How to Install a Blum AVENTOS HF Top Bi-Fold Lift

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

The AVENTOS HF top is Blum's bi-fold lift: two doors, one above the other, fold together and lift up, carried by two lift mechanisms with telescopic arms and hinged at the middle. This guide shows how to size it by power factor and the theoretical cabinet height, the parts to order by Blum part number, the jigs for hand work and the steps in order, for cabinets from 480 mm (about 18-29/32 in) to 1219 mm (about 47-31/32 in) high.

AVENTOS HF top at a glance

Cabinet Height	From 480 mm (about 18-29/32 in) to 1219 mm (about 47-31/32 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	Power factor = cabinet height (in) x combined door weight including handle weight (lb), with the handle counted once
Unequal Doors	Use the theoretical cabinet height TKH, and put the larger door at the top
Lever Set	Chosen by cabinet height: 22F3200, 22F3500 or 22F3900
Options	SERVO-DRIVE fits the HF top

From Blum AVENTOS catalog p.9, 14, 11, 12.

Who this guide is for

A homeowner or small workshop hanging two folding lift-up doors on a tall wall cabinet from 480 mm (about 18-29/32 in) to 1219 mm (about 47-31/32 in) high with an inside depth of at least 264 mm (about 10-13/32 in), frameless or face frame.

What you need

Order the lift set, the lever set, the hardware set for your cabinet type and the cover caps.

Blum Part Number	What It Is	How Many	Your Choice
22F2500, 22F2800	AVENTOS HF top lift mechanism set, chosen by power factor	1 set	
22F2510, 22F2810	The same set with system screws	1 set, in place of the set above	
22F3200, 22F3500, 22F3900	Lever set, chosen by cabinet height	1 set	Nickel (NI) or Eclipse black (ECS)
78Z5530T28	Hardware set for a frameless cabinet or a partial overlay face frame: 2 lever plates 175H3100, 2 CLIP top 120 degree free swing hinges 70T5580.TL, 4 CLIP face frame plates 175H6000, 2 CLIP top center hinges 78Z5530T	1 set	Nickel (NI) or Onyx black (ONS)

78Z5530TA9	Hardware set for a large overlay face frame: 2 lever plates 175H3F00, 2 COMPACT 33 free swing hinges 32.4630, 2 CLIP face frame plates 175H6000, 2 COMPACT 33 mounting plates 130.1130.02, 2 center hinges 78Z5530T	1 set, in place of 78Z5530T28	
78Z550ATA6	Hardware set for narrow aluminum frames	1 set, in place of 78Z5530T28	Nickel (NI) or Onyx black (ONS)
22.8000	Cover cap set	1 set	Dark gray (TGR), Silk white (SW) or Light gray (HGR)
22F6001	Frame mounting bracket set for a face frame cabinet	1 set, for a face frame cabinet	

From Blum AVENTOS catalog p.11, 12, 13, 64. Finishes and colors are your choice; the table names them as Blum prints them.

Option: the SERVO-DRIVE set for the HF top is 23.A000 with cover set 23.8000, and the SERVO-DRIVE guide lists the rest. For the number of hinges, see Blum's HF top sheet.

Jigs and tools that make it easier

The HF top hangs two doors on hinges, so it uses the lift jigs and the hinge jigs. With the positioning-system set, the lift mechanism's cabinet side needs no pre-drilling, and the front plates and hinges still need marking or drilling.

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 doors.
65.5030.01	PLATEMATE, with the 2.5 mm (about 3/32 in) drill bit DB-2.5mm	Boring template for all Blum face frame adapter plates, for frames from 5/8 to 1 inch thick.
M31.1000	ECODRILL	A hand-held drilling pattern for the hinges.
65.7500.03	QUICKFIX (brochure name: drilling template for hinge systems)	Transfers hinge and plate positions between the door and the cabinet.
65.5300	Mounting plate template (brochure name: angle template)	Marks the mounting plate positions.
65.5070	ECOJIG (brochure name: drilling template for mounting plates)	Marks the plate positions for the hinges.
65.059A	INSERTA boring template	Bores the INSERTA hinge fixing holes.
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 tension and the cams.

From Blum AVENTOS overview p.1; Blum AVENTOS catalog p.67, 66.

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, theoretical cabinet height and limits

The HF top is picked by power factor, from the cabinet height and the combined weight of both doors. Blum counts the handle weight once. The lever set follows the cabinet height.

Power factor

`Power factor = cabinet height (in) x combined door weight including handle weight (lb)`

Cabinet height in inches, weights in pounds. Blum marks the cabinet height with an asterisk: use the theoretical cabinet height TKH for asymmetrical doors.

From Blum AVENTOS catalog p.11.

Cabinet height from two equal doors

`KH = FHo x 2 + F1 + F2 + F3`

FHo is the height of the top door, F1 the gap above it, F2 the gap between the doors and F3 the gap below the lower door, all in one unit. The drawing below marks each one.

From Blum AVENTOS catalog p.14.

Theoretical cabinet height for asymmetrical doors

`TKH = FHo x 2 + F1 + F2 + F3`

Use TKH in the power factor in place of the cabinet height. The larger door must be at the top. Blum recommends its product configurator for planning asymmetrical door applications.

From Blum AVENTOS catalog p.14.

Power Factor Ranges

Part Number	System Screw Set	Power Factor From	Power Factor to
22F2500	22F2510	238	1188
22F2800	22F2810	880	1698

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.11.

Lever Sets by Cabinet Height

Part Number	Cabinet Height From	Cabinet Height to
22F3200	480 mm (about 18-29/32 in)	610 mm (about 24 in)
22F3500	600 mm (about 23-5/8 in)	910 mm (about 35-13/16 in)
22F3900	840 mm (about 33-3/32 in)	1219 mm (about 47-31/32 in)

The cabinet heights are in millimeters, as Blum prints them. From Blum AVENTOS catalog p.11, 12.

Blum recommends the more powerful lift mechanism for applications in overlapping ranges, and a trial application when you are in a borderline area of a mechanism's power factor range.

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.

Worked example. A cabinet 36 in high and 30 in wide with two equal doors

The two doors together weigh 19.5 lb and the pull weighs 0.5 lb, and the pull counts once.

1. Combined door weight including the handle = 19.5 + 0.5 = 20 lb

2. The doors are equal, so the cabinet height is used as it is: power factor = 36 x 20 = 720

3. 22F2500 runs from 238 to 1188 and 22F2800 starts at 880, so only 22F2500 holds 720.

4. Lever set: 36 in is 914.4 mm (36 in). 22F3500 stops at 910 mm (about 35-13/16 in) and 22F3900 runs from 840 mm (about 33-1/16 in) to 1219 mm (about 48 in), so 22F3900.

Order lift set 22F2500, lever set 22F3900 and, for a frameless cabinet, hardware set 78Z5530T28. The set holds two lift mechanisms.

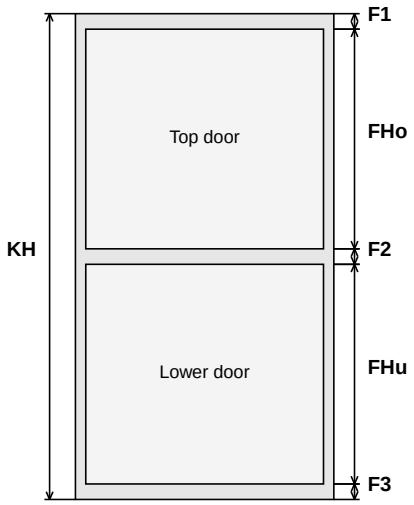
Where two ranges overlap, Blum recommends the more powerful mechanism.

From Blum AVENTOS catalog p.11, 12.

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.

The door heights and gaps behind the cabinet height



Drawn by CabDesign after Blum AVENTOS catalog cme106254, p.14. Not to scale: the gaps are drawn larger than they are. F1 is gap 1, F2 gap 2 and F3 gap 3. FHo is the top door height, FHu the lower door height and KH the cabinet height. For two equal doors KH = FHo x 2 + F1 + F2 + F3. For asymmetrical doors the same sum is the theoretical cabinet height TKH.

Steps, in order

1. Size the lift. Work out the power factor from the cabinet height and the combined door weight, with the handle counted once. For unequal doors use the theoretical cabinet height and put the larger door at the top. Where two ranges overlap, choose the more powerful set.

2. Choose the hardware set. Pick the hardware set for your cabinet type: 78Z5530T28 for frameless or partial overlay face frame, 78Z5530TA9 for large overlay face frame, 78Z550ATA6 for narrow aluminum frames.

3. Bore the hinge cups. Bore the cups for the CLIP top hinges as Blum's hinge boring pattern on page 16 of its catalog shows. ECODRILL M31.1000 and the INSERTA template 65.059A help.

4. Fit the lift mechanisms to the cabinet sides. With the positioning-system set, fix each mechanism with its four wood screws Ø4 x 35. With the system-screw set, drill the holes first. The hole positions are on Blum's page 15, so follow that drawing.

5. Fit the lever plates on the lower door. Fix the lever plates to the lower door at the position Z that Blum's page 16 gives for your cabinet type, hinge and cabinet height.

6. Hang both doors. Hang the top door and the lower door on their hinges.

7. Align the doors. Adjust each top door hinge and plate to align the top door to the cabinet, then each lower door hinge and plate to align the doors to the cabinet and to each other.

8. Set the tension. Close the doors flush, test them, and adjust the tension with a screw gun and a T20 TORX bit until the doors balance. Blum says the tension must be the same on both lift mechanisms.

9. Adjust and lock the telescopic arms. Adjust each telescopic arm so that neither door protrudes when closed, then lock it, as Blum's sheet shows.

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

Check before you finish

- Both doors sit flush with the cabinet and with each other when closed.
- The tension is the same on both lift mechanisms and the doors balance.
- The larger door is at the top, if the doors are unequal.
- The telescopic arms are locked and neither door protrudes.

Common mistakes

- The smaller door on top. For asymmetrical doors, Blum says the larger door must be at the top.
- The cabinet height instead of the theoretical cabinet height. For asymmetrical doors, Blum marks the cabinet height in the power factor with an asterisk: calculate with the theoretical cabinet height.
- Different tension on the two mechanisms. Blum says the tension adjustment must be the same on both lift mechanisms.
- The wrong lever set for the cabinet height. Read the lever table by cabinet height; two rows can both hold a height.
- A wide cabinet with two mechanisms. Blum recommends a third lift mechanism for wide cabinets, to prevent the door from sagging when open.
- A face frame cabinet with no block-out or bracket. Blum's catalog shows the frame blocked out flush with frame mounting bracket set 22F6001.

From Blum AVENTOS catalog p.11, 12, 64; Blum HF top and HL top adjustment sheet.

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 number of hinges for the HF top, which Blum's HF top sheet gives.
- The side hole positions and the lever plate position Z, which Blum draws on its pages 15 and 16.

Frequently asked questions

How do I pick an AVENTOS HF top lift?

Multiply the cabinet height in inches by the combined door weight in pounds, counting the handle once: 22F2500 holds a power factor from 238 to 1188 and 22F2800 from 880 to 1698. Where two ranges overlap, Blum recommends the more powerful lift mechanism.

What is the theoretical cabinet height on an HF top?

For two doors of different heights it is TKH = FHo x 2 + F1 + F2 + F3, where FHo is the height of the top door and F1, F2 and F3 are the three gaps. Use it in the power factor in place of the cabinet height, and put the larger door at the top.

Which lever set does an HF top need?

It follows the cabinet height: 22F3200 from 480 mm (about 18-29/32 in) to 610 mm (about 24 in), 22F3500 from 600 mm (about 23-5/8 in) to 910 mm (about 35-13/16 in) and 22F3900 from 840 mm (about 33-3/32 in) to 1219 mm (about 47-31/32 in).

What depth does an AVENTOS HF top need?

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

How many hinges does an HF top need?

See Blum's HF top sheet. The hardware sets in the catalog hold the hinges for your cabinet type.

Does the HF top take SERVO-DRIVE?

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

How CabDesign picks and sizes this

CabDesign sizes a two-panel lift-up front, two equal doors, on the AVENTOS HF top from the same printed Blum tables used in this guide. It reads the cabinet height and the combined door weight, counts the pull once, picks the lift set and the lever set, and puts their part numbers, and the hinge 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 HS Top Up-and-Over Lift: cabdesign.app/guides/doors-drawers-fronts/install-blum-aventos-hs-top

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

- Blum AVENTOS HF top and HL top adjustment instructions cme203471, blum.com/file/cme203471_ma_dok_bus (the adjustments)

- Blum AVENTOS HF top installation and adjustment instructions, blum.com/hftopassembly (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-hf-top