Blum AVENTOS 'HKS' User Guide.



Introduction

Overview

- The 'Blum AVENTOS HKS Package' from Solid Setup Plus adds the Blum AVENTOS HKS door lift system to Cabinet Vision and the TIP-ON option.
- 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.
- 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.
- 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.
- If three arms are required, user can swap the odd arm left to right with an attribute.
- If three arms are required, the centre arm will link to a partition if there is one present.

Included in This Package

User Created Standards

The Following UCS's are provided

- { DOOR } -- Blum Aventos HKS Attributes -Adds Blum Aventos HKS Attributes to DOR
- { DOOR } -- Blum Aventos HKS -Adds Blum Aventos HKS to DOR_OPEN
-

Library

- CVS Blum.cvc Cabinet Vision Catalog of Blum Library parts

Parts

- HNGDXF — Hinge type part used for Mechanisms
- HNGPLT — Hinge type part used for Mech Covers
- HNGSTAY — Hinge type part used for Arms
- BRKT — Part used for Tipon adapters

Miscellaneous Materials:

Name	Description
Aventos HKS Arm	Aventos HKS Arm (hide)
Aventos HKS Cover Grey	Aventos HKS Mech Cover (hide) Light-Grey
Aventos HKS Cover White	Aventos HKS Mech Cover (hide) Silk-White
Aventos HKS LG Light	Aventos HKS Light Set (pr) #20K2B00.02 Light-Grey
Aventos HKS LG Med	Aventos HKS Medium Set (pr) #20K2C00.02 Light-Grey
Aventos HKS LG Strong	Aventos HKS Strong Set (pr) #20K2E00.02 Light-Grey
Aventos HKS SW Light	Aventos HKS Light Set (pr) #20K2B00.02 Silk-White
Aventos HKS SW Med	Aventos HKS Medium Set (pr) #20K2C00.02 Silk-White
Aventos HKS SW Strong	Aventos HKS Strong Set (pr) #20K2E00.02 Silk-White
Aventos HKS Tip LG Light	Aventos HKS Tipon Light Set (pr) #20K2B00T Light-Grey
Aventos HKS Tip LG Med	Aventos HKS Tipon Medium Set (pr) #20K2C00T Light-Grey
Aventos HKS Tip LG Strong	Aventos HKS Tipon Strong Set (pr) #20K2E00T Light-Grey
Aventos HKS Tip SW Light	Aventos HKS Tipon Light Set (pr) #20K2B00T Silk-White
Aventos HKS Tip SW Med	Aventos HKS Tipon Medium Set (pr) #20K2C00T Silk-White
Aventos HKS Tip SW Strong	Aventos HKS Tipon Strong Set (pr) #20K2E00T Silk-White
Aventos Tipon Crux	Aventos Tipon Cruciform #955.1501
Aventos Tipon Crux Exp	Aventos Tipon Cruciform Expando #955.15E1
Aventos Tipon Inline	Aventos Tipon Inline #955.1201
Aventos Tipon Std	Aventos Tipon Standard #955.1004

Aventos HKS Usage

Door Requirements.

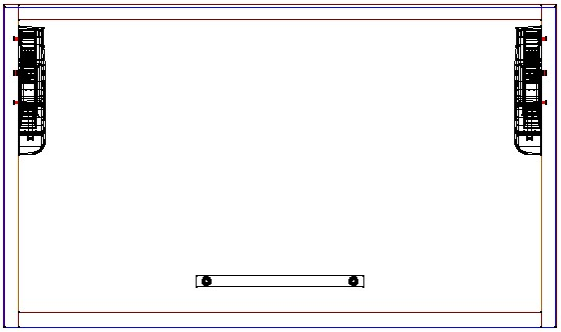
For the Aventos HKS to appear on a door the following conditions must be met

- Door must be hinged at top.
- Door must have its hinge quantity set to zero.
- The door height **must** be in size range **205-400 High** and doors must be **200-1800 Wide**
- The **"Aventos HKS?"** Attribute will then appear on the Top Door to switch on Aventos HKS.
- (You must be in the orthographic or "Smiley" views to click on the door and see the attributes)

Attributes

- If the **"Aventos HKS?"** attribute is changed to "**True**" the following attributes will appear on the Door, along with the Aventos mechanisms and arms.
- **NOTE**: - If the Door is not within the above size ranges, or is too heavy for any Mechanism the Aventos HKS parts will **not** be added to the Door. (The power factor **must** be between **0** and **3322**)

Attributes	
Aventos HK ?	False
Aventos HKS ?	True
Aventos HKS Cen Offset	0
Aventos HKS Colour	Light Grey
Aventos HKS Dor Kg/m3	800
Aventos HKS Dor Pull gm	200
Aventos HKS Dors Kg	2.82
Aventos HKS Dors Total Kg	3.22
Aventos HKS Open?	False
Aventos HKS Pos Lh	16.20
Aventos HKS Pos Rh	16.20
Aventos HKS Power Factor	1054.60
Aventos HKS Swap Sides?	False
Aventos HKS Tipon	Cruciform Expando
Aventos HKS Tipon X	300
Aventos HKS Tipon Y Adj	0

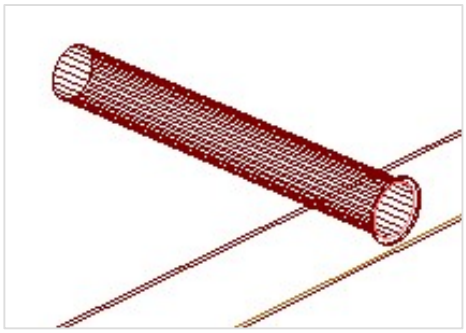


- **Aventos HKS Dor Kg/m3** This value is the density of the door measured in kilograms per cubic meter and is used to calculate the weight of the door – ***change this to the density of the board you are using if known (If you are using MDF its density varies between 680 and 830 Kg/m3)***
- **Aventos HKS 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 HKS 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 HKS 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 HKS Power Factor** -This is the value used to select the correct lift mechanism and how many to use based on the **Aventos HKS Dors Total Kg** value. – ***(If you have already calculated the power factor yourself you can change this to your value instead)***

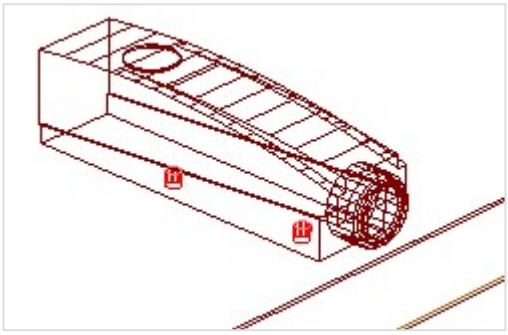
- **Aventos HKS Cen Offset** -Offsets the Centre arm left or right for when there is no system partition in the interior of the cabinet to link to. *(This may be the case if you have manually added a part to use as the center partition rather than adding one in the section view.)*
- **Aventos HKS Door Bracket** -Changes the Door Bracket Type **(Screwon,Expando,Knockin)**
- **Note Screwon drilling sizes are set via UCS Public Variable (see "Drilling Setup" section below), Expando is 5mm Dia x 12mm deep, Knockin is 10mm dia x 12mm deep.**
- **Aventos HKS Colour?** -Changes the Cover Colour **(Light Grey, Silk White)**
- **Aventos HKS Open?** -Shows the door in the open position.
- **Aventos HKS Pos Lh** -Can be used to move the x position of the left arm.
- **Aventos HKS Pos Rh** -Can be used to move the x position of the right arm.
- **Aventos HKS Swap Sides?** -You can swap the odd arm from left to right for when there is 1 or 3 arms

Tipon Attributes

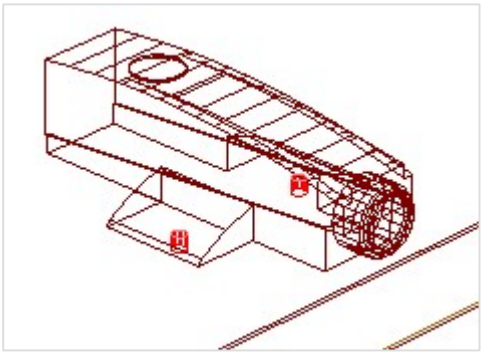
- **Aventos HKS Tipon** -Selects Tipon adapter:



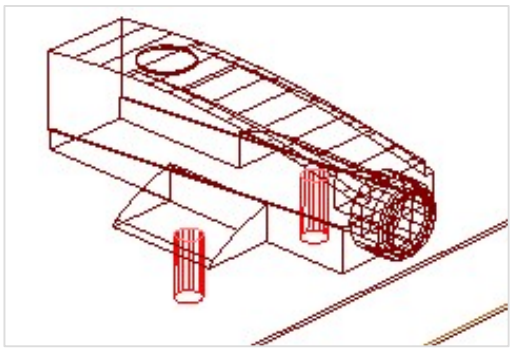
Edge (Standard)



Inline Screwon



Cruciform Screwon



Cruciform Expando

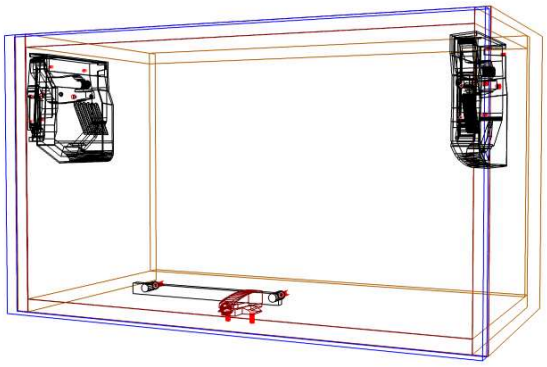
- **Aventos HKS Tipon X** -Allows X position of adapter to be changed (default is center of opening).
- **Aventos HKS Tipon Y Adj** -Allows Y position adjustment of adapter when required to attach to bottom or shelf on modified cabinets.

Power Factors

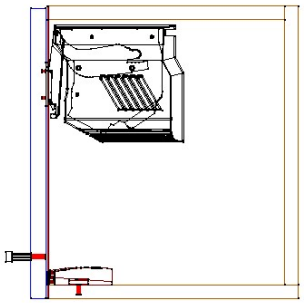
The following table shows which lift mechanism is used, and how many arms based on the Power Factor (Because Blum uses overlapping ranges , we have adjusted the ranges so that the stronger mechanism and arm quantity is chosen where the ranges overlap)

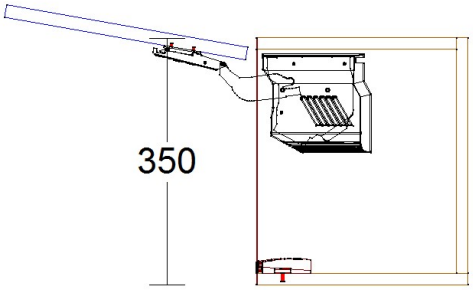
Blum Power Factor	Used Power Factor	Lif Mechanism	Arm Quantity
0 - 220	0 - 220	20K2B00	(1 piece)
220 - 500	220 - 400	20K2B00	(1 set)
400 - 1000	400 - 960	20K2C00	(1 set)
960 - 2215	960 - 2215	20K2E00	(1 set)
2215 - 3322	2215 - 3322	20K2E00	(3 pieces)

Some Example Images:









Note: The handle on the door is hidden when the door is displayed in the open position.

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 HKS Attributes"** UCS. The Public Variables are at the top right of the screen.

- **V6 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.**

- Now click on the **"{ DOOR } -- Blum Aventos HKS Attributes"** UCS.
- Here we set the front bracket type and units

Public Variables	
Attributes Metric?	1
Front Bracket	.Screwon

- Now click on the **"{ DOOR } -- Blum Aventos HKS"** UCS.
- Here we set the various drilling sizes.

Public Variables	
Door Bracket Screw Depth	Imp(3)
Door Bracket Screw Diam	Imp(3)
Mech Peg Holes Depth	Imp(7)
Mech Peg Holes Diam	Imp(5)
Mech Pilot Holes Depth	Imp(3)
Mech Pilot Holes Diam	Imp(3)
Tipon Expando Holes Depth	Imp(12)
Tipon Expando Holes Diam	Imp(5)
Tipon Screw Holes Depth	Imp(3)
Tipon Screw Holes Diam	Imp(3)
Tipon Std Edge Hole?	0

- Edit the **Imp()** values to the diameter and depths you require.
- If you are using imperial sizes simply replace the whole **imp()** with the imperial measurement instead.
- E.g.: **Imp(3)** might become **1/8**
- Change the **Mech Pilot Holes** value to **0** if you normally do not want to drill the Aventos Mechanism screw pilot holes in the cabinet ends.
- **Please note the "Tipon Std Edge Hole?' Variable will turn on the 10x 76mm deep horizontal hole in the front edge when the Tipon type "Edge (Standard)" is selected. (0 = Off, 1 = On)**

Once you have changed these values to your requirements, close the UCS editor.

Tools Required

- The drill diameters you choose in the UCS User Definable Variables above 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.