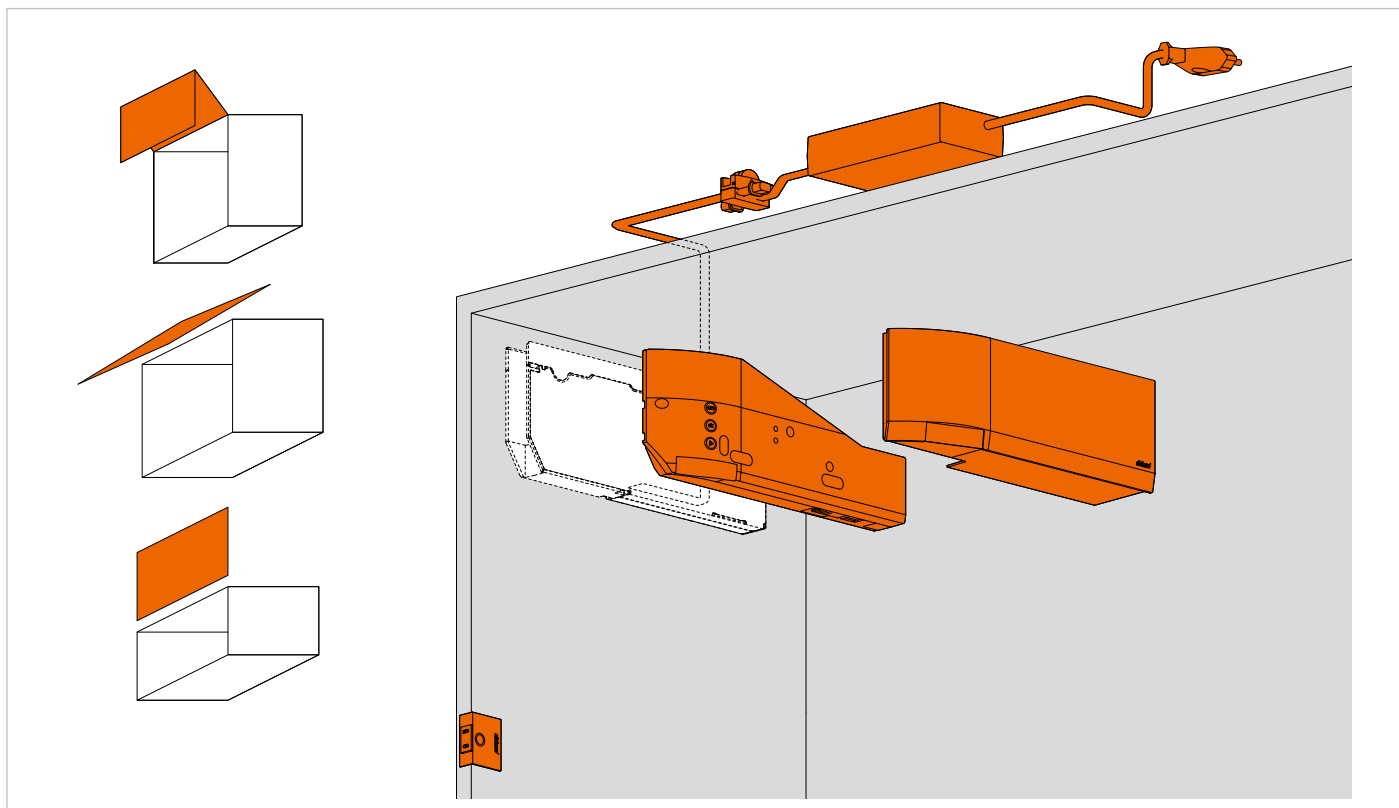
Assembly – hinge systems					
	Template			Drilling template for mounting plates	
	65.5300				
	Drilling template for hinges			Drilling template for hinges	
	Ø (mm)				
	8 2.5				65.059A
		2.5	65.055A		
	ECODRILL			Drilling template for hinge systems	
	M31.1000				
	Insertion tool for hinges			Insertion 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

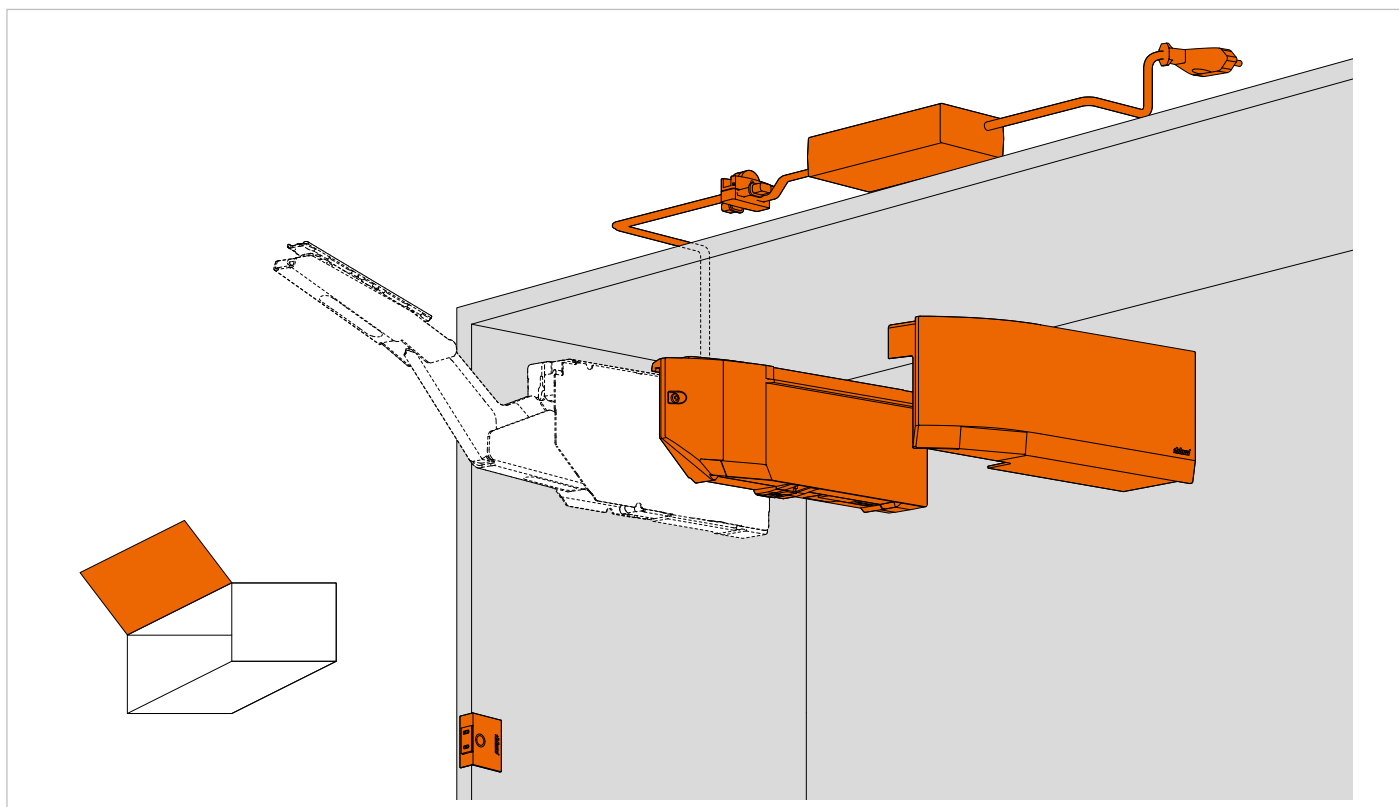
Assembly – TIP-ON			
	Positioning template for catch plate		Drilling template for BLUMOTION TIP-ON
65.5210.01		65.5010	

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

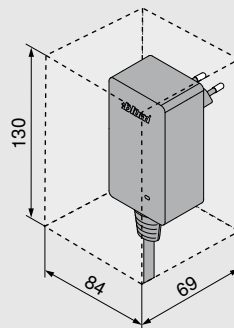
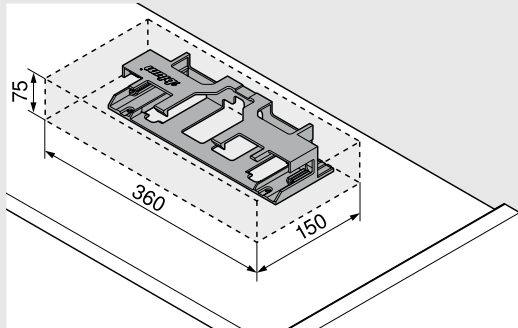
Colours and material

Name	
WGR	White grey
SZ	Black
WS	White
K	Nylon

SERVO-DRIVE power supply unit and accessories

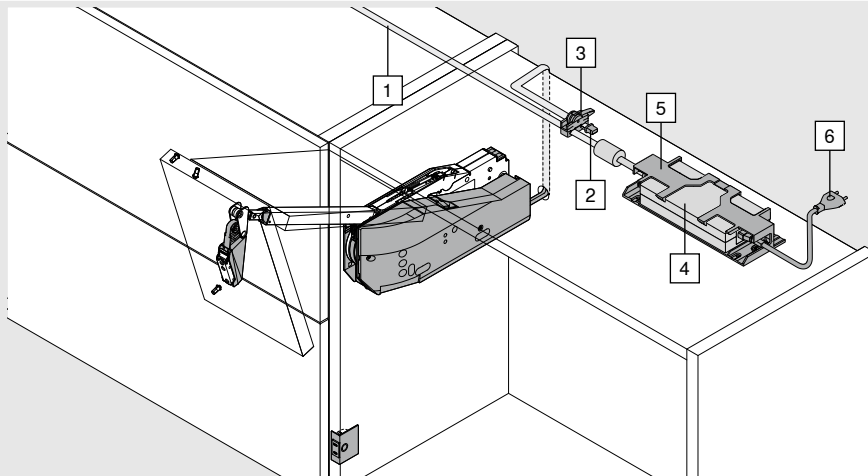
Planning

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.

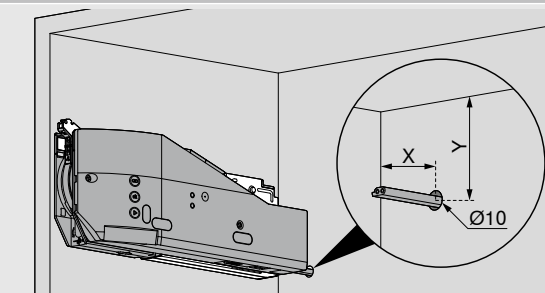
Assembly on the cabinet top panel



- 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

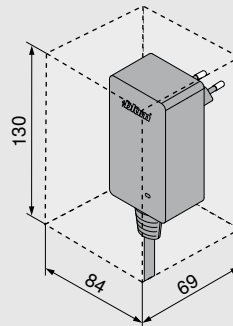
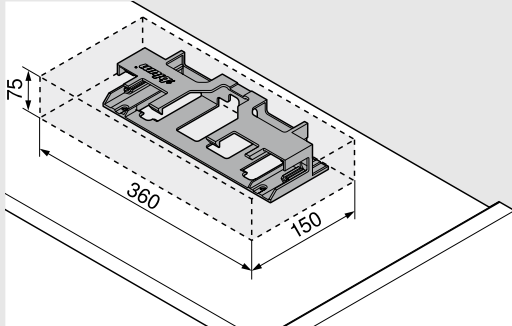


			X (mm)	Y (mm)
AVENTOS HF top	Cabinet height KH (mm)	480–519	38.5	102
		520–1200	38.5	124
AVENTOS HS top			38.5	45
AVENTOS HL top			38.5	71

SERVO-DRIVE power supply unit and accessories

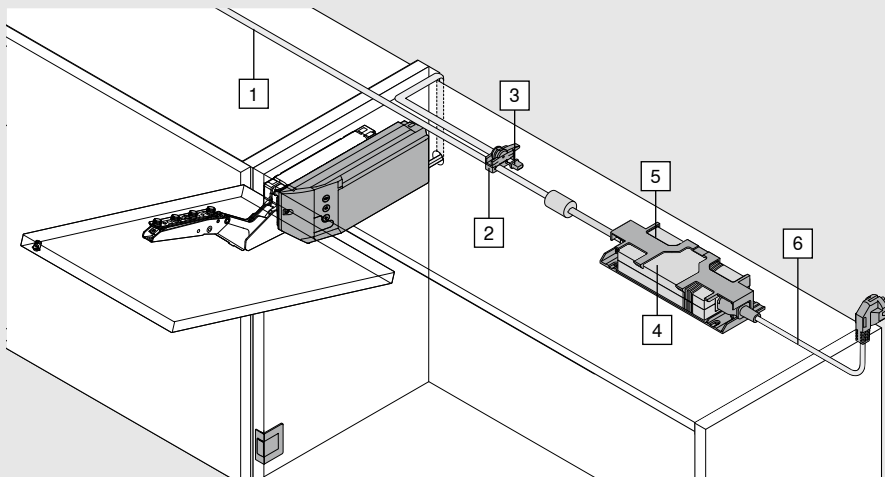
Planning

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.

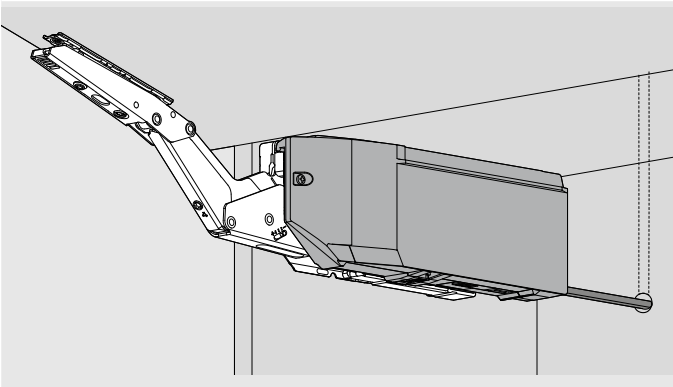
Assembly on the cabinet top panel



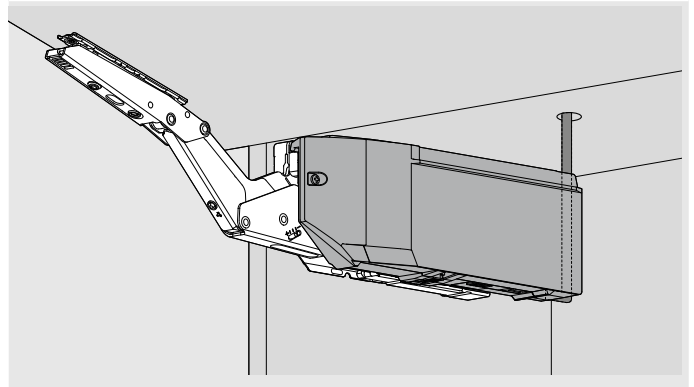
- 1 SERVO-DRIVE distribution cable
- 2 Connecting node
- 3 Cable end protector
- 4 SERVO-DRIVE power supply unit
- 5 Power supply unit housing
- 6 Flex

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

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