How to Install a Blum AVENTOS HS Top Up-and-Over Lift

Doors, Drawers & Fronts. US catalog, in inches and millimeters. Updated November 2026.

The AVENTOS HS top is Blum's up-and-over lift: the door swings up and over the top of a taller wall cabinet, carried by two lift mechanisms with lever arms, one on each cabinet side. This guide shows how to pick the set by cabinet height and door weight, the parts to order by Blum part number, the side and door hole positions and the steps in order, for cabinets from 350 mm (about 13-25/32 in) to 800 mm (about 31-15/32 in) high.

AVENTOS HS top at a glance

Cabinet Height	From 350 mm (about 13-25/32 in) to 800 mm (about 31-15/32 in) outside height, up to 1828 mm (about 71-15/16 in) outside width
Inside Depth	At least 264 mm (about 10-13/32 in)
Sizing	By cabinet height and door weight in pounds and ounces: the table lists weight, not a power factor
Cabinet Side	Positioning system, no pre-drilling required, four wood screws Ø4 x 35, or four system screw holes
Door Plates	Z = 195 + FAo from the top edge of the door, then three steps of 32 mm (about 1-1/4 in)
Options	SERVO-DRIVE fits the HS top

From Blum AVENTOS catalog p.9, 24, 21, 25.

Who this guide is for

A homeowner or small workshop hanging an up-and-over door on a wall cabinet from 350 mm (about 13-25/32 in) to 800 mm (about 31-15/32 in) high with an inside depth of at least 264 mm (about 10-13/32 in).

What you need

Order one lift set by cabinet height and door weight, the lever set, the cover caps and the door hardware set for your door.

Blum Part Number	What It Is	How Many	Your Choice
22S2200, 22S2500, 22S2800	AVENTOS HS top lift mechanism set, chosen by cabinet height and door weight: 2 symmetrical lift mechanisms with positioning system and 8 wood screws Ø4 x 35	1 set	
22S2210, 22S2510, 22S2810	The same set with pre-attached system screws instead of the positioning system	1 set, in place of the set above	
22S3500	Symmetrical lever set	1 set	Nickel (NI) or Eclipse black (ECS)
22.8000	Cover cap set	1 set	Dark gray (TGR), Silk white (SW) or Light gray (HGR)

20S4200	Door hardware set for wooden doors and wide aluminum frames	1 set	Nickel (NI) or Onyx black (ONS)
20S4200A	Door hardware set for narrow aluminum frames	1 set, in place of 20S4200	Nickel (NI) or Onyx black (ONS)
20S4F01	Door hardware set for large overlay five-piece doors: a mounting plate with bracket	1 set, in place of 20S4200	
20S42T1	Door hardware set for EXPANDO T, thin fronts	1 set, in place of 20S4200	

From Blum AVENTOS catalog p.21, 22. Finishes and colors are your choice; the table names them as Blum prints them.

Option: the SERVO-DRIVE set for the HS top is 23.A000 with cover set 23.8000, and the SERVO-DRIVE guide lists the rest.

Jigs and tools that make it easier

With the positioning-system set, the lift mechanism's cabinet side needs no pre-drilling, and the front plates still need marking or drilling. These jigs help with the marking and drilling when you work by hand.

Blum Part Number	Jig or Tool	What It Does Here
65.1051.02	Universal individual template, with the 5 mm (about 3/16 in) drill bit DB-5mm	Marks and guides the cabinet side holes for the system-screw set.
ZML.0040.02	Universal drilling template	Marks and drills the front fixing positions on the door.
ZML.2200	Marking template for front fixing bracket	Marks the door plate positions. Blum's 2025 assembly aids brochure lists it for the HS top; the 2026 overview lists it for the HK top.
T20 TORX DRIVER	T20 TORX driver, or TORX BIT T20X2 in a screw gun	Blum prints it for AVENTOS HKi and AVENTOS top adjustments: the balance and the three cams.

From Blum AVENTOS overview p.1; Blum assembly aids brochure p.14; Blum AVENTOS catalog p.67.

If you cut on a CNC router, you can drill these same positions from your own cut file, so the jigs here are for building by hand.

Sizing, space and limits

The HS top is picked from a table of cabinet height against door weight, with the weight in pounds and ounces. The table prints no power factor. This guide counts the pull once, as CabDesign does, so weigh the finished door with its pull fitted.

Door plate position from the top edge of the door

`Z = 195 + FAo`

FAo is the upper door overlay, in millimeters. The first hole of the plate is Z below the top edge of the door, and three more follow at 32 mm (about 1-1/4 in) steps.

From Blum AVENTOS catalog p.25.

Lift Sets by Cabinet Height and Door Weight

Part Number	System Screw Set	Cabinet Height	Door Weight
22S2200	22S2210	350 mm (about 13-25/32 in) to 450 mm (about 17-23/32 in)	4 lb 6 oz to 25 lb 5 oz

22S2200	22S2210	450 mm (about 17-23/32 in) to 540 mm (about 21-1/4 in)	5 lb 8 oz to 27 lb 9 oz
22S2500	22S2510	480 mm (about 18-29/32 in) to 660 mm (about 25-31/32 in)	6 lb 1 oz to 33 lb 10 oz
22S2800	22S2810	650 mm (about 25-19/32 in) to 800 mm (about 31-1/2 in)	7 lb 11 oz to 40 lb 13 oz

Blum prints no inclusive or exclusive word for the end of a range, so read each range as running from its first figure to its second, and do a trial application near either end. From Blum AVENTOS catalog p.21.

Cornice Clearance by Gap F, Maximum

Gap F	X Maximum	Y Maximum
3 mm (about 1/8 in)	31 mm (about 1-7/32 in)	117 mm (about 4-19/32 in)
2 mm (about 3/32 in)	29 mm (about 1-1/8 in)	118 mm (about 4-5/8 in)
1.5 mm (about 1/16 in)	27 mm (about 1-1/16 in)	119 mm (about 4-21/32 in)

X and Y are marked on Blum's page 25. From Blum AVENTOS catalog p.25.

Blum recommends the more powerful lift mechanism for applications in overlapping ranges, and a trial application when you are in a borderline area.

Blum prints: "The power factor can be increased by 50% when using a third lift mechanism." Blum also recommends a third lift mechanism for wide cabinets, to prevent the door from sagging when open. This table lists door weight, not a power factor, so do a trial application before you add a third mechanism.

Worked example. A cabinet 600 mm (about 23-5/8 in) high and 30 in wide

The door weighs 14 lb and the pull weighs 0.3 lb, and the pull counts once.

1. Door weight with the pull = 14 + 0.3 = 14.3 lb, which is 14 lb 5 oz to the nearest ounce
2. The cabinet height of 600 mm (about 23-5/8 in) falls in only one row, the one from 480 mm (about 18-29/32 in) to 660 mm (about 25-31/32 in), which holds 6 lb 1 oz to 33 lb 10 oz
3. That row is part 22S2500

Order lift set 22S2500, lever set 22S3500 and door hardware set 20S4200. The set holds two lift mechanisms.

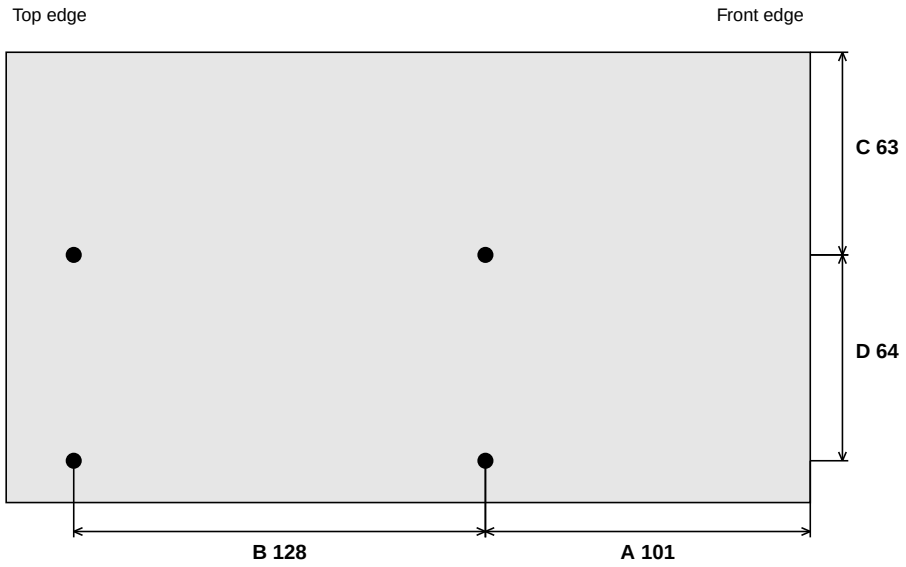
Where two rows overlap, Blum recommends the more powerful mechanism.

From Blum AVENTOS catalog p.21.

Drawings and positions

Every drawing below is ours, drawn to scale from the figures Blum prints and named with its source page. The letter on a dimension line points to the table under the drawing.

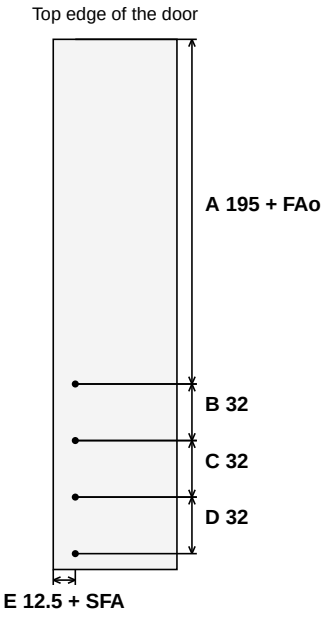
System screw holes in the cabinet side



Drawn by CabDesign after Blum AVENTOS catalog cme106254, p.24. Four holes, Ø5 mm (about 3/16 in) and at least 11.5 mm (about 15/32 in) deep, measured from the front edge back and down from the underside of the top panel (the inside top). On a cabinet whose top panel sits between the sides, add the top panel's thickness to measure from the side's top edge. The positioning-system set needs none of this.

Letter	Figure	In Inches	What It Measures
A	101 mm	about 3-31/32 in	Front edge to the first column of holes
B	128 mm	about 5-1/32 in	First column of holes to the second
C	63 mm	about 2-15/32 in	Top edge down to the first row of holes
D	64 mm	about 2-17/32 in	First row of holes to the second

Door plate screw holes



Drawn by CabDesign after Blum AVENTOS catalog cme106254, p.25, for wooden doors and wide aluminum frames, with the upper overlay FAo and the side overlay SFA drawn as zero. Narrow aluminum frames use a different pattern: use door hardware set 20S4200A and follow Blum's page 25.

Letter	Figure	In Inches	What It Measures
A	195 mm + FAo	about 7-11/16 in + FAo	Top edge of the door to the first hole, plus the upper door overlay (Z)
B	32 mm	about 1-1/4 in	First hole to the second
C	32 mm	about 1-1/4 in	Second hole to the third
D	32 mm	about 1-1/4 in	Third hole to the fourth
E	12.5 mm + SFA	about 1/2 in + SFA	Side edge of the door to the column of holes, plus the side door overlay

Steps, in order

1. Pick the set by cabinet height and door weight. Find your cabinet height in the table, then check that the finished door's weight sits inside the row's weight range. Where two rows overlap, choose the more powerful set.

2. Check the space. The inside depth is at least 264 mm (about 10-13/32 in).

3. Fit the lift mechanisms to the cabinet side. With the positioning-system set, seat each mechanism against the top panel and flush with the front, and fix it with its four wood screws Ø4 x 35. With the system-screw set, drill the four Ø5 mm (about 3/16 in) holes first, at the positions in the drawing.

4. Fit the door plates. Fix the mounting plates to the back of the door at the positions in the door drawing: Z = 195 + FAo from the top edge, then three steps of 32 mm (about 1-1/4 in), and 12.5 mm (about 1/2 in) plus the side overlay in from the side edge.

5. Hang the door. Hang the door on the lever arms as Blum's pictured steps show.

6. Balance the door. Lower the door by hand. If it rises by itself, reduce the tension, and if it falls, increase it, with a T20 TORX driver, until it balances.

7. Make the three adjustments. With the T20 adjust the door's side, depth and height cams, plus or minus 2 mm (about 3/32 in) each.

8. Snap on the caps. Snap on the cover caps of set 22.8000.

Check before you finish

- Both mechanisms are flush with the front and every wood screw is in.
- The door balances, and both mechanisms have the same tension.
- The open door clears a cornice or crown molding by the X and Y for your gap F.
- The three door adjustments are within plus or minus 2 mm (about 3/32 in) each.

Common mistakes

- Measuring the cabinet holes from the side's top edge. Blum measures the lift from the inside top of the cabinet, the underside of the top panel. On a cabinet whose top panel sits between the sides, the side's top edge is one top-panel thickness higher, so holes measured from that edge land one top-panel thickness too high and the arm misses the door plate.
- Reading the table against the wrong weight. The table is read against the weight of the finished door. Weigh the door with its pull fitted, and read the row for your cabinet height.
- Ignoring a borderline weight. Blum recommends a trial application when you are in a borderline area, and the more powerful mechanism where ranges overlap.
- A wide cabinet with two mechanisms. Blum recommends a third lift mechanism for wide cabinets, to prevent the door from sagging when open.
- A cabinet shallower than the lift needs. The inside depth is at least 264 mm (about 10-13/32 in).
- No clearance check for a cornice. Blum gives the X and Y clearance by gap F so that the open door does not hit the molding above the cabinet.

From Blum AVENTOS catalog p.62, 21, 24, 25.

Check your numbers: Enter your cabinet and door in inches or millimeters, and the Blum AVENTOS Calculator gives the part, its power factor and every hole, each cabinet figure measured from Blum's own line and from the side's top edge. Open the Blum AVENTOS Calculator at cabdesign.app/modules/blum-aventos-calculator/blum-aventos-calculator.

What Blum's sheet decides

These details are not published in the Blum documents this guide is written from, so this guide leaves them out. Read them on Blum's own sheet for your part.

- The size of a pilot hole for the door screws: Blum prints only the screw part numbers.
- The door weight range for a third lift mechanism.

Frequently asked questions

How do I pick an AVENTOS HS top lift?

Use Blum's table of cabinet height against door weight: 22S2200 for 350 mm (about 13-25/32 in) to 540 mm (about 21-1/4 in) high, 22S2500 for 480 mm (about 18-29/32 in) to 660 mm (about 25-31/32 in) and 22S2800 for 650 mm (about 25-19/32 in) to 800 mm (about 31-1/2 in), each with its own door weight range in pounds and ounces. Where two rows overlap, Blum recommends the more powerful lift mechanism.

What depth does an AVENTOS HS top need?

An inside depth of at least 264 mm (about 10-13/32 in).

Do I need to pre-drill the cabinet side for an HS top?

Blum prints "no pre-drilling required" for the lift installation with the positioning system. The system-screw sets use four Ø5 mm (about 3/16 in) holes instead.

Where do the HS top door plates go?

The first hole is Z = 195 + FAo from the top edge of the door, where FAo is the upper door overlay, then three more holes follow at 32 mm (about 1-1/4 in) steps, 12.5 mm (about 1/2 in) plus the side overlay in from the side edge.

Does the HS top take SERVO-DRIVE?

Yes. See the SERVO-DRIVE guide for the parts and holes.

How CabDesign picks and sizes this

CabDesign sizes a lift-up front on the AVENTOS HS top from the same printed Blum tables used in this guide. It reads the cabinet height and the door weight, counts the pull once, picks the lift set and the lever set, and puts their part numbers, and the door hardware set, on the project's buy list.

Size it the same way in the Designer: pick a lift-up front, enter the door weight, and the Designer reads the same printed tables. Open the Designer at cabdesign.app.

Keep reading

- How to Install a Blum AVENTOS HL Top Parallel Lift: cabdesign.app/guides/doors-drawers-fronts/install-blum-aventos-hl-top

- How to Install a Blum AVENTOS HF Top Bi-Fold Lift: cabdesign.app/guides/doors-drawers-fronts/install-blum-aventos-hf-top

- How to Add Blum SERVO-DRIVE to an AVENTOS Lift: cabdesign.app/guides/doors-drawers-fronts/install-blum-servo-drive-aventos

- How to Install a Blum AVENTOS HK Top Stay Lift: cabdesign.app/guides/doors-drawers-fronts/install-blum-aventos-hk-top

- Cabinet Door Overlay and Reveals, Explained: cabdesign.app/guides/doors-drawers-fronts/door-overlay-and-reveals-explained

Sources and references

- Blum AVENTOS catalog cme106254, LIT.AVT1001.08.26, blum.com/file/cme106254_ep_dok_bus (ranges, part numbers and drawings)

- Blum AVENTOS program overview cme115842, blum.com/file/cme115842_td_dok_bus (templates for each lift)

- Blum assembly aids brochure cme205127, blum.com/file/cme205127_ep_dok_bus (the front marking template)

- Blum AVENTOS HS top installation and adjustment instructions, blum.com/hstopassembly (the pictured assembly steps)

AVENTOS, SERVO-DRIVE, TIP-ON and BLUMOTION are names of Blum. This guide is independent: it is written by CabDesign and Blum has not reviewed it.

Blum's own instructions win if they differ, and Blum may change its parts without notice.

A CabDesign guide. This guide on the web: cabdesign.app/guides/doors-drawers-fronts/install-blum-aventos-hs-top