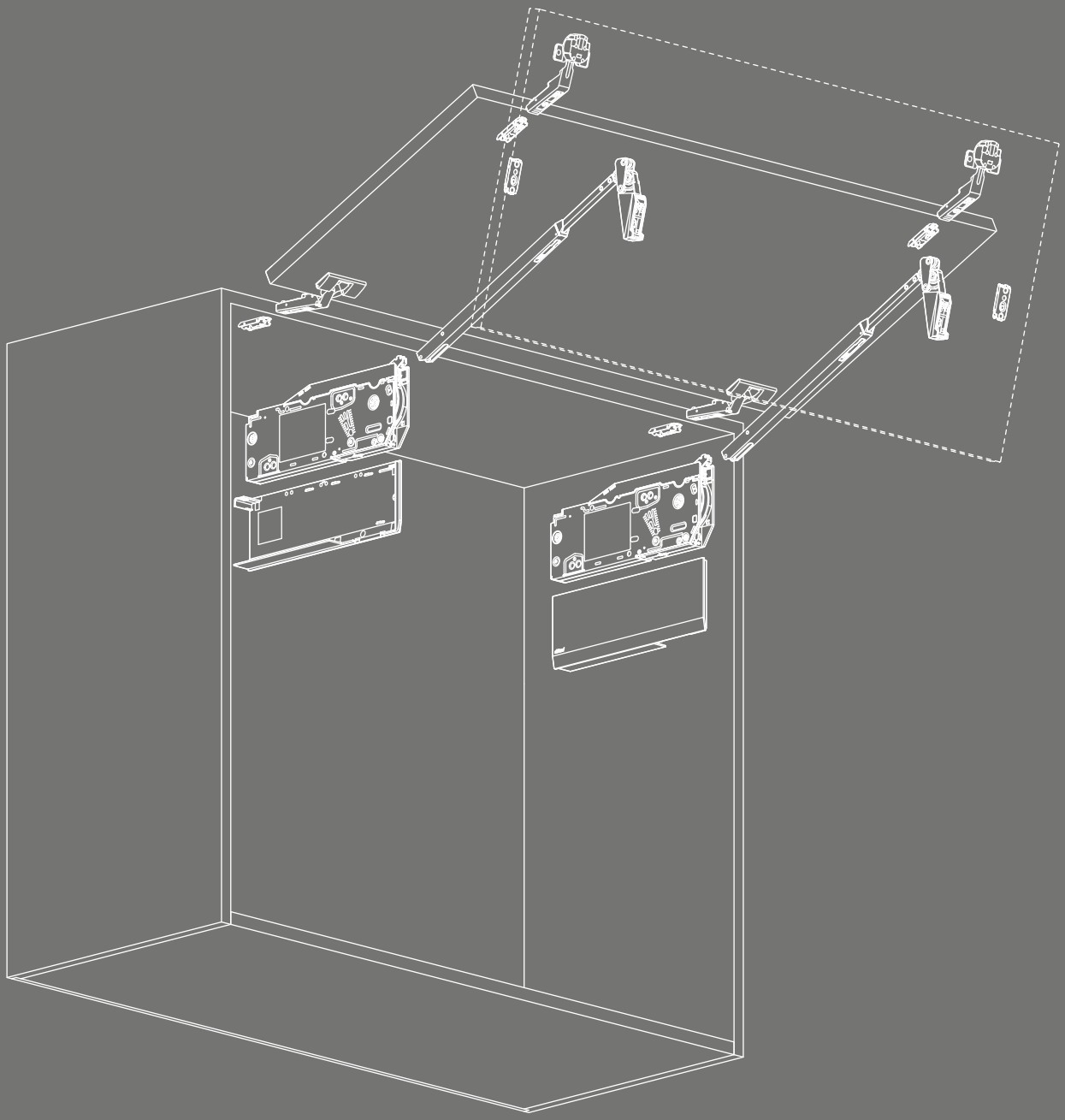
# AVENTOS top

## Ordering and planning information

Now also in eclipse black

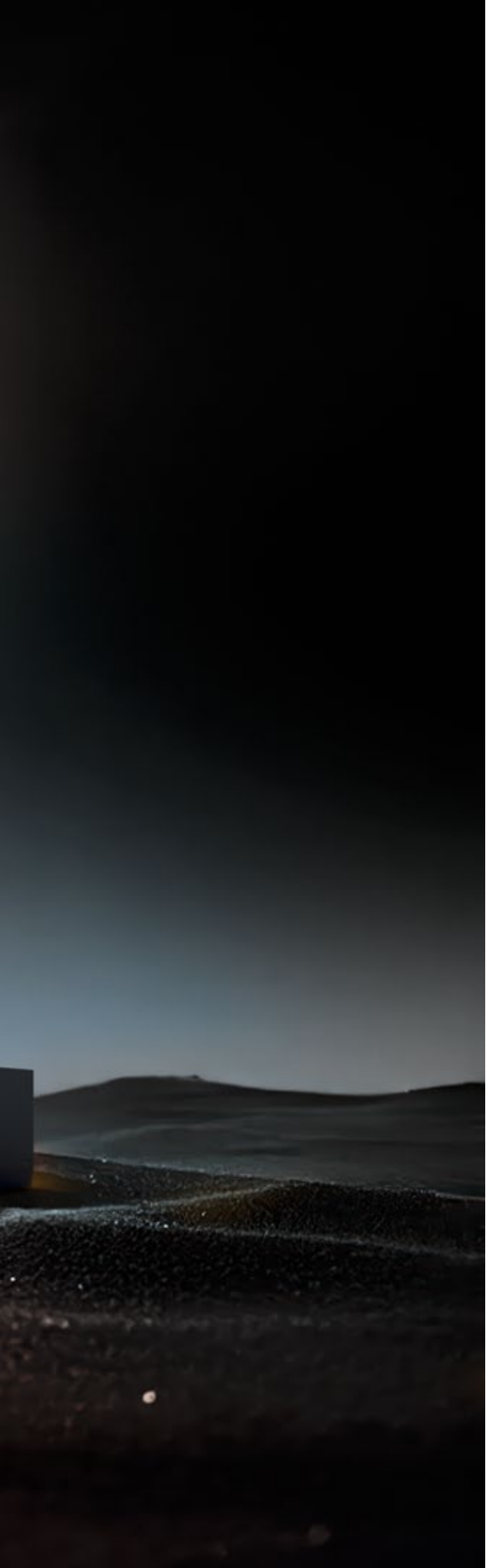


www.blum.com

# 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. The new AVENTOS top allows you to masterfully stage individual items of furniture or entire living spaces. A new colour option of eclipse black opens up even more design possibilities.





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4 Living world

5 Services

6 Overview of cabinet heights

8 AVENTOS HF top

20 AVENTOS HS top

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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.

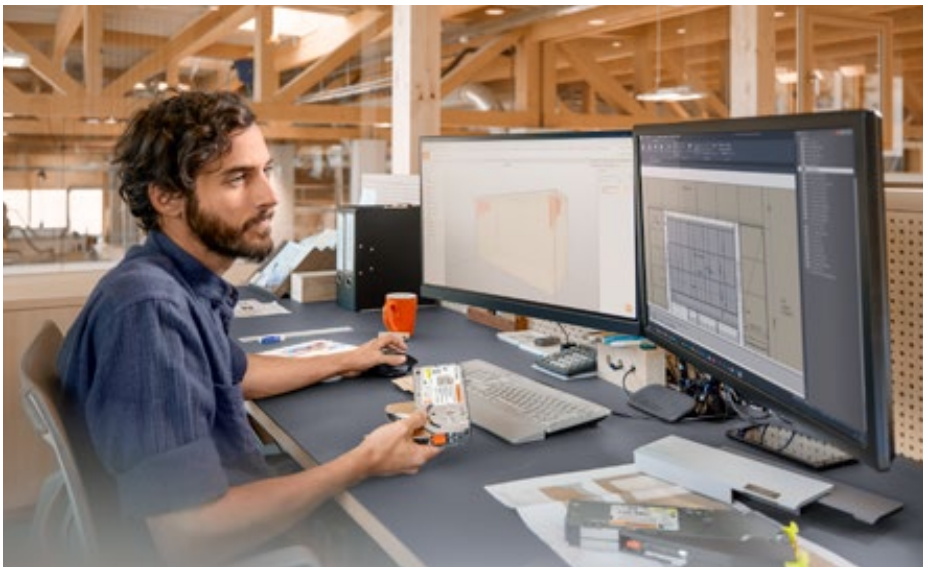
**Digital services**
Digital support for more efficiency

**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

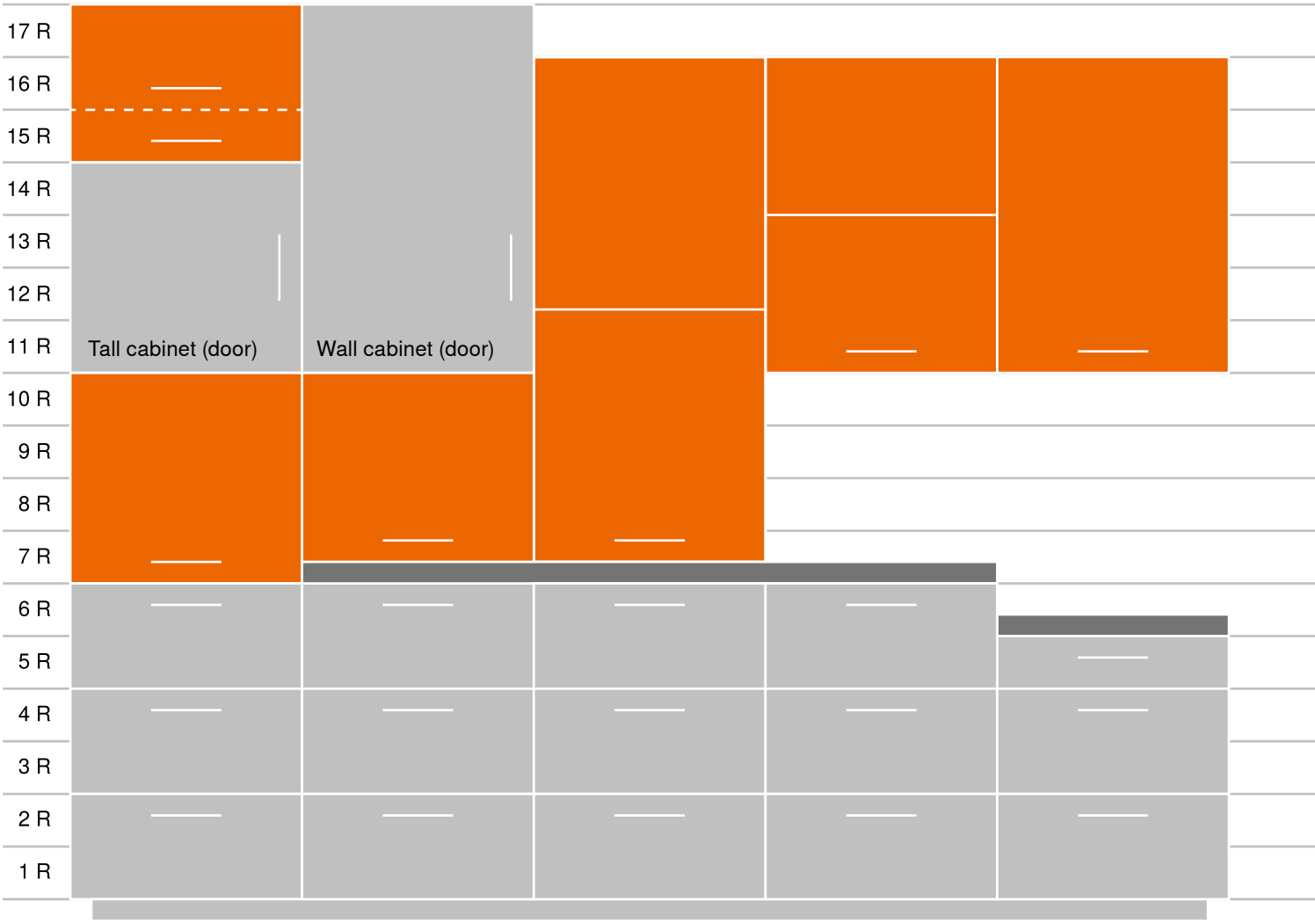
AVENTOS HK-S
AVENTOS HL top
AVENTOS HK top

AVENTOS HL top

AVENTOS HF top

AVENTOS HF top

AVENTOS HS top




R = tier system

AVENTOS HS top

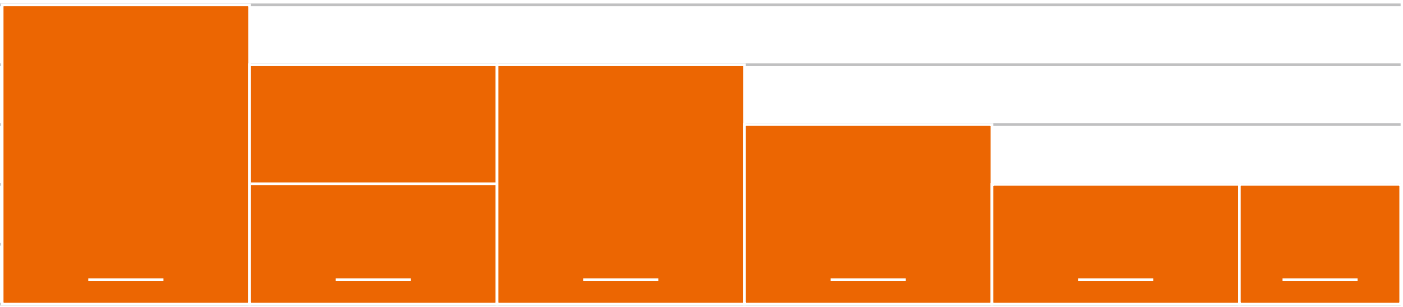
AVENTOS HF top

AVENTOS HS top
AVENTOS HL top
AVENTOS HK top

AVENTOS HS top
AVENTOS HL top
AVENTOS HK top

AVENTOS HK top

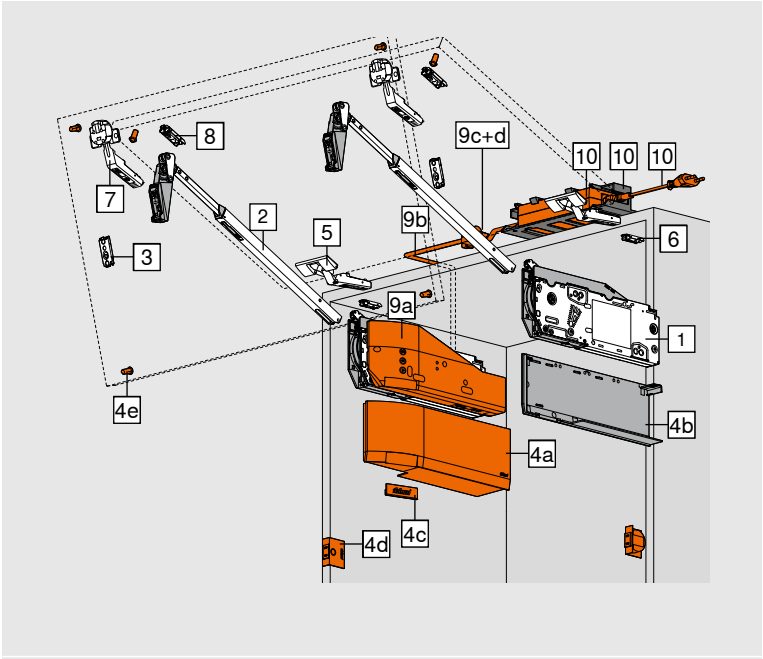
AVENTOS HK-S
AVENTOS HK-XS



# AVENTOS HF top



## Wooden fronts and wide aluminium frames

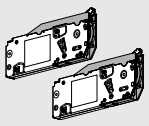


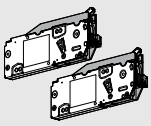

☐ Standard
■ SERVO-DRIVE

- 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
- Lever arm in the variants nickel and eclipse black

## Ordering information

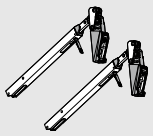
| Note |
|---|
| **Power factor (LF) =**<br>**cabinet height* (KH) [mm] x front weight including handle weight [kg]**<br><br>* Calculate with theoretical cabinet height (TKH) for asymmetrical fronts |
| For asymmetrical fronts: **theoretical cabinet height TKH** = front height top FHo (mm) x 2 + gaps<br>The larger front must be at the top for asymmetrical fronts. |
| We recommend the more powerful lift mechanism for applications in overlapping ranges.<br>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<br>Incl. pre-mounted system screws | | |
| * 1 pc LF 1300–3000<br>cabinet width KB up to 600 mm | | | |

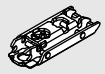
| 1 ☐■ | Lift mechanism set | | |
|---|---|---|---|
|  | Fixing with chipboard screws with positioning system | | |
| | **LF** | **OW** | |
| | 2700–13500* | 81°–116° | **22F2500** |
| | 10000–19300 | 81°–116° | **22F2800** |
| LW Power factor | | | |
| OW Opening angle (multi-stage adjustment) | | |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

## Wooden fronts and wide aluminium frames

### Ordering information

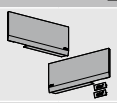
| 2 | Lever arm set | | |
|---|---|---|---|
|  | **Colour** | NI \| ECS | |
| | **Cabinet height (mm)*** | | |
| | 480–610 | | **22F3200** |
| | 600–910 | | **22F3500** |
| | 840–1200 | | **22F3900** |
| **Consisting of:** | | | |
| **2** | 2 x | Symmetrical lever arm | |

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

| 3 | Mounting plate for lever arm | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **Fixing method** | **Spacing (mm)** | |
| | Screw-on [1] | 0 | **175H3100** |
| | EXPANDO | 0 | **177H3100E** |
| | Knock-in | 0 | **177H3100** |

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 | **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° hinge | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **Boss** | **Spring** | |
| | INSERTA | Unsprung | **70T5590BTL** |
| | Screw-on [1] | Unsprung | **70T5550.TL** |
| **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

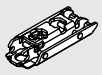
**Alternative to 5**

| - | CLIP top 120° special hinge for larger front overlay | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **Boss** | **Spring** | |
| | INSERTA | Unsprung | **72T5590BTL** |
| | Screw-on [1] | Unsprung | **72T5550.TL** |
| **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 | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **Fixing method** | **Spacing (mm)** | |
| | Screw-on [1] | 0 | **175H3100** |
| | EXPANDO | 0 | **177H3100E** |
| | Knock-in | 0 | **177H3100** |

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 | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **Boss** | **Spring** | |
| | Screw-on [1] | Unsprung | **78Z5500T** |
| | EXPANDO | Unsprung | **78Z553ET** |

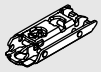
3 hinges starting at cabinet width KB 1200 mm and/or 12 kg front weight

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 | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **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

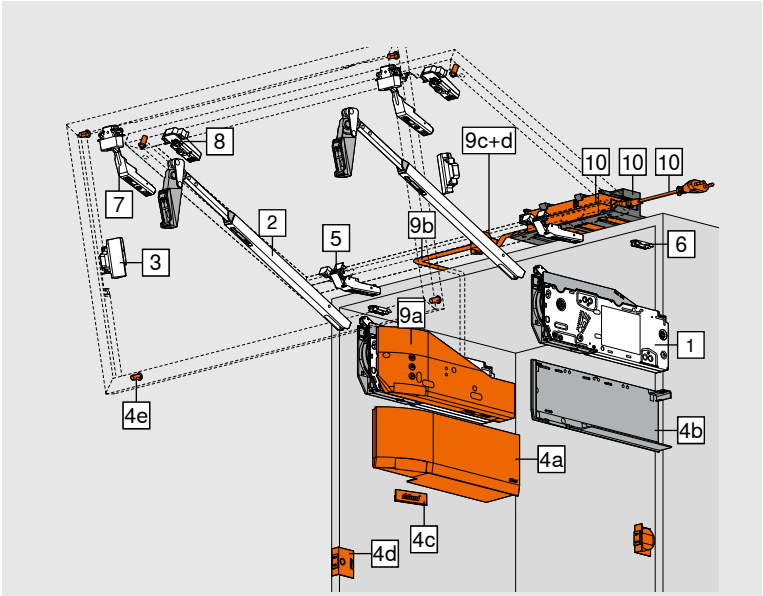
**From 5000 pcs:**

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 |
| NI | Nickel plated |
| ECS | Eclipse black |
| ONS | Onyx black |

## Narrow aluminium frames

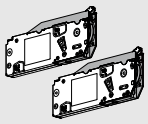



- Standard
- SERVO-DRIVE

- 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
- Lever arm in the variants nickel and eclipse black

## Ordering information

**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

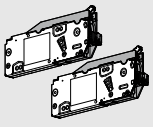
OW Opening angle (multi-stage adjustment)

**Consisting of:**

| | | |
|---|---|---|
| 1 | 2 x | Symmetrical lift mechanism<br>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<br>Incl. positioning system |
| - | 8 x | Chipboard screws Ø 4 x 35 mm |

* 1 pc LF 1300–3000
cabinet width KB up to 600 mm

**Note**

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

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

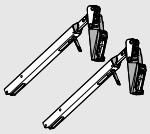
For asymmetrical fronts: **theoretical cabinet height TKH** =
front height top FHo (mm) x 2 + gaps

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.

**2** **Lever arm set**



| Colour | NI \| ECS |
|---|---|
| **Cabinet height (mm)*** | |
| 480–610 | 22F3200 |
| 600–910 | 22F3500 |
| 840–1200 | 22F3900 |

**Consisting of:**

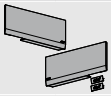
| | | |
|---|---|---|
| 2 | 2 x | Symmetrical lever arm |

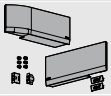
* For asymmetrical fronts: **theoretical cabinet height TKH** =
front height top FHo (mm) x 2 + gaps

## Narrow aluminium frames

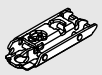
### Ordering information

| 3 | CLIP adapter plate set for lever arms | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **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 | |

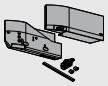
| 4 | Cover cap set for SERVO-DRIVE | | |
|---|---|---|---|
|  | **Colour** | **Material** | |
| | SW \| HGR \| TGR | K | **23.8000** |
| **Consisting of:** | | | |
| **4a** | 1 x | SERVO-DRIVE cover cap left | |
| **4b** | 1 x | Cover cap right | |
| **4c** | 2 x | Branding element, embossed with Blum 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 | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **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 | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **Fixing method** | **Spacing (mm)** | |
| | Screw-on [1] | 0 | **175H3100** |
| | EXPANDO | 0 | **177H3100E** |
| | Knock-in | 0 | **177H3100** |
| Standard mounting plates, spacing depends on the top gap | | | |

| 7 | CLIP top aluminium centre hinge | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **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 | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **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 | | | |

**Colours and material**

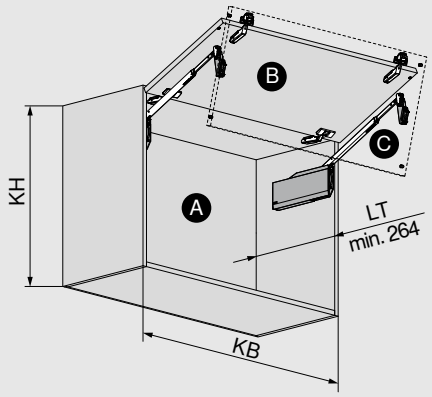
| Name | | | |
|---|---|---|---|
| SW | Silk white | SW-M | Silk white matt |
| HGR | Light grey | K | Nylon |
| TGR | Dark grey | ECS | Eclipse black |
| ONS | Onyx black | IN-G | In-mould brushed stainless steel |
| NI | Nickel plated | | |

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

## Wooden fronts, wide and narrow aluminium frames

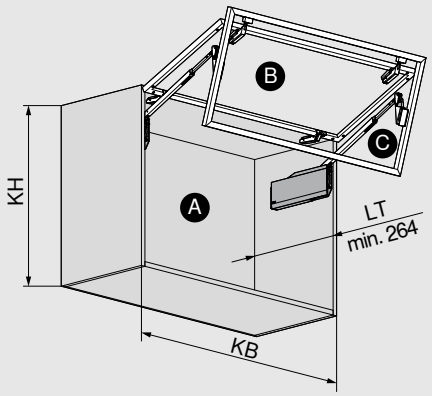
### Planning

**Wooden fronts and wide aluminium frames**




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

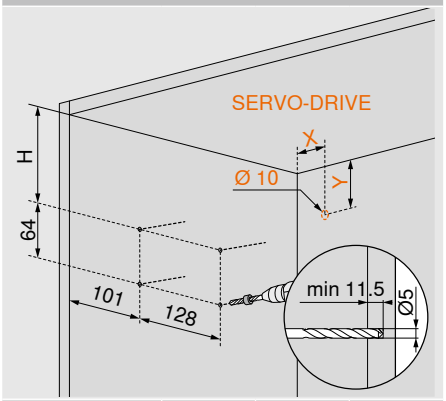
**Narrow aluminium frames**




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

**Drilling position**

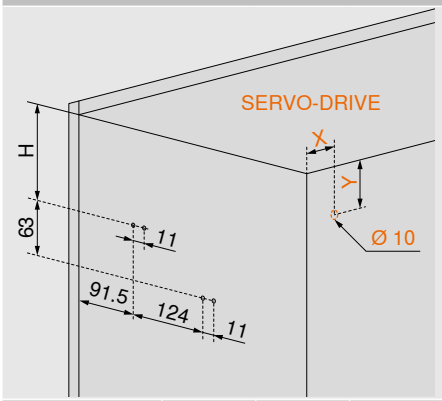
**System screws**




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

KH Cabinet height

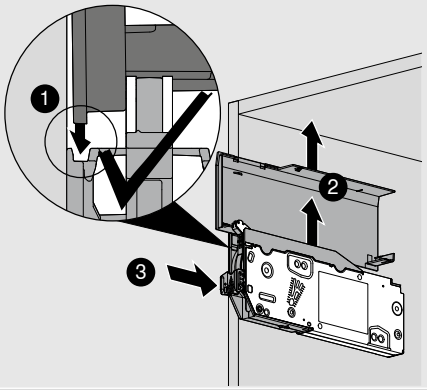
**Chipboard screws incl. positioning system**




| 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



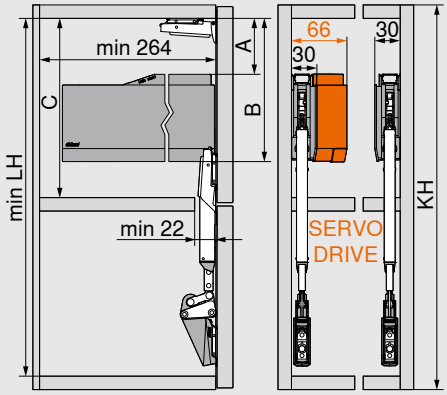

| KH (mm) |
|---|
| 520–1200 |

KH Cabinet height

## Wooden fronts, wide and narrow aluminium frames

### Planning

#### Space requirement



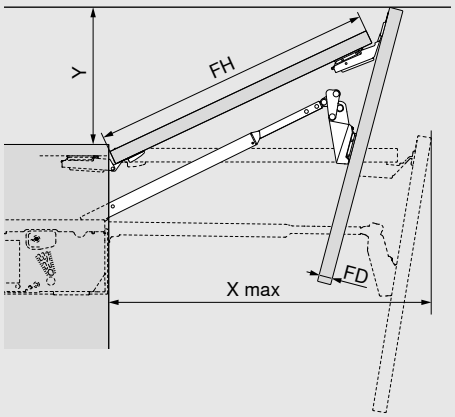

| Lever arm set | LH min. (mm) |
|---|---|
| 22F3200 | 443 |
| 22F3500 | 512 |
| 22F3900 | 632 |

| 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

#### Space requirement above



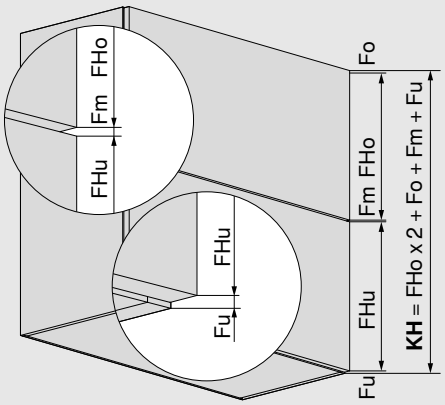

X max = FH x 0.9 + 1.5 x FD + 35

| Opening angle stop | Y (mm) |
|---|---|
| 116° | FH x 0.44 + 38 |
| 107° | FH x 0.29 + 35 |
| 97° | FH x 0.12 + 31 |
| 88° | 28 |
| 81° | 0 |

FD Front thickness

FH Front height

#### Symmetrical front




Fo Top gap

Fm Middle gap

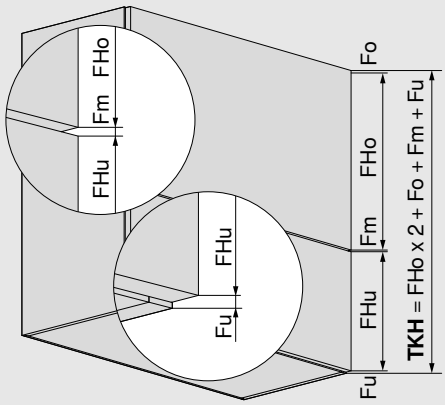
Fu Bottom gap

FHo Front height top

FHu Lower front height

KH Cabinet height

#### Asymmetrical front




Fo Top gap

Fm Middle gap

Fu Bottom gap

FHo Front height top

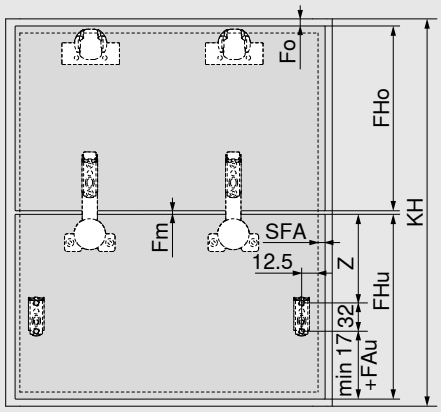
FHu Lower front height

TKH Theoretical cabinet height

## Wooden fronts and wide aluminium frames

### Planning

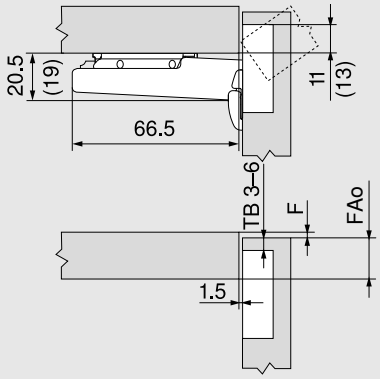
#### Front assembly




| 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

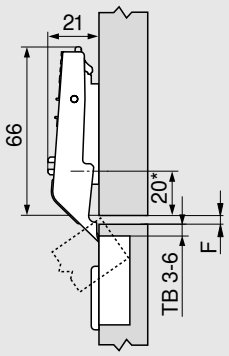
#### Boss drilling distance TB

| 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



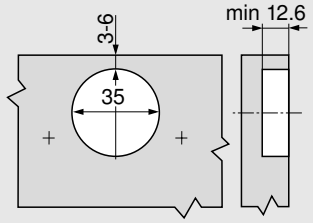

TB Boss drilling distance
F Min. gap 1.5 mm
* 37 mm for cruciform mounting plates (37/32)

#### Boss drilling distance TB

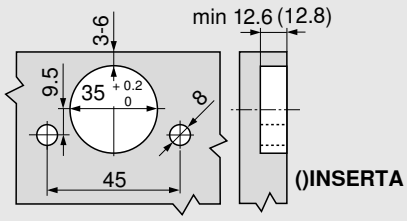
| MD | Horizontal gap F between fronts (mm) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | 3 | 4 | 5 | 6 |
| 0 | | | | | | | | | | 6 | 5 | 4 | 3 |
| 3 | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | |

MD Mounting plate spacing (mm)

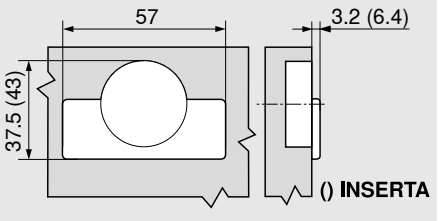
#### Screw-on assembly




#### INSERTA | EXPANDO assembly



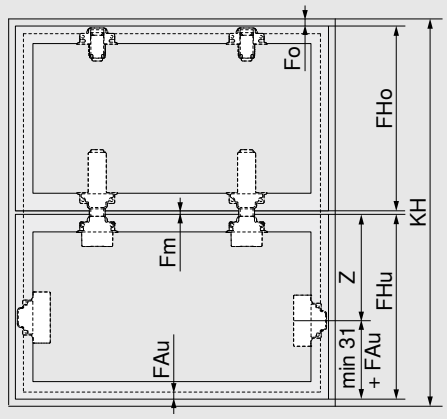

#### Hinge boss dimensions



## Narrow aluminium frames

### Planning

#### Front assembly




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

Fo Top gap

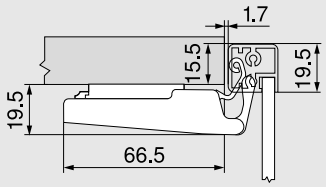
Fm Middle gap

FAu Bottom front overlay

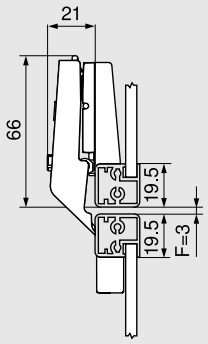
FHo Front height top

FHu Lower front height

#### CLIP top 120° aluminium frame door hinge



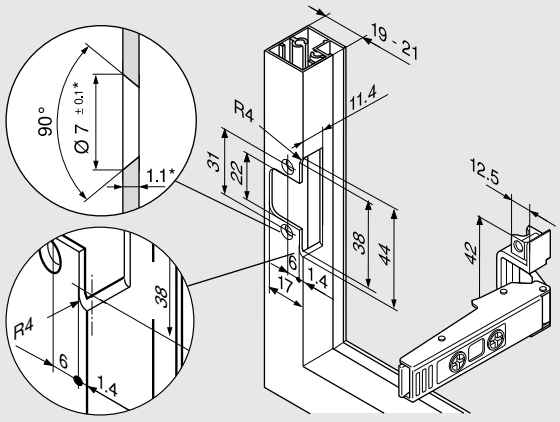

#### CLIP top aluminium centre hinge




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

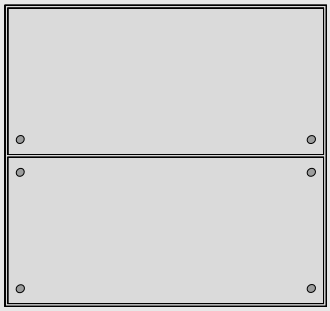
Find more information on assembly and adjustment of AVENTOS HF top at

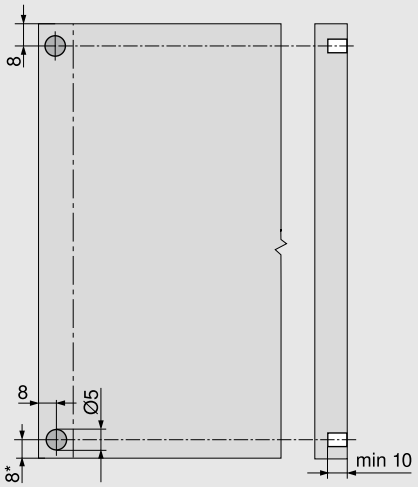
**www.blum.com/hftopassembly**

## SERVO-DRIVE for AVENTOS HF top

### Planning

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






Insert Blum distance bumper (do not glue)

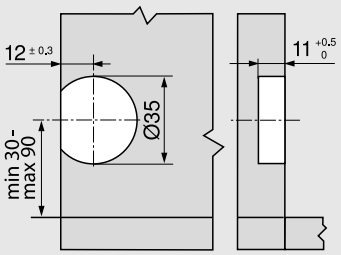
**Recommendation for aluminium frames**

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 |
| **Colour** | NI, ONS | |
| **Consisting of:** | | |
| 2x | CLIP top 120° hinge unsprung | |
| | 70T5590BTL | |
| 2 x | CLIP top centre hinge unsprung | |
| | 78Z5530T | |
| 6 x | Horizontal cam mounting plate | |
| | 177H3100 | |

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



| Ordering information | | |
|---|---|---|
| **Fixing method** | | |
| Screw-on[1] | | ☎ 78Z5500T12 |
| **Colour** | NI, ONS | |
| **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**

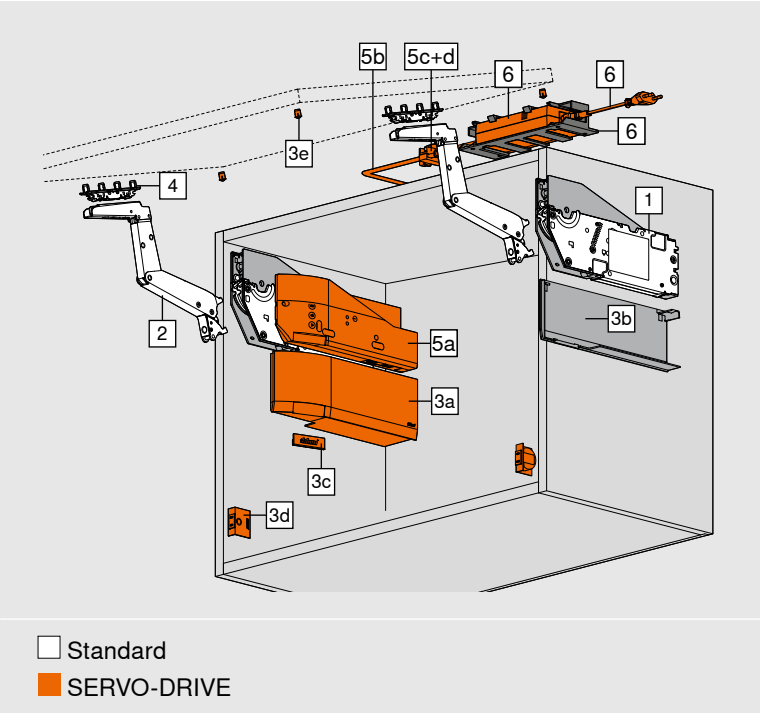


| Ordering information | | |
|---|---|---|
| **Fixing method** | | |
| Screw-on | | ☎ 78Z550AT11 |
| **Colour** | NI, ONS | |
| **Consisting of:** | | |
| 2x | CLIP top 120° aluminium frame door hinge unsprung | |
| | 72T550A.TL | |
| 2 x | CLIP top aluminium centre hinge unsprung | |
| | 78Z550AT | |
| 2 x | Horizontal cam mounting plate | |
| | 175H5400 | |
| 2 x | CLIP adapter plate symmetrical | |
| | 175H5A00 | |
| 2 x | CLIP adapter plate left/right | |
| | 175H5B00 | |

| Colours and material | |
|---|---|
| ONS | Onyx black |
| NI | Nickel plated |

# AVENTOS HS top



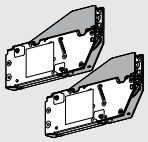



☐ Standard
■ SERVO-DRIVE

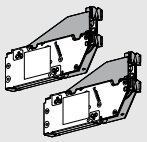
- Ideal for large, one-part fronts
- Cabinet height 350-800 mm
- Cabinet width up to 1800 mm
- Internal depth of at least 264 mm
- Integrated BLUMOTION setting
- SERVO-DRIVE electrical motion support system
- Light operating forces
- Variable stop
- Standardised position of the lift mechanism and front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

## 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 | **22S2210** |
| | 450–540 | 2.50–12.50 | |
| | 480–660 | 2.75–15.25 | **22S2510** |
| | 650–800 | 3.50–18.50 | **22S2810** |
| FG Front weight including double handle weight | | | |
| KH Cabinet height | | | |

| Consisting of: | | |
|---|---|---|
| 1 | 2 x | Symmetrical lift mechanism<br>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 | **22S2200** |
| | 450–540 | 2.50–12.50 | |
| | 480–660 | 2.75–15.25 | **22S2500** |
| | 650–800 | 3.50–18.50 | **22S2800** |
| FG Front weight including double handle weight | | | |
| KH Cabinet height | | | |

| Consisting of: | | |
|---|---|---|
| 1 | 2 x | Symmetrical lift mechanism<br>Incl. positioning system |
| - | 8 x | Chipboard screws Ø 4 x 35 mm |

## Ordering information

**2 Lever arm set**

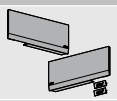


| Colour | Material | |
|---|---|---|
| NI \| ECS | Steel | 22S3500 |

**Consisting of:**

| | | |
|---|---|---|
| 2 | 2 x | Symmetrical lever arm |

**3 Cover cap set**

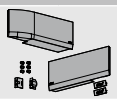


| Colour | Material | |
|---|---|---|
| SW \| HGR \| TGR | K | 22.8000 |

**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**



| Colour | NI \| ONS | |
|---|---|---|
| **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**



| Colour | NI \| ONS | |
|---|---|---|
| **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:**

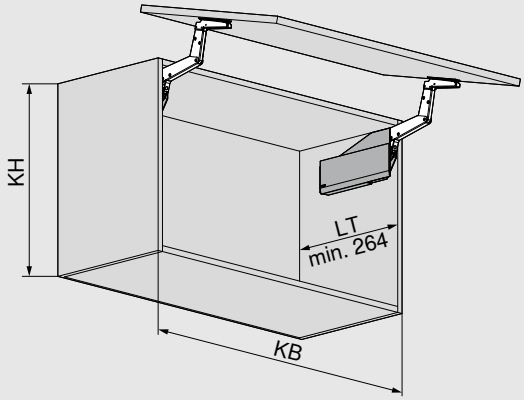
Customised, embossed branding element

### 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 |
| ECS | Eclipse black |
| ONS | Onyx black |

## Planning

### Wooden fronts and wide aluminium frames

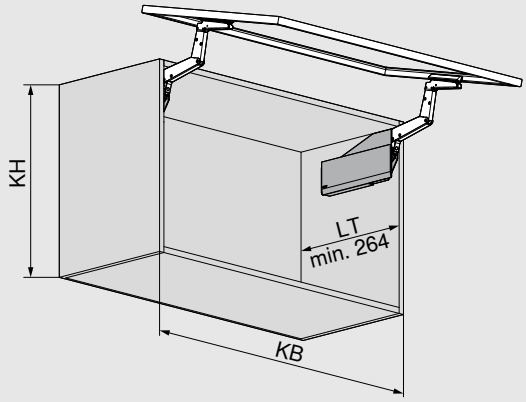



KB Cabinet width

KH Cabinet height

LT Internal cabinet depth

### Narrow aluminium frames



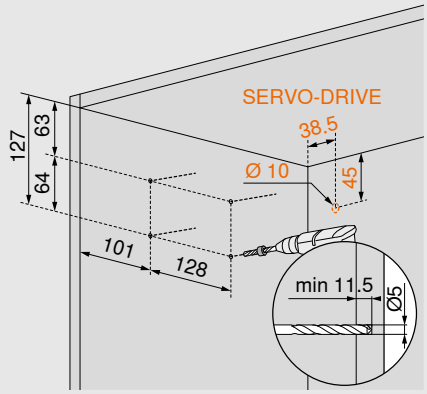

KB Cabinet width

KH Cabinet height

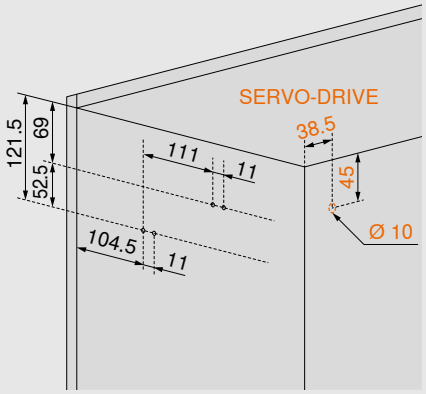
LT Internal cabinet depth

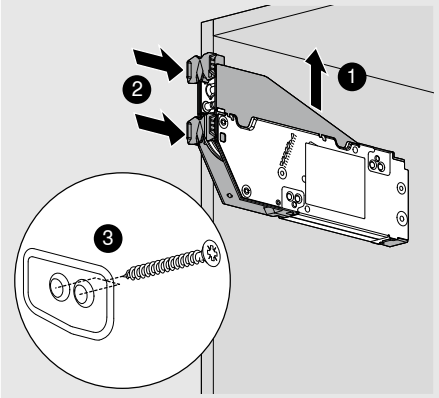
### Drilling position

#### System screws

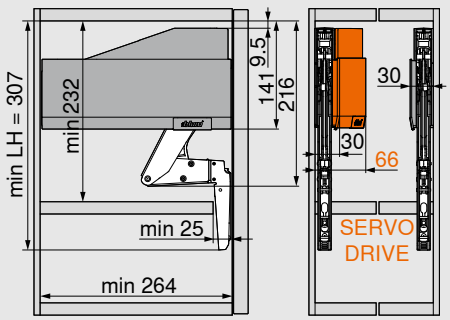



#### Chipboard screws incl. positioning system



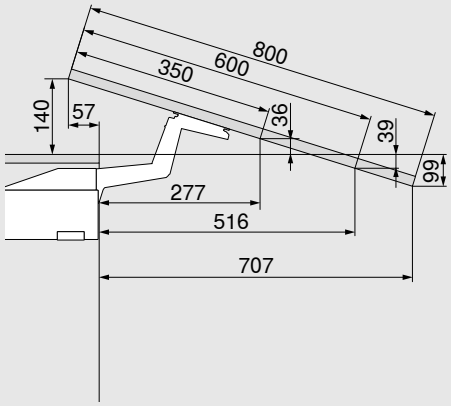




### Space requirement




LH Internal cabinet height

### Front setting

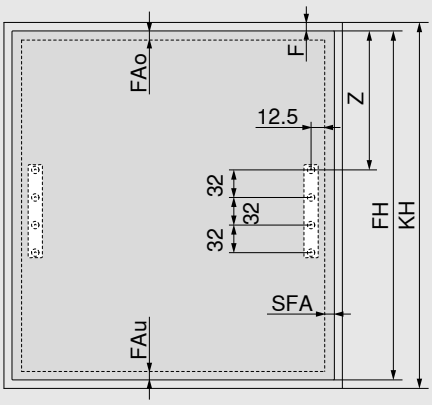



Dimensions depend on tilt adjustment

## Planning

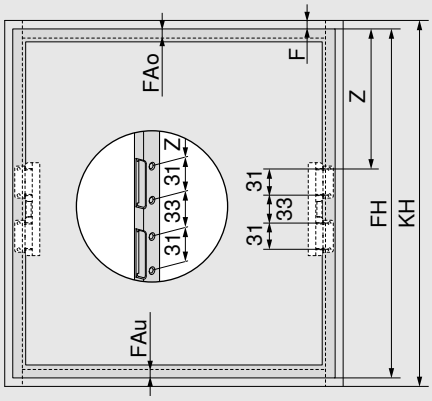
### Front assembly

#### Wooden fronts and wide aluminium frames



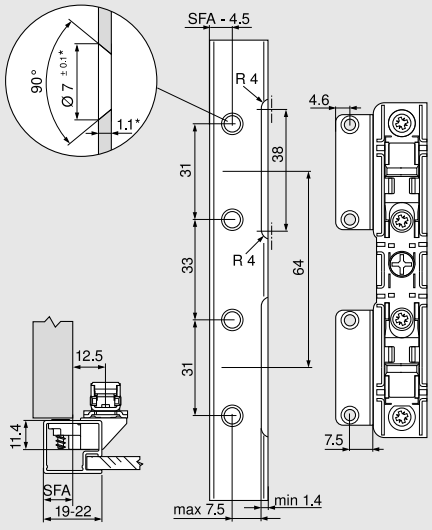

FAo Upper front overlay
FAu Bottom front overlay
F Gap
Z 195 + FAo
FH Front height
KH Cabinet height
SFA Side front overlay
Application against a wall: minimum 5 mm gap

#### 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

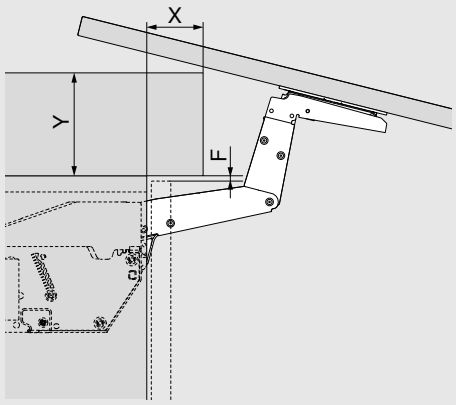



For frame width 19 mm, an SFA of 11-18 mm is possible.

* 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

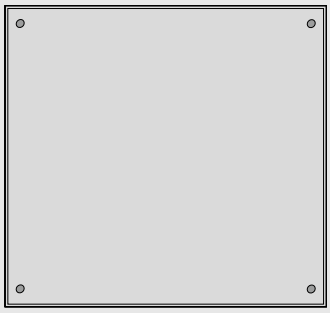
Find more information on assembly and adjustment of AVENTOS HS top at

**www.blum.com/hstopassembly**

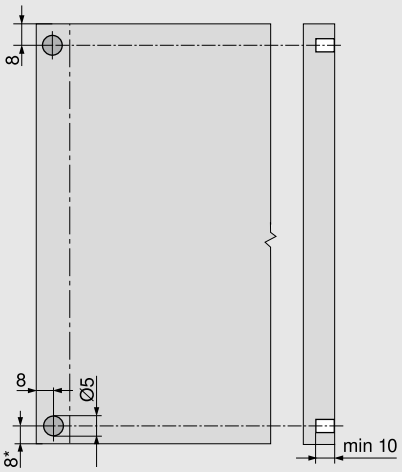
## SERVO-DRIVE for AVENTOS HS top

### Planning

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



Insert Blum distance bumper (do not glue)



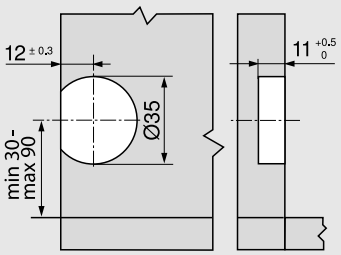

**Recommendation for aluminium frames**

Drill hole into cabinet side for Blum distance bumper

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

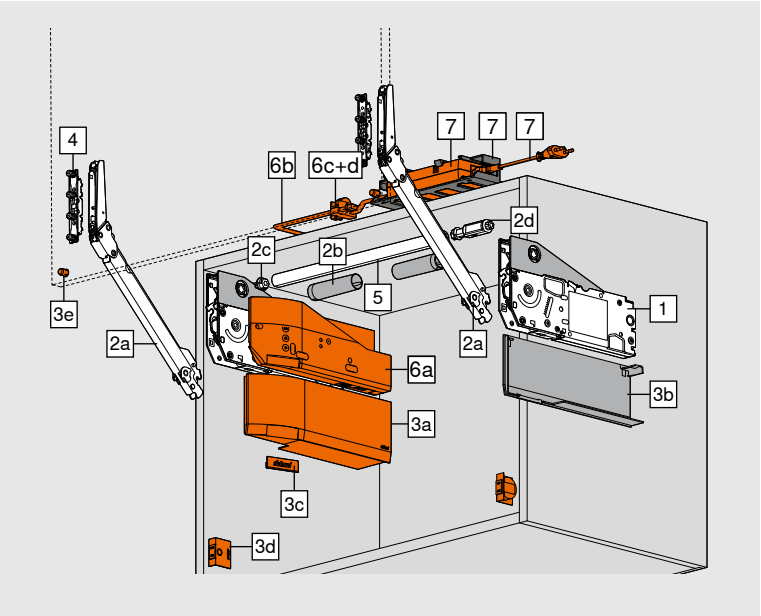
* From cabinet bottom edge for fronts that protrude below

**SERVO-DRIVE switch**



# AVENTOS HL top

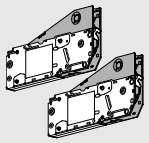





☐ Standard
■ SERVO-DRIVE

- 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
- Lever arm in the variants nickel and eclipse black

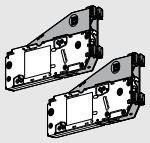
## Ordering information

| 1 ☐ ■ | Lift mechanism set | |
|---|---|---|
|  | Fixing with pre-mounted system screws | |
| | **KH (mm)** | |
| | 300–389 | **22L2210** |
| | 390–580 | **22L2510** |

KH Cabinet height

**Consisting of:**

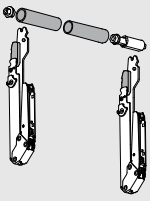
| | | |
|---|---|---|
| **1** | 2 x | Symmetrical lift mechanism<br>Incl. pre-mounted system screws |

| 1 ☐ ■ | 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<br>Incl. positioning system |
| **-** | 8 x | Chipboard screws Ø 4 x 35 mm |

| 2 ☐ ■ | Lift mechanism set | | |
|---|---|---|---|
|  | **Colour** | **Material** | |
| | NI \| ECS | Steel | |
| | **KH (mm)** | **FG (kg)** | |
| | 300–339 | 1.50–9.00 | **22L3200** |
| | 340–389 | 1.75–10.00 | **22L3500** |
| | 390–540 | 2.00–12.25 | **22L3800** |
| | 480–580 | 2.50–14.00 | **22L3900** |

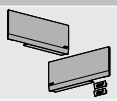
FG Front weight including handle weight

KH Cabinet height

**Consisting of:**

| | | |
|---|---|---|
| **2a** | 2 x | Symmetrical lever arm |
| **2b** | 2 x | Cross stabiliser cover cap |
| **2c** | 1 x | Adapter for cross stabiliser rod |
| **2d** | 1 x | Length adapter for cross stabiliser |

## Ordering information

| 3 | Cover cap set | | |
|---|---|---|---|
|  | **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 | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **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 | |

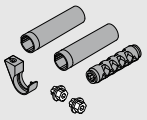
[1] Use 4 chipboard screws (609.1x00) per side for wooden fronts. Use 4 countersunk self-tapping screws (660.0950) per side for wide aluminium frames.

[2] Incl. 8 x countersunk self-tapping screws – 660.0950

| - | Front fixing bracket | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **Version** | **Fixing method** | |
| | Thin fronts | EXPANDO T 2 x | **20S42T1** |

EXPANDO T suitable for thin fronts – see page 54

| 5 | Cross stabiliser | | |
|---|---|---|---|
|  | **Colour** | **Length (mm)** | |
| | NI \| ECS | 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

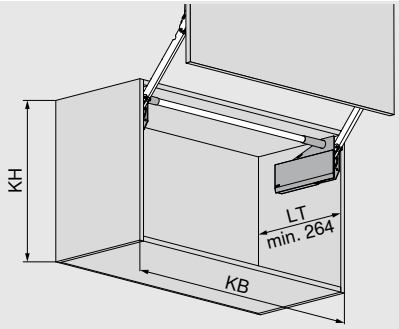
| 3c | Branding element | | |
|---|---|---|---|
|  | **Material** | **Colour** | |
| | K | SW-M, TGR | IN-G |
| Printed * | 2 x | **ABD.1000.BL** | **ABD.1009.BL** |
| Embossed * | 2 x | **ABD.1000.BT** | **ABD.1009.BT** |
| Plain | 2 x | **ABD.1000** | **ABD.1009** |
| * With Blum logo | | | |
| **From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

### Colours and material

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

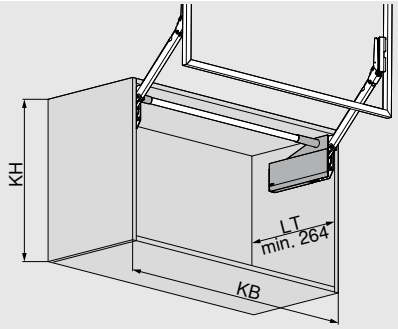
## Planning

### Wooden fronts and wide aluminium frames




KB Cabinet width
KH Cabinet height
LT Internal cabinet depth

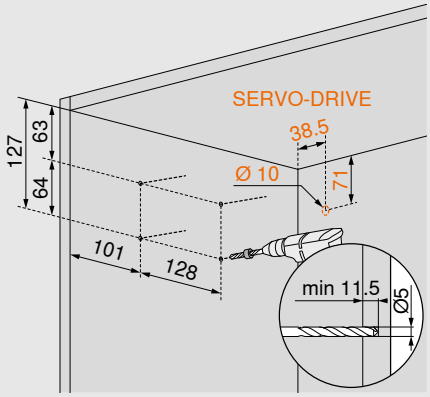
### Narrow aluminium frames



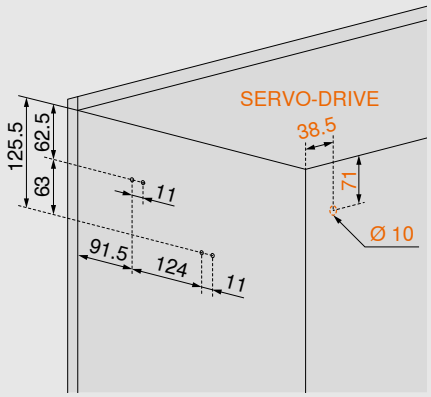

KB Cabinet width
KH Cabinet height
LT Internal cabinet depth

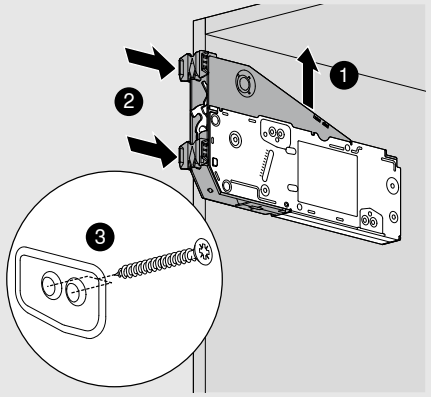
### Drilling position

#### System screws

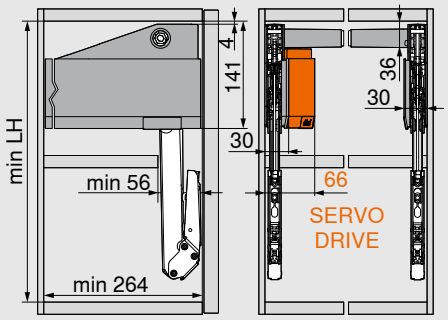



#### Chipboard screws incl. positioning system




### Space requirement

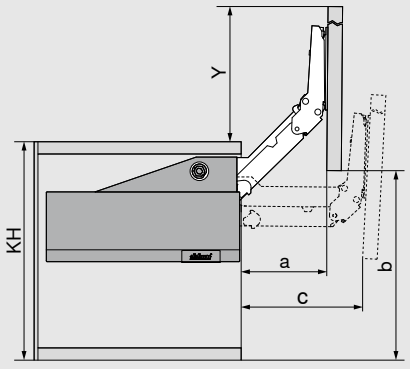



| Lever arm set | LH min. (mm)[1] |
|---|---|
| 22L3200 | 255 |
| 22L3500 | 295 |
| 22L3800 | 345 |
| 22L3900 | 399 |

[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

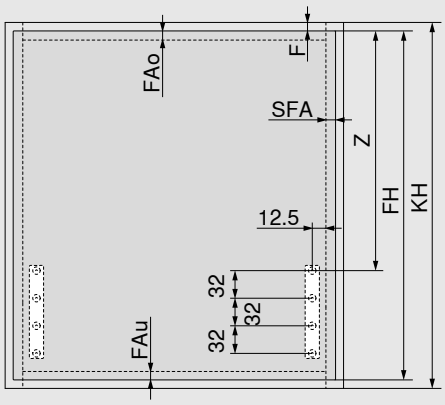
[2] Dimensions based on top gap F = 0 mm

KH Cabinet height

## Planning

### Front assembly

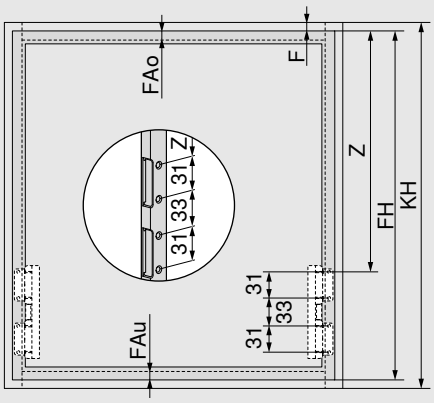
#### Wooden fronts and wide aluminium frames




| 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

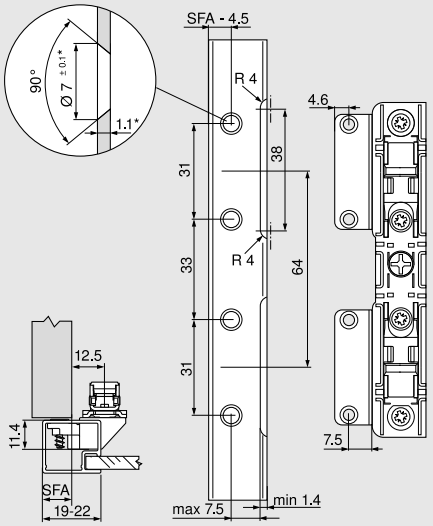
#### Narrow aluminium frames




| 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

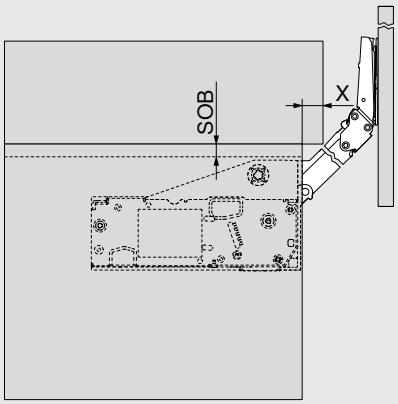



For frame width 19 mm, an SFA of 11-18 mm is possible.

* When changing material thickness, adjust the assembly dimensions accordingly

SFA Side front overlay

#### Space requirement – cornice | crown moulding



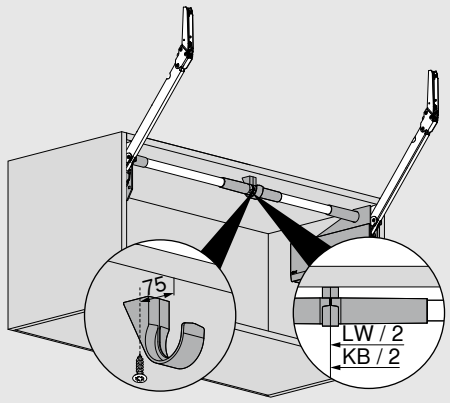

| Top panel thickness (SOB) | X (mm) |
|---|---|
| 16 mm | 25 |
| 17 mm | 26 |
| 18 mm | 27 |
| 19 mm | 28 |
| 20 mm | 29 |

## Planning

**Extra wide applications**

**Cross stabiliser from an internal cabinet width ≧ 1190 mm or a cabinet width ≧ 1228 mm**

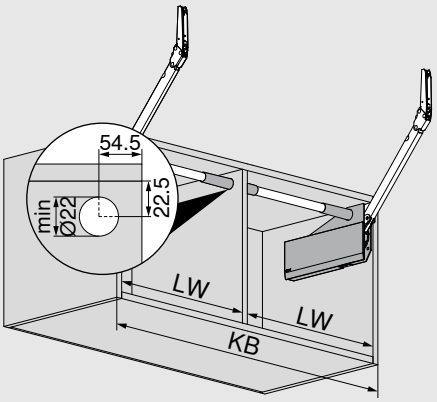
**Cross stabiliser fixing**




KB Cabinet width

LW Internal cabinet width

**Version with dividing wall**




KB Cabinet width

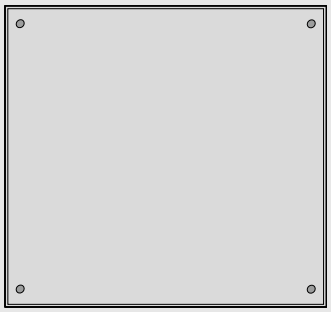
LW Internal cabinet width

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

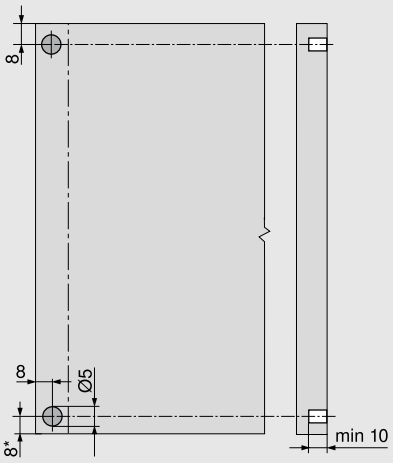
**www.blum.com/hltopassembly**

## SERVO-DRIVE for AVENTOS HL top

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



Insert Blum distance bumper (do not glue)



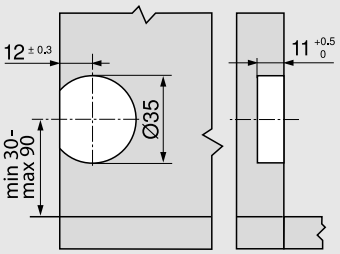

**Recommendation for aluminium frames**

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

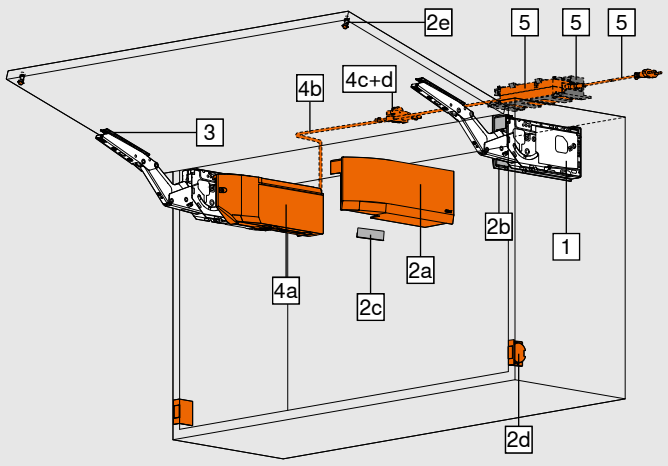
**SERVO-DRIVE switch**



# AVENTOS HK top



## Standard and SERVO-DRIVE

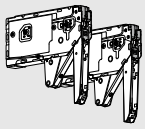


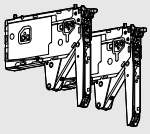

☐ Standard
■ SERVO-DRIVE

- 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
- Lever arm in the variants nickel and eclipse black

## Ordering information

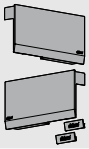
| Note |
|---|
| **Power factor (LF) =**<br>cabinet height (KH) [mm] x front weight incl. double handle weight [kg] |
| We recommend the more powerful lift mechanism for applications in overlapping ranges.<br>A trial application is recommended when you are in a borderline area of the individual lift mechanism. |
| The power factor (LF) can be increased by 50% if you use a third lift mechanism.<br>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 | | |
| | **Colour** | NI \| ECS | |
| | **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<br>Incl. pre-mounted system screws | | |

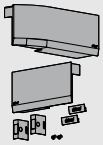
| 1 ☐■ | Lift mechanism set | | |
|---|---|---|---|
|  | Fixing with chipboard screws with positioning system | | |
| | **Colour** | NI \| ECS | |
| | **LF** | **OW** | |
| | 420–1610 | 75°–107° | **22K2300** |
| | 930–2800 | 75°–107° | **22K2500** |
| | 1730–5200 | 75°–107° | **22K2700** |
| | 3200–9000 | 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<br>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 | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **Version** | **Fixing method** | |
| | Wooden fronts and wide aluminium frames | Screw-on [1] | **20S4200** |
| | Narrow aluminium frames | Screw-on [2] | **20S4200A** |

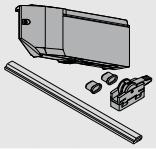
| Consisting of: | | |
|---|---|---|
| 3 | 2 x | Front fixing bracket |

[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 | | |
|---|---|---|---|
|  | **Colour** | NI \| ONS | |
| | **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** |

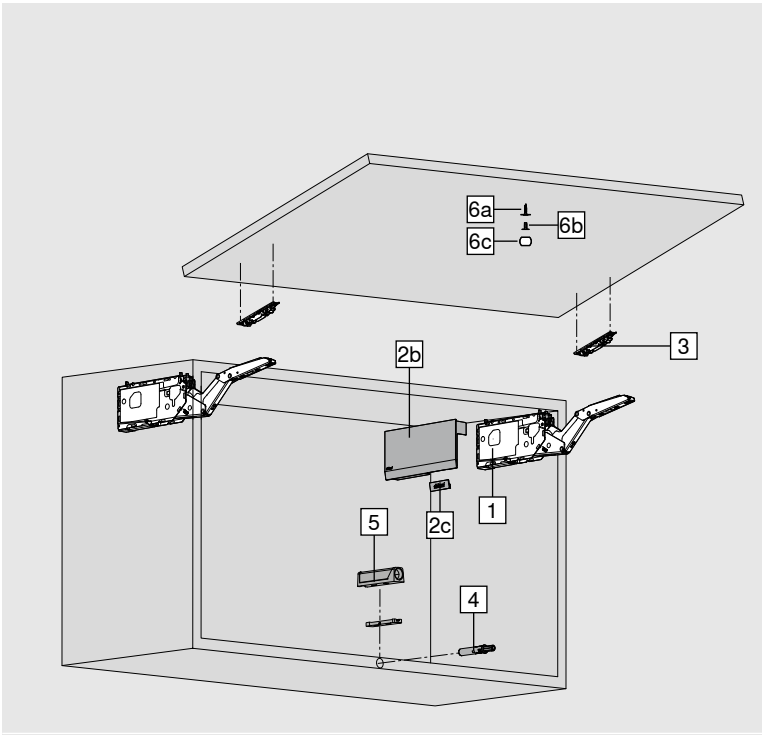
* With Blum logo

| **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 |
| NI | Nickel plated |
| ECS | Eclipse black |
| ONS | Onyx black |

## TIP-ON

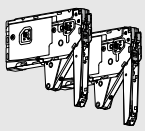


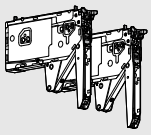

■ TIP-ON

- 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
- Lever arm in the variants nickel and eclipse black

## Ordering information

| Note |
|---|
| **Power factor (LF) =**<br>cabinet height (KH) [mm] x front weight incl. double handle weight [kg] |
| We recommend the more powerful lift mechanism for applications in overlapping ranges.<br>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.<br>We recommend a third lift mechanism for wide cabinets. This will prevent the front from sagging when open. |

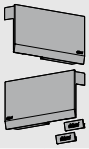
| 1 ■ | Lift mechanism set for TIP-ON | | |
|---|---|---|---|
|  | Fixing with pre-mounted system screws | | |
| | **Colour** | NI \| ECS | |
| | **LF** | **OW** | |
| | 420–1610 | 75°–107° | **22K2310T** |
| | 930–2800 | 75°–107° | **22K2510T** |
| | 1730–5200 | 75°–100° | **22K2710T** |
| | 3200–9000 | 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<br>Incl. pre-mounted system screws | | |

| 1 ■ | Lift mechanism set for TIP-ON | | |
|---|---|---|---|
|  | Fixing with chipboard screws with positioning system | | |
| | **Colour** | NI \| ECS | |
| | **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<br>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**



| Colour | NI \| ONS | |
|---|---|---|
| **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**



| Colour | NI \| ONS | |
|---|---|---|
| **Version** | **Fixing method** | |
| Thin fronts | EXPANDO T 2 x | 20S42T1 |

EXPANDO T suitable for thin fronts – see page 54

**4** ■ **TIP-ON comfort**



| Short version with magnet | | |
|---|---|---|
| **Material** | **Colour** | |
| Nylon | SW \| R7036 \| CS | |
| **Cabinet height KH (mm)** | | |
| Up to 600 | | 958.1002 |

For drilling or in combination with adapter plates

**5** ■ **Adapter plate**



| Straight adapter plate – short version – 20/17 | | |
|---|---|---|
| **Material** | **Colour** | |
| Nylon | SW \| R7036 \| CS | 956.1201 |



| Cruciform adapter plate – long version – 37/32 | | |
|---|---|---|
| **Material** | **Colour** | |
| Nylon | R7036 | 956A1501 |

Assemble using Ø 3.5 mm or Ø 4 mm chipboard screws.
TIP-ON must be ordered separately.

**6a** ■ **Screw-on catch plate**



| Material | Colour | |
|---|---|---|
| Steel | NI \| ONS | 958.1008S |

For hard surfaces and/or MDF, Ø 2.5 mm pre-drilling and countersinking if required.

**6b** ■ **Knock-in catch plate**



| Material | Colour |
|---|---|
| Steel | NI \| ONS |
| Ø 11.5 mm | 958.1008D |
| Pre-drilling Ø 5 mm | |

**6c** ■ **Glue-on catch plate**



| Material | Colour |
|---|---|
| Steel | NI \| ONS |
| 13 x 18 mm | 955.1008 |

**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**

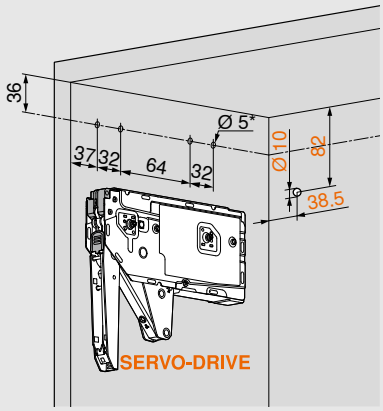
| Name | |
|---|---|
| SW | Silk white |
| HGR | Light grey |
| TGR | Dark grey |
| R7036 | RAL 7036 platinum grey |
| SW-M | Silk white matt |
| CS | Carbon black |
| IN-G | In-mould brushed stainless steel |
| K | Nylon |
| NI | Nickel plated |
| ECS | Eclipse black |
| ONS | Onyx black |

## Standard, SERVO-DRIVE and TIP-ON

### Planning

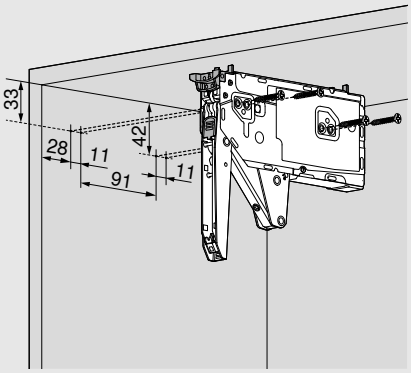
**Drilling position**

**System screws**

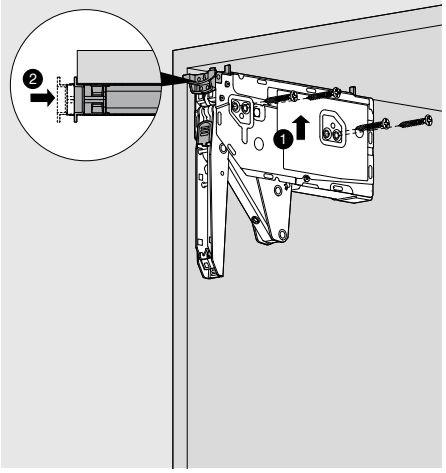



* Drilling depth 11.5 mm

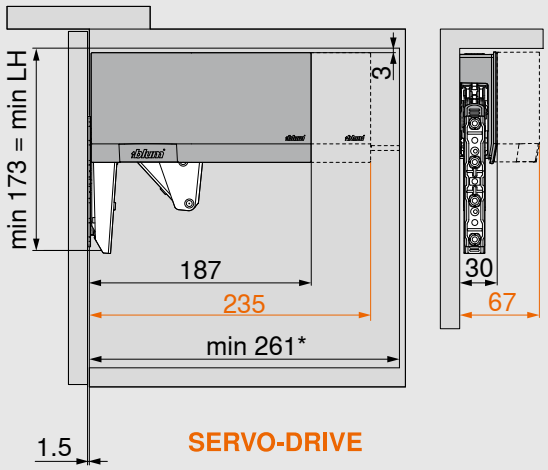
**Chipboard screws incl. positioning system**




4 x chipboard screws Ø 4 x 35 mm




**Space requirement**

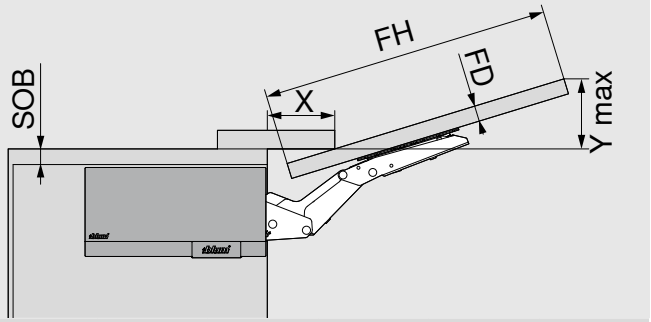



* Min. 261 mm with visible wall hanging bracket

Note: Cabinet height max. 600 mm

LH Internal cabinet height

**Space requirement – cornice | crown moulding**




**Space requirement (mm)**

At max. opening angle

Y = FH x 0.29 + FD - SOB

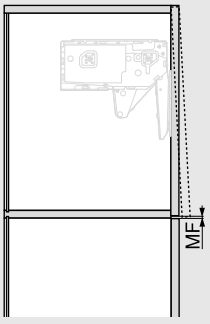
| FD (mm) | 16 | 19 | 22 | 26 | 28 |
|---|---|---|---|---|---|
| X (mm) | 68 | 57 | 47 | 33 | 27 |

SOB Top panel thickness

FD Front thickness

FH Front height

**Minimum gap**



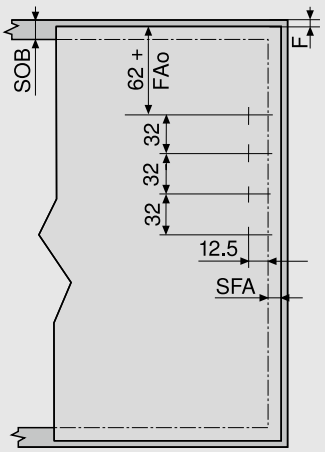

Minimum gap MF is 2 mm

## Standard, SERVO-DRIVE and TIP-ON

### Planning

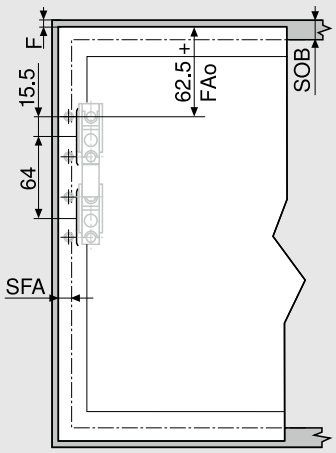
**Front assembly**

Wooden fronts and wide aluminium frames



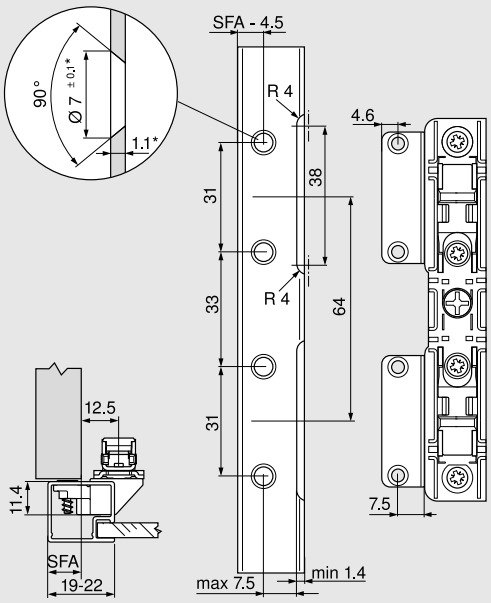

| | |
|---|---|
| FAo | Max. 25.4 mm |
| FAo | Upper front overlay |
| SOB | Top panel thickness |
| SFA | Side front overlay |
| F | Gap |

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

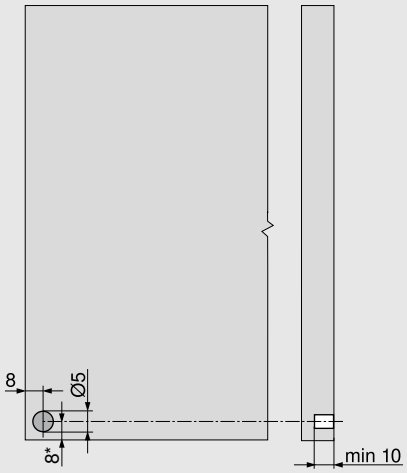
**www.blum.com/hktopassembly**

## 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

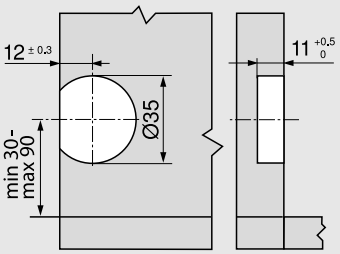
**Recommendation for aluminium frames**

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

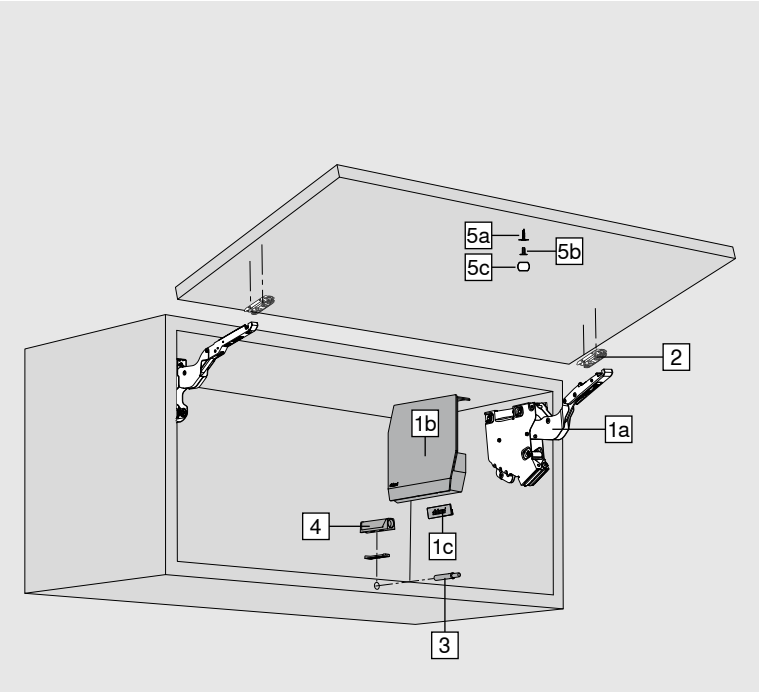
**SERVO-DRIVE switch**



# AVENTOS HK-S



## Standard and TIP-ON

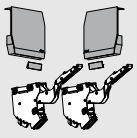



☐ Standard
■ TIP-ON

- 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) =**<br>cabinet height (KH) [mm] x front weight incl. double handle weight [kg] |
| We recommend the more powerful lift mechanism for applications in overlapping ranges.<br>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** |

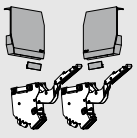
[1] One lift mechanism is unsprung

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

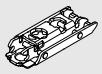
**Consisting of:**

| | | |
|---|---|---|
| **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 comfort**



**Short version with magnet**

| Material | Colour | |
|---|---|---|
| Nylon | SW \| R7036 \| CS | |
| **Cabinet height KH (mm)** | | |
| Up to 600 | | 958.1002 |

For drilling or in combination with adapter plates

**4 Adapter plate**



**Straight adapter plate – short version – 20/17**

| Material | Colour | |
|---|---|---|
| Nylon | SW \| R7036 \| CS | 956.1201 |



**Cruciform adapter plate – long version – 37/32**

| Material | Colour | |
|---|---|---|
| Nylon | R7036 | 956A1501 |

Assemble using Ø 3.5 mm or Ø 4 mm chipboard screws. TIP-ON must be ordered separately.

**5a Screw-on catch plate**



| Material | Colour | |
|---|---|---|
| Steel | NI \| ONS | 958.1008S |

For hard surfaces and/or MDF, Ø 2.5 mm pre-drilling and countersinking if required.

**5b Knock-in catch plate**



| Material | Colour | |
|---|---|---|
| Steel | NI \| ONS | |
| Ø 11.5 mm | | 958.1008D |
| Pre-drilling Ø 5 mm | | |

**5c Glue-on catch plate**



| Material | Colour | |
|---|---|---|
| Steel | NI \| ONS | |
| 13 x 18 mm | | 955.1008 |

**Accessories**

**- 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

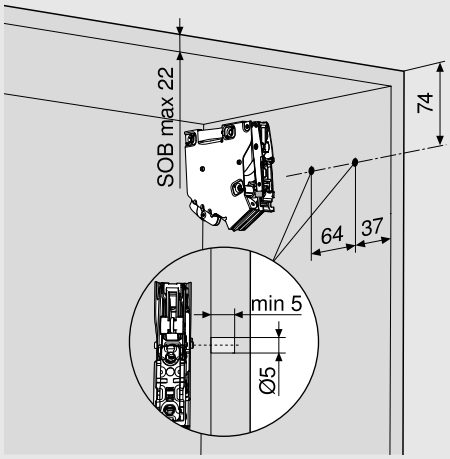
**Colours and material**

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

## Standard and TIP-ON

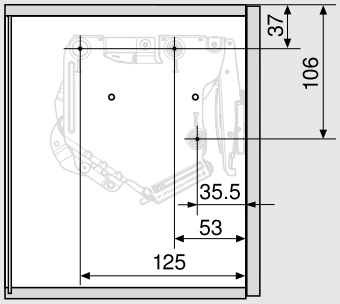
### Planning

**Peg position**



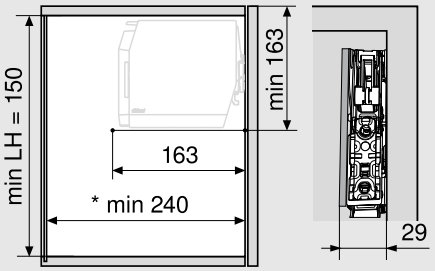

SOB Top panel thickness

**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

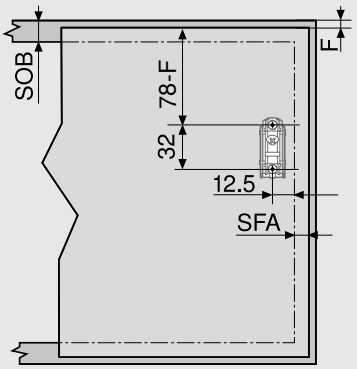
LH Internal cabinet height

## Standard and TIP-ON

### Planning

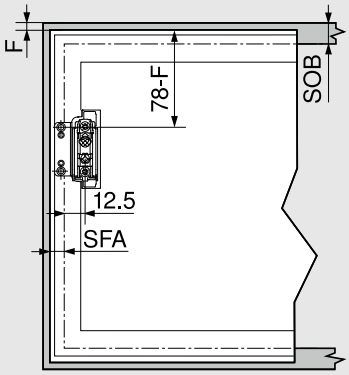
**Front assembly**

Wooden fronts and wide aluminium frames



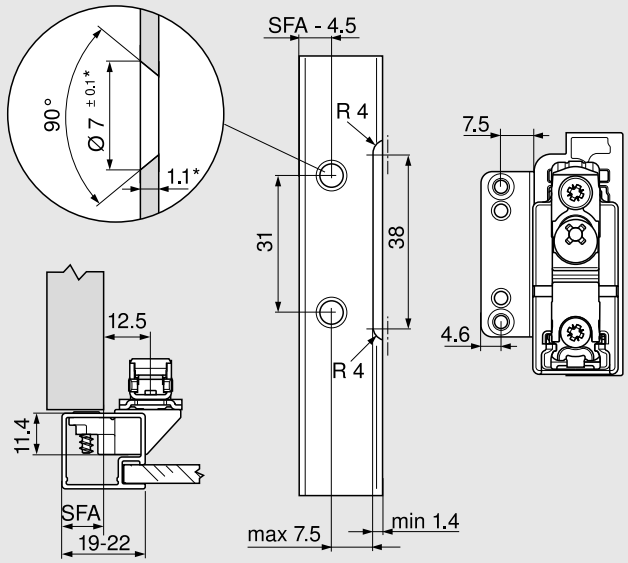

| | |
|---|---|
| SOB | Top panel thickness |
| SFA | Side front overlay |
| F | Gap |

Narrow aluminium frames




| | |
|---|---|
| SOB | Top panel thickness |
| SFA | Side front overlay |
| F | Gap |

**Narrow aluminium frames**

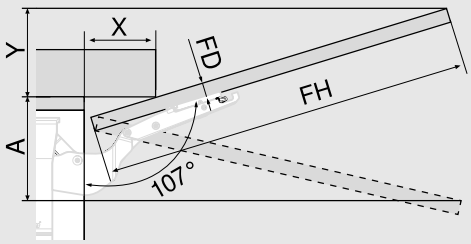



For frame width 19 mm, an SFA of 11-18 mm is possible.

* When changing material thickness, adjust the assembly dimensions accordingly

| | |
|---|---|
| SFA | Side front overlay |

**Space requirement – cornice | crown moulding**



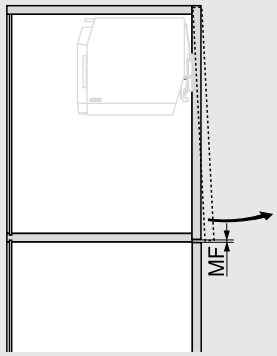

| Opening angle stop | | | Space requirement (mm) | | |
|---|---|---|---|---|---|
| Unsprung | | | Y = FH x 0.29 - 15 + FD | | |
| 100° | | | Y = FH x 0.17 - 15 + FD | | |
| 75° | | | A = FH x 0.26 + 15 - FD | | |
| **FD (mm)** | 16 | 19 | 22 | 26 | - |
| **X (mm)** | 70 | 59 | 49 | 35 | - |

| | |
|---|---|
| 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

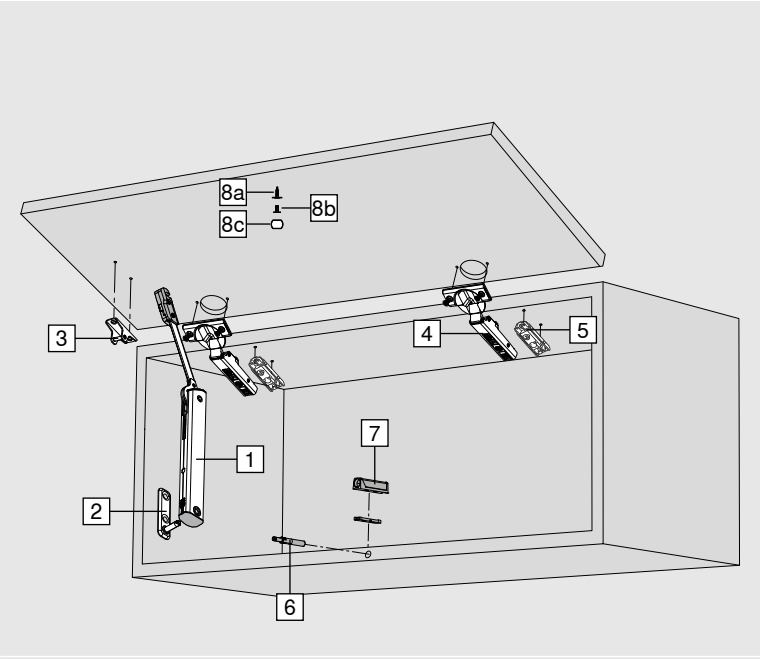
Find more information on
assembly and adjustment of
AVENTOS HK-S at

**www.blum.com/aventos-hks-assembly**

# AVENTOS HK-XS



## Standard and TIP-ON




☐ Standard
■ 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) =**<br>cabinet height (KH) [mm] x front weight incl. double handle weight [kg] |
| We recommend the more powerful lift mechanism for applications in overlapping ranges.<br>A trial application is recommended when you are in a borderline area of the individual lift mechanism. |

**1 ☐ 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 |

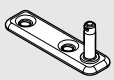
The power factor (LF) is doubled when used on both sides

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

LF Power factor

OW Opening angle

**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 |

## Standard and TIP-ON

### Ordering information

**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 |

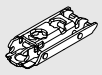
3 hinges starting at cabinet width KB 900 mm and/or power factor LF 1800

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

**6 ■ TIP-ON comfort**



**Short version with magnet**

| Material | Colour |
|---|---|
| Nylon | SW \| R7036 \| CS |

**Cabinet height KH (mm)**

| | |
|---|---|
| Up to 600 | 958.1002 |

For drilling or in combination with adapter plates

**7 ■ Adapter plate**



**Straight adapter plate – short version – 20/17**

| Material | Colour | |
|---|---|---|
| Nylon | SW \| R7036 \| CS | 956.1201 |



**Cruciform adapter plate – long version – 37/32**

| Material | Colour | |
|---|---|---|
| Nylon | R7036 | 956A1501 |

Assemble using Ø 3.5 mm or Ø 4 mm chipboard screws.
TIP-ON must be ordered separately.

**8a ■ Screw-on catch plate**



| Material | Colour | |
|---|---|---|
| Steel | NI \| ONS | 958.1008S |

For hard surfaces and/or MDF, Ø 2.5 mm pre-drilling and countersinking if required.

**8b ■ Knock-in catch plate**



| Material | Colour | |
|---|---|---|
| Steel | NI \| ONS | |
| Ø 11.5 mm | | 958.1008D |
| Pre-drilling Ø 5 mm | | |

**8c ■ Glue-on catch plate**



| Material | Colour | |
|---|---|---|
| Steel | NI \| ONS | |
| 13 x 18 mm | | 955.1008 |

### Accessories

**- ☐■ Opening angle stop**



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

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

### Colours and material

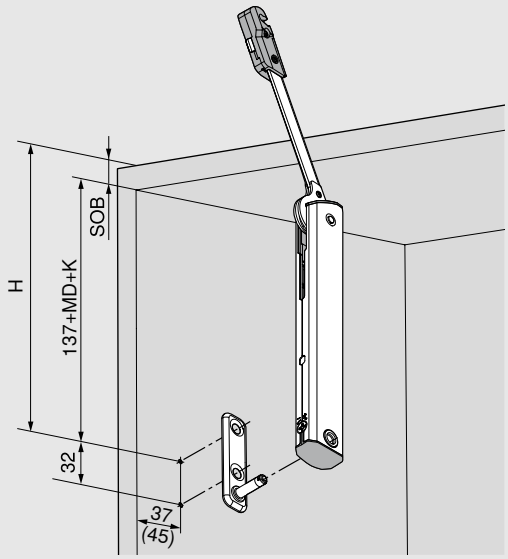
| Name | |
|---|---|
| SW | Silk white |
| SZ | Black |
| R7036 | RAL 7036 platinum grey |
| CS | Carbon black |
| NI | Nickel plated |
| ONS | Onyx black |

[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

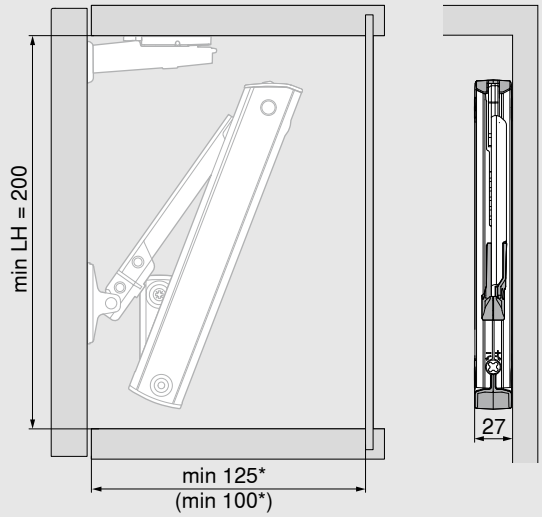
### Planning

**Drilling position**

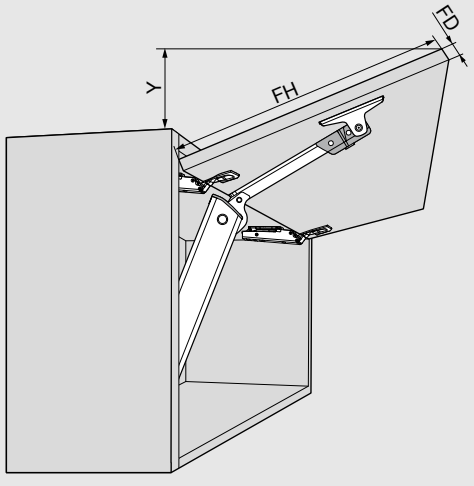



| | |
|---|---|
| H = 137 + MD + K + SOB | |
| MD | Mounting plate spacing |
| K | Cranking of hinge arm |
| | Straight hinge arm 0 mm |
| | Cranked hinge arm 9.5 mm |
| | Double cranked arm 18 mm |
| SOB | Top panel thickness |
| () | Internal cabinet depth 100 mm |

**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) x 0.3

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

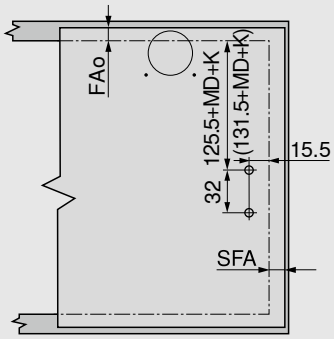
| | |
|---|---|
| FD | Front thickness |
| FH | Front height |

## Standard and TIP-ON

### Planning

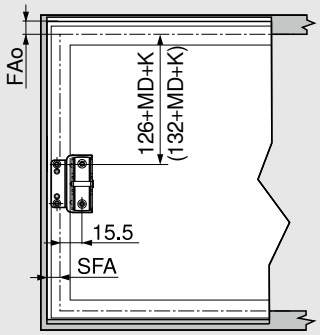
**Front assembly**

Wooden fronts and wide aluminium frames



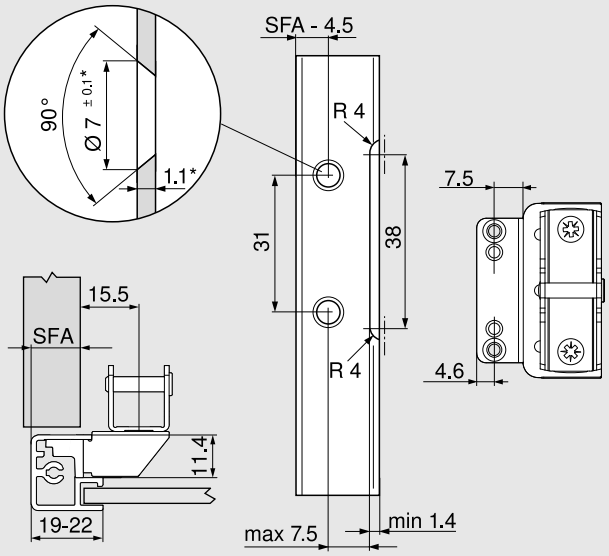

| | |
|---|---|
| FAo | Upper front overlay |
| SFA | Side front overlay |
| MD | Mounting plate spacing |
| K | Cranking of hinge arm |
| | Straight hinge arm 0 mm |
| | Cranked hinge arm 9.5 mm |
| | Double cranked arm 18 mm |
| () | Internal cabinet depth 100 mm |

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**

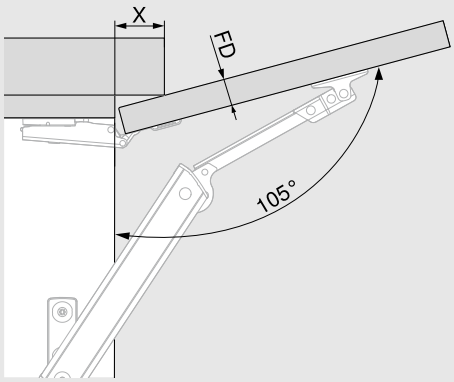



For frame width 19 mm, an SFA of 11-18 mm is possible.

* When changing material thickness, adjust the assembly dimensions accordingly

SFA Side front overlay

**Space requirement – cornice | crown moulding**




**CLIP top BLUMOTION 110° hinge**

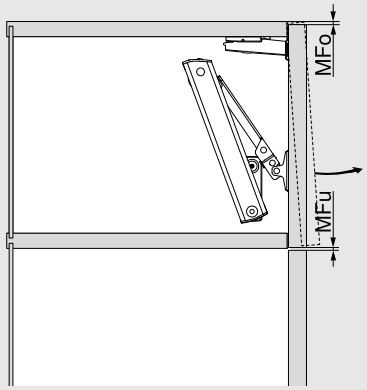
| **FD (mm)** | 16 | 19 | 22 | 24 |
|---|---|---|---|---|
| **X (mm)** | 45 | 34 | 23 | 15 |

FD Front thickness

## Standard and TIP-ON

### Planning

**Minimum gap**

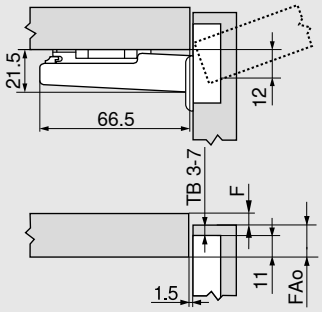



MFo Minimum gap at the top depending on the hinge used

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 | | | | | | | | | |

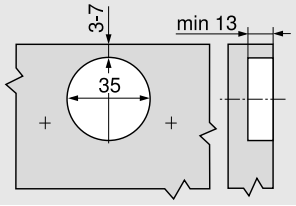
MD Mounting plate spacing (mm)

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

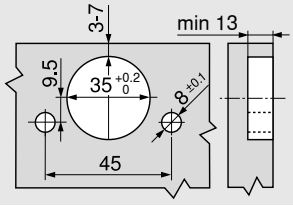



| Boss drilling distance TB (mm) | Front thickness FD (mm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 16 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 28 | 30 |
| 3 | 0.5 | 0.8 | 1.0 | 1.2 | 1.5 | 1.8 | 2.2 | 2.7 | 3.5 | 4.3 | △ | △ |
| 4 | 0.5 | 0.8 | 1.0 | 1.2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

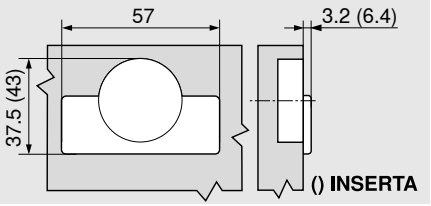
**Screw-on assembly**




**INSERTA assembly**




**Hinge boss dimensions**




Further planning information for TIP-ON – see page 52

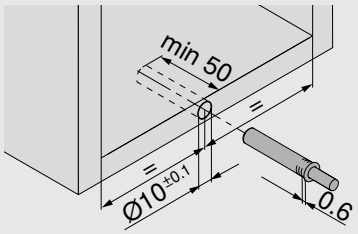
Find more information on assembly and adjustment of AVENTOS HK-XS at

**www.blum.com/aventos-hkxs-assembly**

# TIP-ON

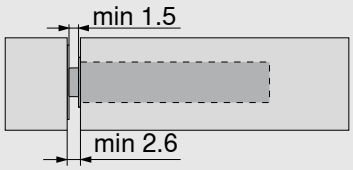
## Planning

### TIP-ON for drilling fixing position



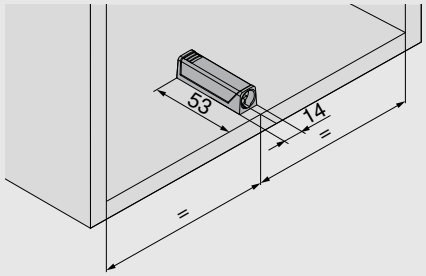

For stay lifts up to and including a height of 600 mm

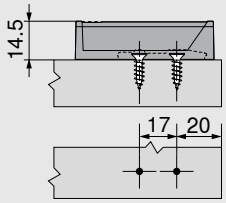
### Installation dimensions for front gap



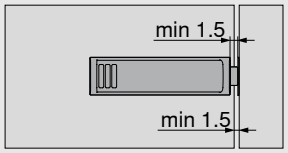

### TIP-ON adapter plate fixing position

#### Straight adapter plate – short version



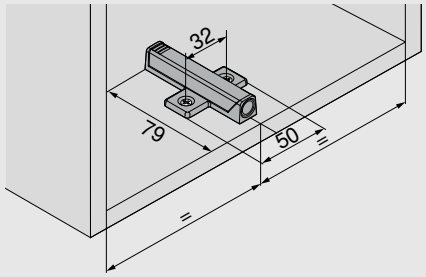



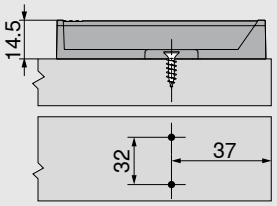

#### Installation dimensions for front gap



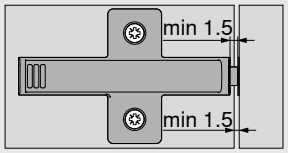

### TIP-ON adapter plate fixing position

#### Cruciform adapter plate



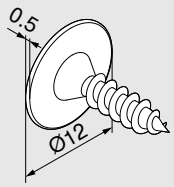

#### Installation dimensions for front gap

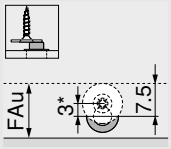
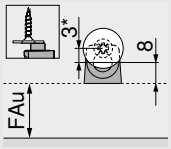
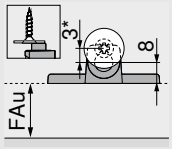


## TIP-ON

### Planning

**Screw-on catch plate**



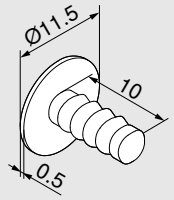

| TIP-ON | | |
|---|---|---|
| For drilling | Straight adapter plate | Cruciform adapter plate |
|  |  |  |

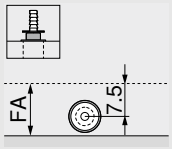
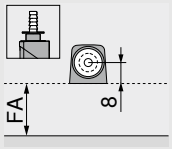
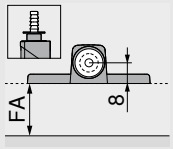


* For the screw-on catch plate we recommend positioning the catch plate 3 mm away from TIP-ON.

FAu Bottom front overlay

**Knock-in catch plate**

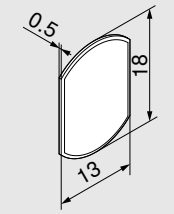


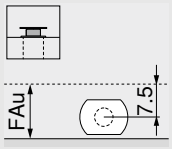
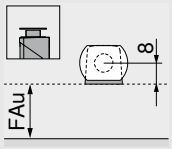
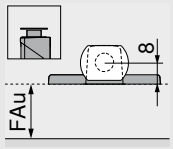

| TIP-ON | | |
|---|---|---|
| For drilling | Straight adapter plate | Cruciform adapter plate |
|  |  |  |



FAu Bottom front overlay

**Glue-on catch plate**




| TIP-ON | | |
|---|---|---|
| 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



| Colour | NI \| ONS | |
|---|---|---|
| **Version** | **Material** | |
| Symmetrical | Steel | **20S42T1** |

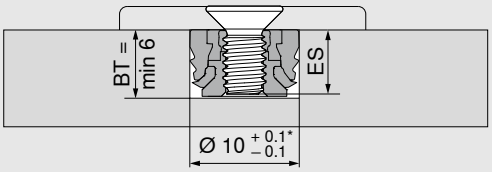
Fixing positions as per the details in the respective planning information

### EXPANDO T – single



| Colour | Material | |
|---|---|---|
| Dark grey | Nylon/steel | **70T4532T** |

### Drilling depth | Screw selection – EXPANDO T

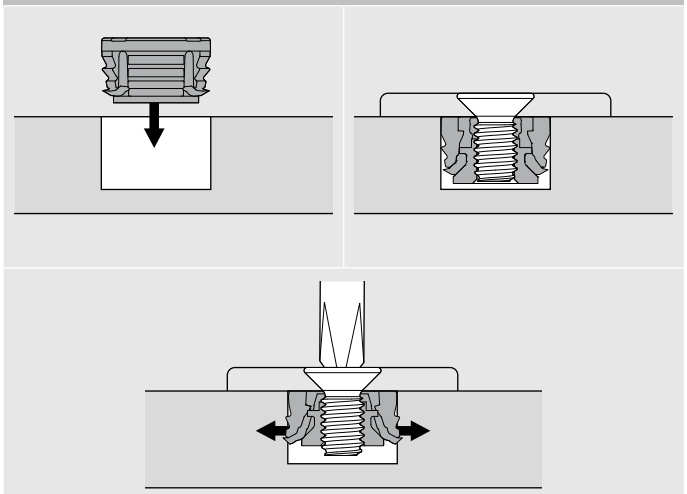



| | |
|---|---|
| BT | Drilling depth |
| ES | Screw penetration depth |
| ES | Min. 4 mm |
| ES | Max. drilling depth – 0.5 mm |
| * | Stone and ceramic +0.2/-0.1 mm |

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

### 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/mm²) | 1.5 |
| MDF (transverse tensile strength > 0.6 N/mm²) | 1.5 |
| HDF | 2 |
| HPL | 2 |
| Mineral composites | 2 |
| Granite stone – nero assoluto | 3 |
| Artificial stone – quartz composite | 3 |
| Ceramic panels | 3 |

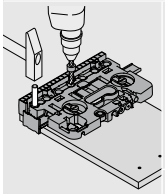
### Limitation of liability

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**

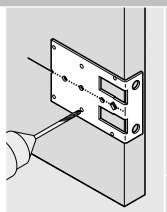
## Assembly devices

### Front assembly



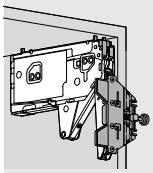
Universal drilling template

ZML.0040.02



Template

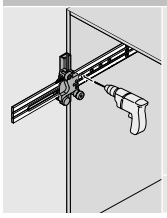
65.5300



Marking template for AVENTOS HK top front fixing bracket

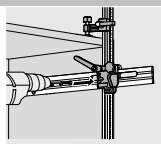
ZML.2200

### Cabinet assembly



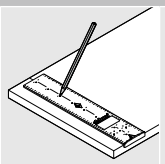
Universal individual template

65.1051.02



Universal drilling template

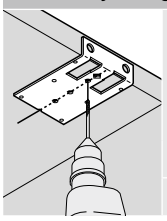
65.1000.01



Universal marking template

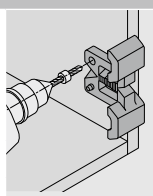
65.5340.01

### Assembly – hinge systems



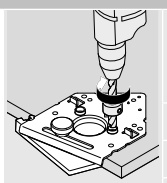
Template

65.5300



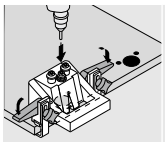
Drilling template for mounting plates

65.5070



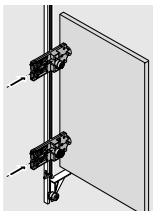
Drilling template for hinges

| Ø (mm) | |
|---|---|
| 8 \| 2.5 | 65.059A |
| 2.5 | 65.055A |



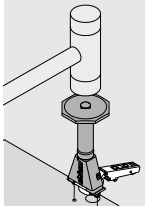
ECODRILL

M31.1000



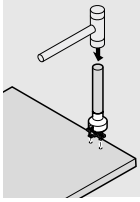
Drilling template for hinge systems

65.7500.03



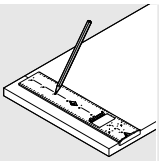
Insertion tool for hinges

ZME.0710



Insertion tool for mounting plates

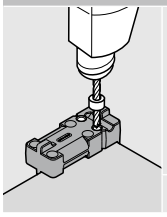
| | |
|---|---|
| Mounting plate | 65.6100 |
| Steel horizontal mounting plate | ZME.0730 |



Universal marking template

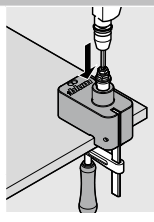
65.5340.01

### Assembly – SERVO-DRIVE



Drilling template for Blum distance bumper

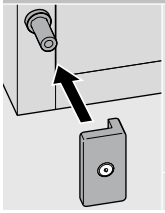
ZML.1090



Drilling template for the SERVO-DRIVE switch

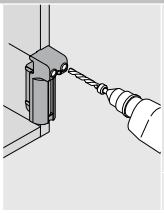
M31.2000

### Assembly – TIP-ON



Positioning template for catch plate

65.5210.01

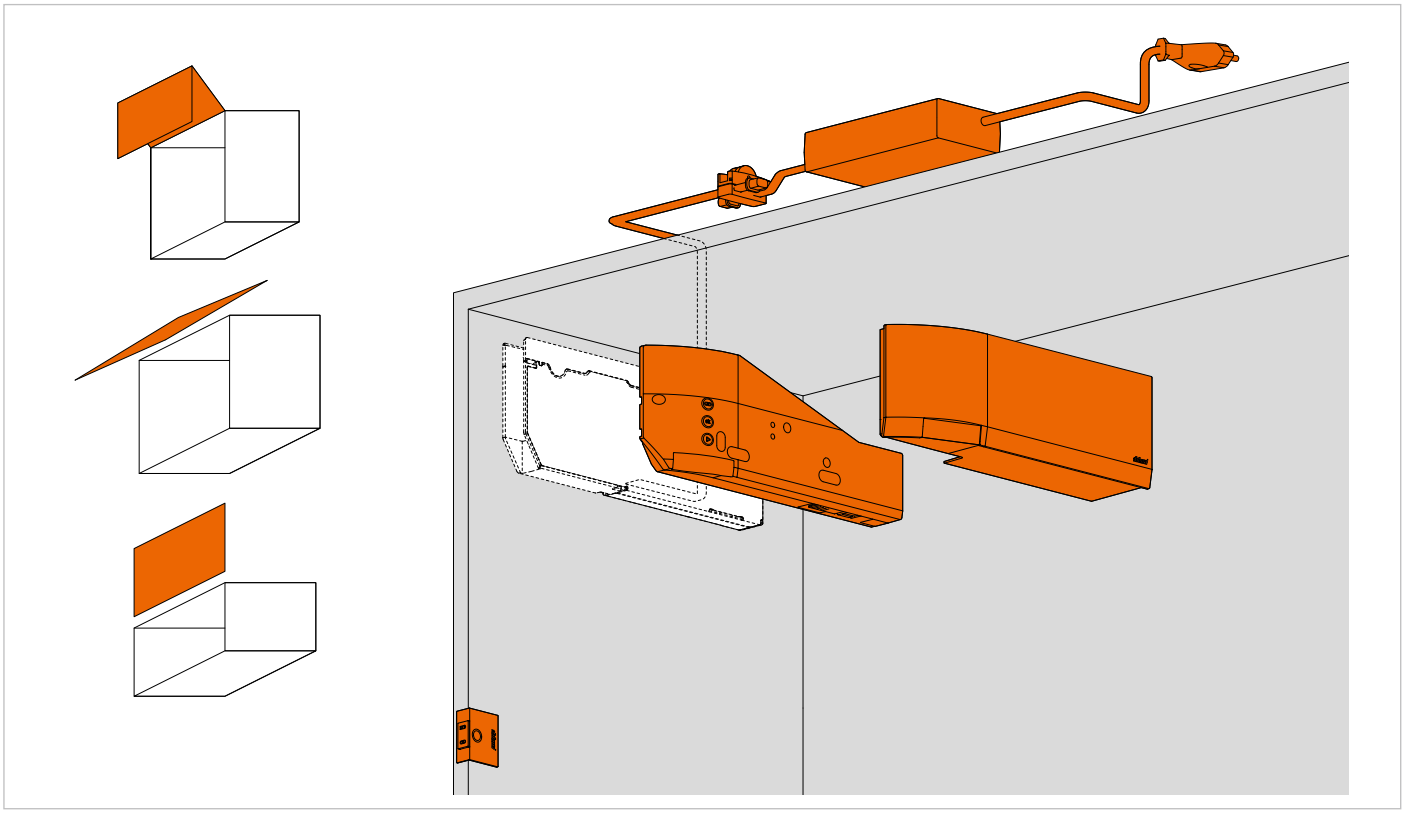


Drilling template for BLUMOTION | TIP-ON

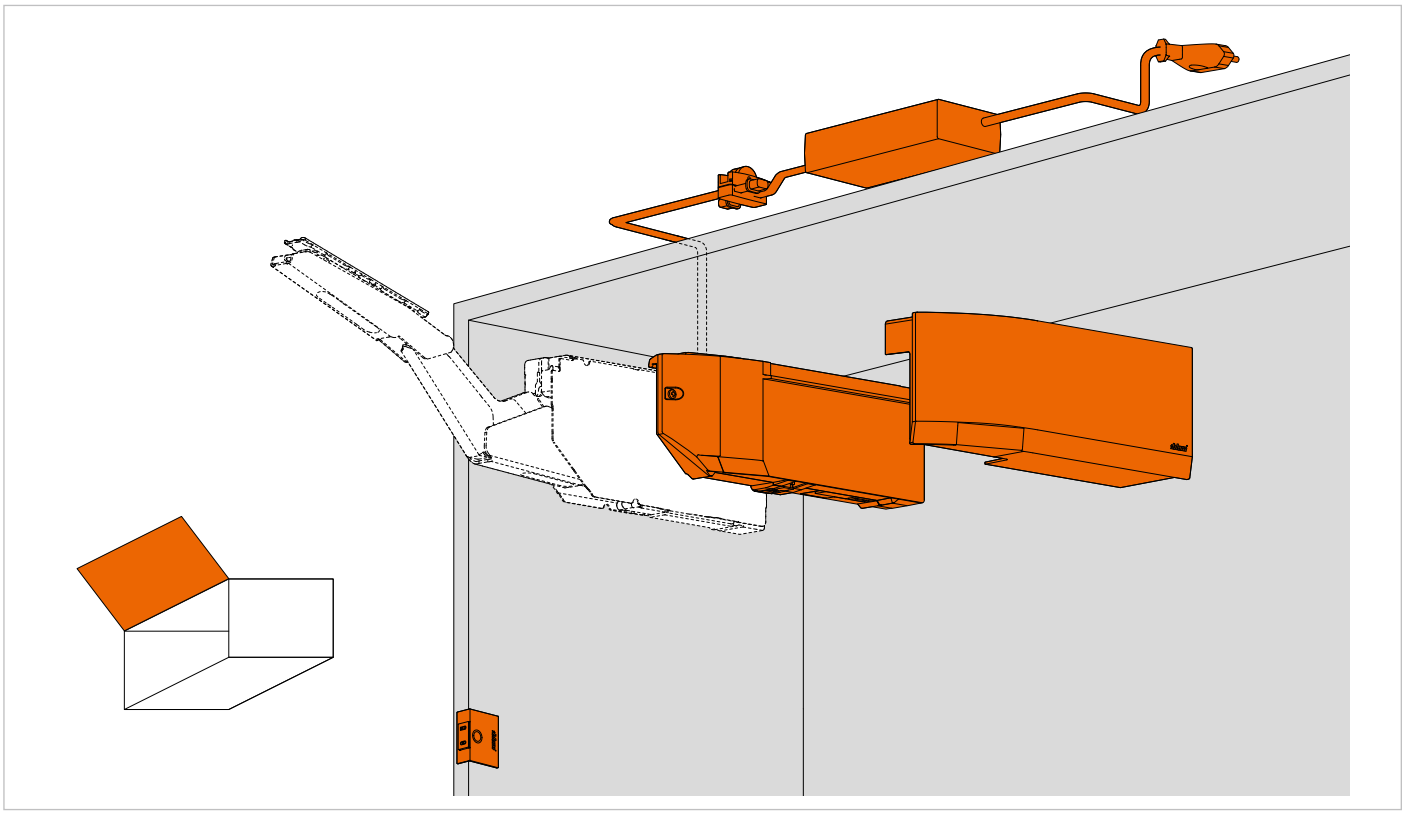
65.5010

## SERVO-DRIVE power supply unit and accessories

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



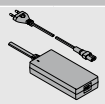
### SERVO-DRIVE for AVENTOS HK top



## 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<br>Incl. operating and installation instructions |
| 1b | 1 x | Flex<br>Length 1.5–1.8 m, incl. plug |

**Power supply unit housing**

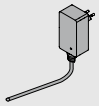


| Colour | Material | |
|---|---|---|
| WGR | K | Z10NG120 |

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<br>Incl. cable, 1120 mm<br>(with SERVO-DRIVE distribution cable extendible to max. 2000 mm)<br>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

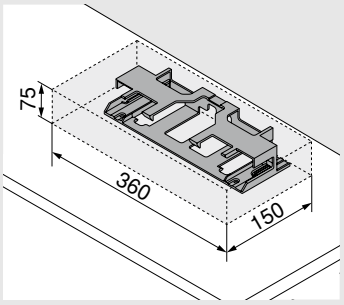
**Colours and material**

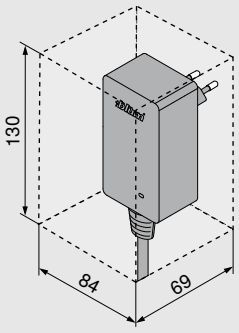
| Name | |
|---|---|
| WGR | White grey |
| SZ | Black |
| WS | White |
| K | Nylon |

## SERVO-DRIVE power supply unit and accessories

### Planning

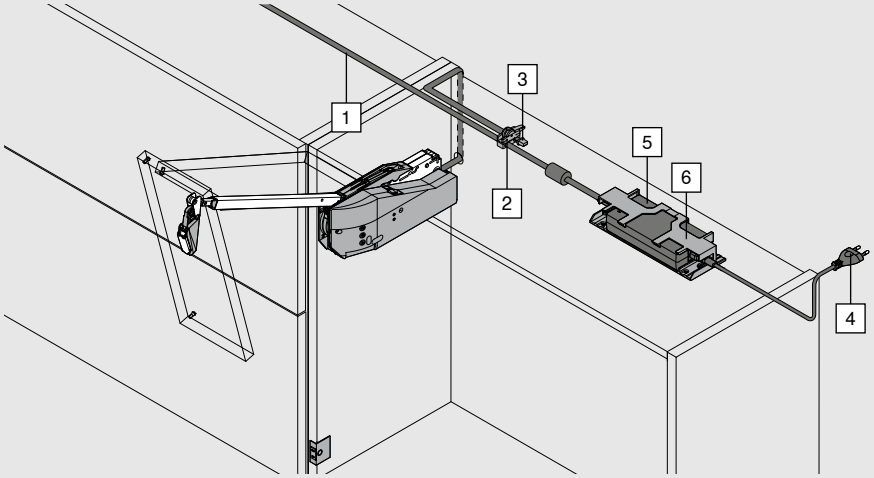
#### Space requirement and safety distance




**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.**

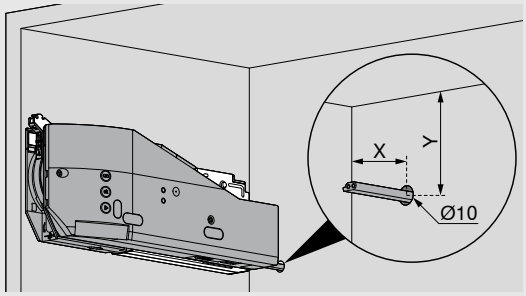
#### Assembly on the cabinet top panel




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

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

#### Back cabling

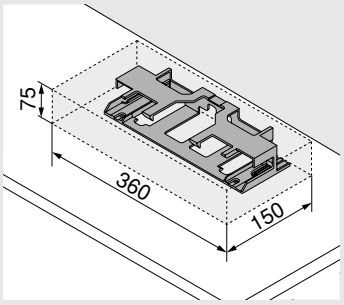


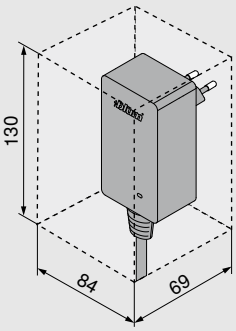

| | | | X (mm) | Y (mm) |
|---|---|---|---|---|
| **AVENTOS HF top** | Cabinet height KH (mm) | 480–519 | 38.5 | 102 |
| | | 520–1200 | 38.5 | 124 |
| **AVENTOS HS top** | | | 38.5 | 45 |
| **AVENTOS HL top** | | | 38.5 | 71 |

## SERVO-DRIVE power supply unit and accessories

### Planning

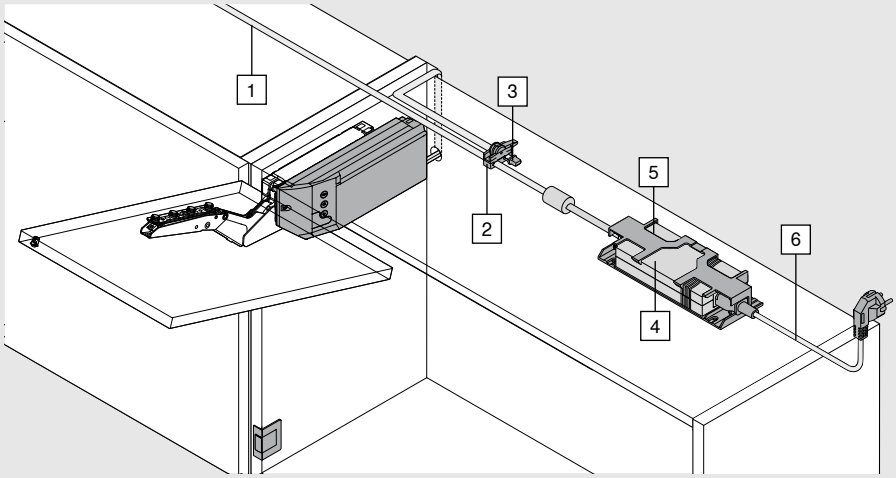
#### Space requirement and safety distance




**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.**

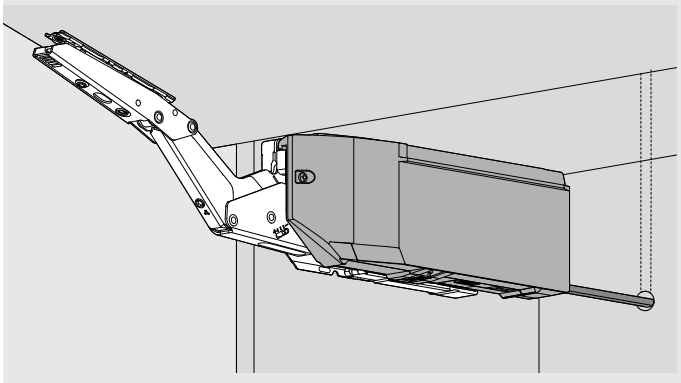
#### Assembly on the cabinet top panel



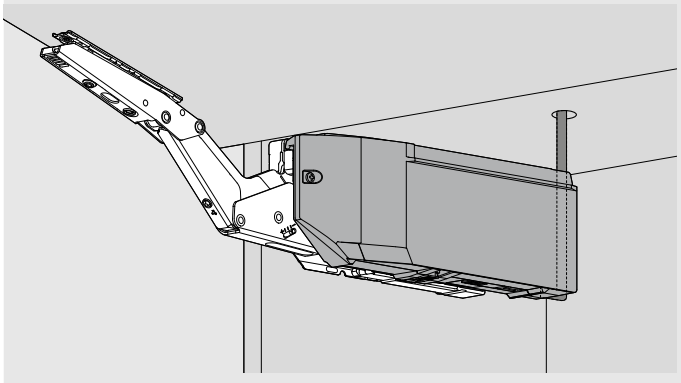

1. SERVO-DRIVE distribution cable
2. Connecting node
3. Cable end protector
4. SERVO-DRIVE power supply unit
5. Power supply unit housing
6. Flex

**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**



# 11

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More than

# 30

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