

Assembly and adjustment of the PIVOTA DX hinges in doors

In respect to load capacity *BaSys*-DX-hinges are designed to meet the specified load capacity for door elements in accordance with DIN 18101. The door may have a maximum dimension of 1000 mm in width and 2000 mm in height and is equipped with 2 hinges with a standardised distance to one another.

It is advised to use more than 2 hinges for higher door elements, i.e. for storey-high doors. The potential deflection of the door is therefore reduced, and sustainability can be increased with precise adjustment of the hinges.

There is an increased risk in the use of more than 2 hinges per door, due to unwanted tension of the hinges caused by inaccurate adjustment. Additional tension leads to increased wear on the hinge and under poor conditions the hinge may stop functioning. The purpose of this document is to prevent this from occurring.

Keep the following in mind when making individual adjustments to hinges if more than 2 are used per door element:

Height adjustment:

When carrying out height adjustments make sure that all hinges have the same position. The calibration of the hinges is +3/-3 mm. If you select +1 mm height adjustment for the upper hinge the same position has to be adjusted for the other hinge on the door as well.

Rabbit Clearance adjustment:

The rabbit clearance adjustment is done with help of the wing section of the hinge's spindle. Make sure that after the adjustment that the hinges are in the same plane. The examples 1 and 2 in the figure below illustrate this. When adjusting the hinges the utmost care must be taken. Ideally, the rabbit clearance position of the upper and lower hinge can be done with the help of a measuring slide and then with a rule of proportion. This results position of the middle hinge to being correctly calculated.

In no case may hinges be at different levels after being adjusted, as is illustrated in example 3 in the figure below.

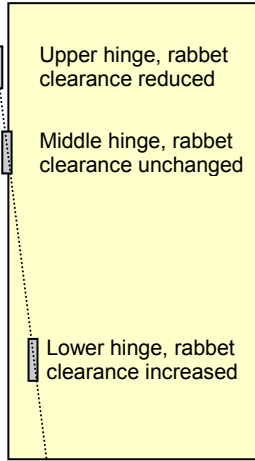
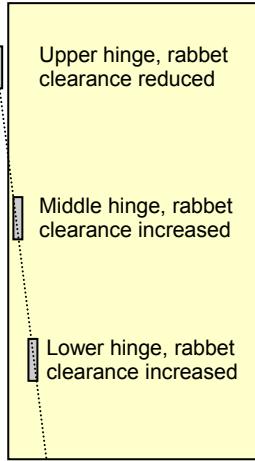
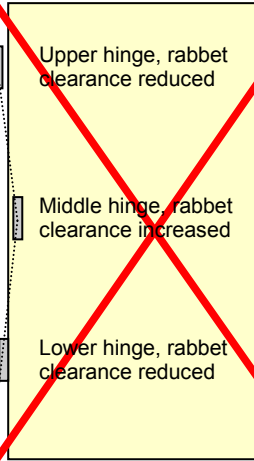
Example 1: equal rabbit clearance adjustment	Example 2: equal rabbit clearance adjustment	Example 3: unequal rabbit clearance adjustment
 <p>Upper hinge, rabbit clearance reduced</p> <p>Middle hinge, rabbit clearance unchanged</p> <p>Lower hinge, rabbit clearance increased</p> <p>Door element with 3 DX-hinges</p>	 <p>Upper hinge, rabbit clearance reduced</p> <p>Middle hinge, rabbit clearance increased</p> <p>Lower hinge, rabbit clearance increased</p> <p>Door element with 3 DX-hinges</p>	 <p>Upper hinge, rabbit clearance reduced</p> <p>Middle hinge, rabbit clearance increased</p> <p>Lower hinge, rabbit clearance reduced</p> <p>Door element with 3 DX-hinges</p>

Illustration: rabbit clearance adjustment for hinge positions.

Pressure seal adjustment:

The pressure of the seal is determined with help of clamping plates in the frame section of the hinge. Make sure that after adjusting the hinges that they are in the same plane. If the middle hinge has been adjusted with +1 mm to the seal the other hinges on the door have to be adjusted to the same position. Also a slide gauge is a suitable tool for the adjustment direction. This avoids false positions on the hinges.