Blum AVENTOS ‘HK-XS’ User Guide.



Introduction

Overview

- The ‘Blum AVENTOS HK-XS Package’ from Solid Setup Plus adds the Blum AVENTOS HK-XS door lift system to Cabinet Vision and optional TIP-ON.
- It provides drilling for the Cabinet and Door parts, for CNC output.
- *(You can change the drilling diameters and depths to the tools you want to use.)*
- It also adds 3d graphics for the mechanisms and brackets etc.
- EXPANDO and Screwon front brackets and Cabinet Fixing are provided.
- Light Grey, Silk White, Carbon Black and Nickel colours for TIP-ON.
- The mechanisms and brackets etc are added as a separate parts and materials for reporting purposes.
- All material descriptions contain the Blum order number after the # symbol and Vendor SKU.
- UCS calculates weight of Door by using the density of board and handle weight.
- User can adjust density, handle weight or Total weight using attributes.
- UCS uses total weight to determine a 'POWER FACTOR' which is displayed as an attribute and can be changed.
- The POWER FACTOR determines which Mechanism to use and how many arms are required, automatically.
- User can swap arm from left to right with an attribute.
- Door can be displayed fully open or anywhere in between.
- Frameless Only – not suitable for Face Frame cabinets.

Included in This Package

User Created Standards

The Following UCS’s are provided

- { DOOR } -- Blum Aventos HK-XS Attributes -Adds Blum Aventos HK-XS Attributes to DOR
- { DOOR } -- Blum Aventos HK-XS -Adds Blum Aventos HK-XS to DOR_OPEN

Miscellaneous Materials:

Name	Description
Aventos HK-XS Arm	Aventos HK-XS Arm
Aventos HK-XS Cab Fix EXP 20K51E1	Aventos HK-XS Cabinet Fixing Expando #20K51E1
Aventos HK-XS Cab Fix Screw 20K5101	Aventos HK-XS Cabinet Fixing Screwon #20K5101
Aventos HK-XS Front Brkt EXP 20K41E1	Aventos HK-XS Front Bracket Wooden Expando #20K41E1
Aventos HK-XS Front Brkt Screw 20K4101	Aventos HK-XS Front Bracket Wooden Screwon #20K4101
Aventos HK-XS Mech 20K1101	Aventos HK-XS Mech #20K1101
Aventos HK-XS Mech 20K1101T	Aventos HK-XS Mech #20K1101T
Aventos HK-XS Mech 20K1301	Aventos HK-XS Mech #20K1301
Aventos HK-XS Mech 20K1301T	Aventos HK-XS Mech #20K1301T
Aventos HK-XS Mech 20K1501	Aventos HK-XS Mech #20K1501
Aventos HK-XS Mech 20K1501T	Aventos HK-XS Mech #20K1501T

Aventos HK-XS Usage

Door Requirements.

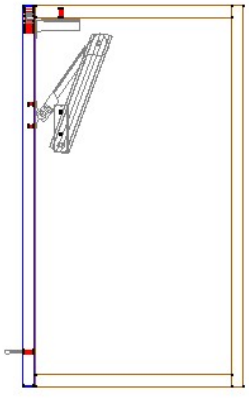
For the Aventos HK-XS to appear on a door the following conditions must be met

- Door must be hinged at top.
- The door height **must** be in size range **240-600 High** and door must be between **200-1800 Wide**
- The **"Aventos HK-XS?"** Attribute will then appear on the Top Door to switch on Aventos HK-XS.
- (You must be in the orthographic or "Smiley" views to click on the door and see the attributes)
- **NOTE**: - If the Door is not within the above size ranges or is too heavy for any Mechanism the Aventos HK-XS parts will **not** be added to the Door. (The power factor **must** be between **200** and **3600**)

Attributes

- If the **"Aventos HK-XS?"** attribute is set to "**Expando**" or "**Screwon**" the following attributes will appear on the Door, along with the Aventos mechanisms and arms.

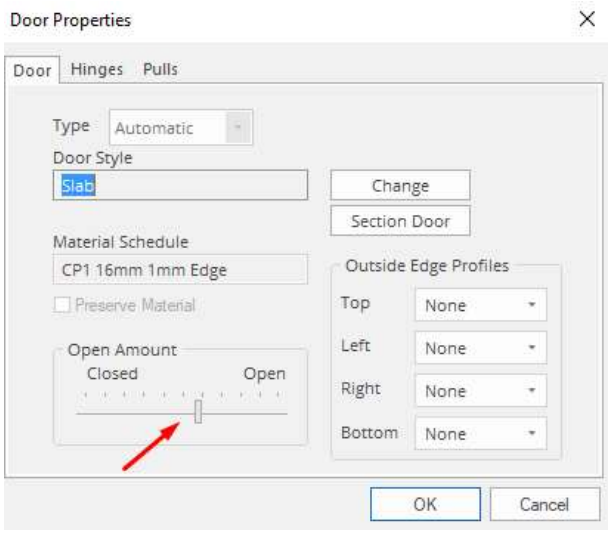
Attributes	
Aventos HK-XS ?	Expando
Aventos HK-XS Dor Kg/m3	700
Aventos HK-XS Dor Kg	5.81
Aventos HK-XS Dor Pull gm	200
Aventos HK-XS Dor Total Kg	6.21
Aventos HK-XS Front Brkt	Expando
Aventos HK-XS Hinge Crank	.Straight Hinge
Aventos HK-XS Hinge Plt Spc	0
Aventos HK-XS Int Dep	Min 125mm
Aventos HK-XS Pos Lh	16
Aventos HK-XS Pos Rh	16
Aventos HK-XS Pos Top	16
Aventos HK-XS Power Factor(l	3394.42
Aventos HK-XS Swap Sides	True
Aventos HK-XS Tipon	.Off

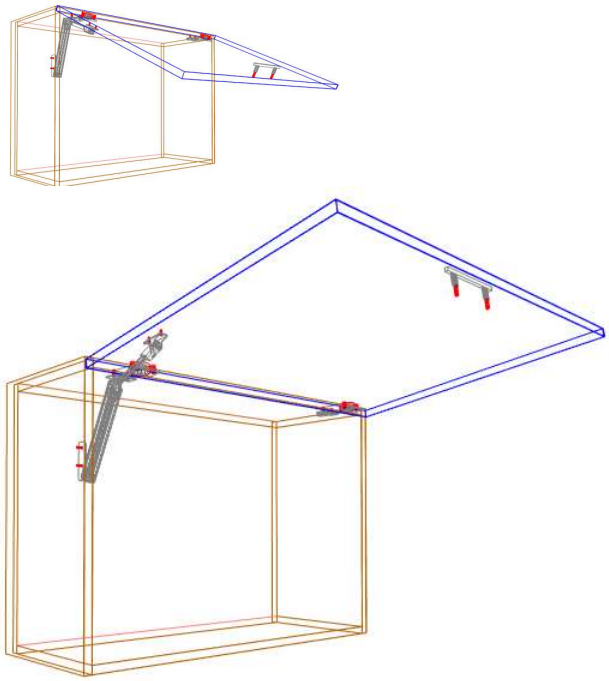


- **Aventos HK-XS Dor Kg/m3** This value is the density of the door measured in kilograms per cubic meter and is used to calculate the weight of the door – ***change this to the density of the board you are using if known (If you are using MDF its density varies between 680 and 830 Kg/m3)***
- **Aventos HK-XS Dors Kg** - This is the weight of the door as calculated by the **density** value **you** entered multiplied by the door size and thickness. – ***(If you already know the door weight you can change this value rather than using the density calculated weight.)***
- **Aventos HK-XS Dor Pull gm** -This value is the weight of the handle in grams and is used to calculate the total weight of the door plus handle – ***(change this to the total weight of the handle(s) you are using.)***
- **Aventos HK-XS Dors Total Kg** -This is the total weight of the door and handle added together and is used to calculate the "Power Factor" ***(If you already know the total door weight plus handle you can change this value rather than using the density calculated weight.)***
- **Aventos HK-XS Front Brkt?** -Select Front Bracket type **(Screwon or Expando)**
- **Aventos HK-XS Hinge Crank** -Moves Aventos down for the hinge crank - Straight Hinge = 0mm, Cranked Hinge = 9mm, Double Cranked Hinge = 18mm.
- **Aventos HK-XS Hinge Plt Spc** -Enter your hinge plate spacing (Standard is 0mm - Maximum 9mm). This setting also moves the Aventos down.
- **Aventos HK-XS Int Depth** -Select the internal cabinet depth (Minimum 100mm or Minimum 125mm) - Affects Front Bracket Position.
- **Aventos HK-XS Pos Lh** -Can be used to move the x position of the left arm.
- **Aventos HK-XS Pos Rh** -Can be used to move the x position of the right arm.
- **Aventos HK-XS Pos Top** -Can be used to move the position of the Aventos up or down – default is Top thickness)
- **Aventos HK-XS Power Factor** -This is the value used to select the correct lift mechanism and how many to use based on the value. – ***(If you have already calculated the power factor yourself you can change this to your value instead)***
- **Aventos HK-XS Swap Sides** -Can be used for one arm to swap from left to right side of door

Display Door in Open Position

To show the door in the open position, use the slider in the door properties in the section view:
(Maximum open angle is 105 degrees - opening the door further will cause the hardware to disappear.)





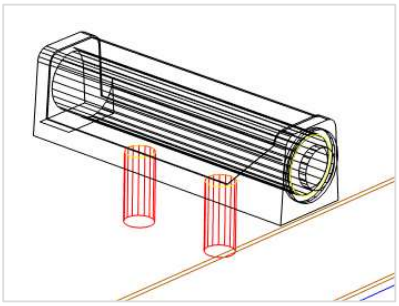
Power Factor

The following table shows which lift mechanism is used, and how many arms based on the Power Factor (Because Blum uses overlapping ranges , we have adjusted the end range of the first two so that the stronger mechanism is chosen where the ranges overlap)

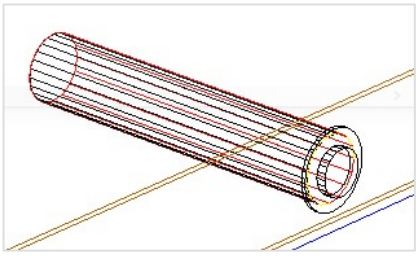
Power Factor (LF)		Lift Mechanism	Lift Mechanism	
Blum Values	Used Values	Screwon	Tipon	Arm Quantity
200 - 1000	200 - 500	20K1101	20K1101T	(1 arm)
500 - 1500	500 - 800	20K1301	20K1301T	(1 arm)
800 - 1800	800 - 1800	20K1501	20K1501T	(1 arm)
1800 - 3600	1800 - 3600	20K1501	20K1501T	(2 Arms)

Tipon Attributes

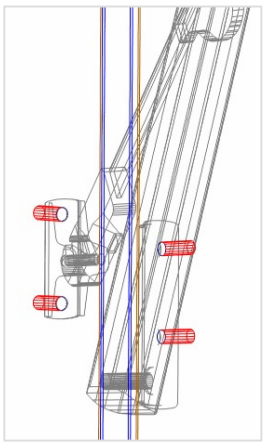
- **Aventos HK-XS Tipon** -Select from -- **Adapter Plate/Edge No Hole/Edge With Hole**
- **Aventos HK-XS Tipon Colour** -Changes the Tipon Colour **(Light Grey, Silk White, Black or Nickel)**
- **Aventos HK-XS Tipon X** -Allows X position of adapter to be changed (default is center of opening).
- **Aventos HK-XS Tipon Y Adj** -Allows Y position adjustment of adapter when required to attach to bottom or shelf on modified cabinets.
- **Tipons can be face mounted or edge mounted in the bottom:**



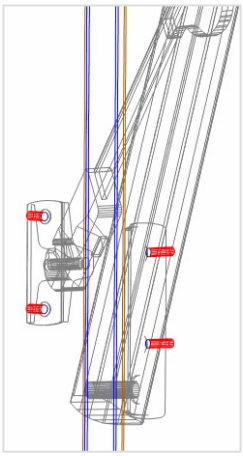
Tipon Adapter Plate Short



Tipon Edge Short



Expando Brackets



Screwon Brackets

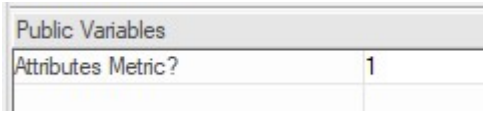
Drilling Setup

UCS Public Variables

- To change these variables go to the Utilities – Edit User Created Standards from the Room Plan or Elevation views



- Then click on the **"{ DOOR } -- Blum Aventos HK-XS Attributes"** UCS. The Public Variables are at the top left of the screen.



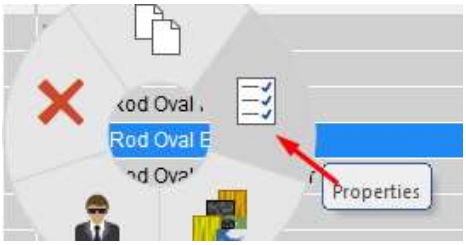
- **Attributes metric?** If you are using **imperial** units the variable must be set to **zero** but if you are using **metric** units it must be set to **1.**

Material Parameters

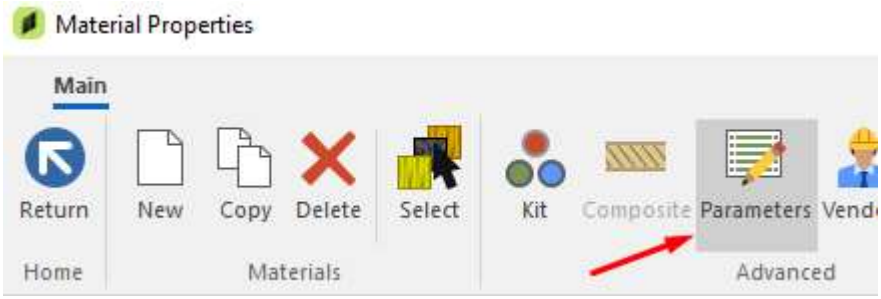
The drilling sizes for the front brackets and Cabinet Fixing brackets are provided as material parameters.

To edit the sizes, in the Material Manager, right click on the following 4 materials and select properties:

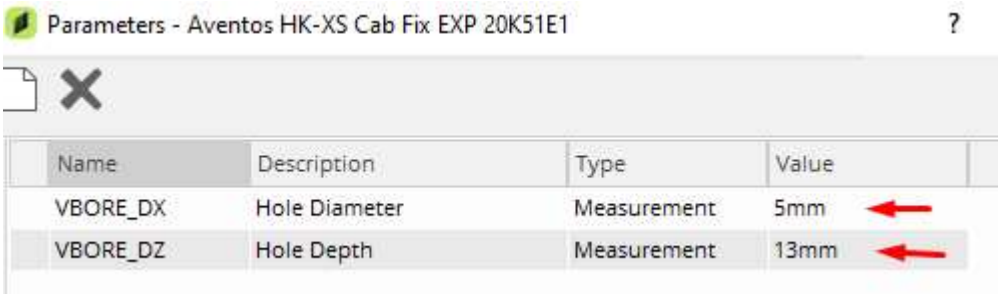
- Aventos HK-XS Cab Fix EXP 20K51E1 (has 5mm Diameter x 13mm Deep holes)
- Aventos HK-XS Cab Fix Screw 20K5101 (has 3mm Diameter x 10mm Deep holes)
- Aventos HK-XS Front Brkt EXP 20K41E1 (has 5mm Diameter x 13mm Deep holes)
- Aventos HK-XS Front Brkt Screw 20K4101 (has 3mm Diameter x 8mm Deep holes)



Click the parameters button:



Change the following values to your requirements:



Tools Required

- The drill diameters you choose on the material models are all required for this package to work. You must have these tool diameters in your tool catalog and in your machine.

Package Exclusions

There may be some items shown in various images contained in this document which are not included in this Package. Any items not specifically mentioned in this guide are part of our other packages which are sold separately.

See our website for more detailed information on these packages.