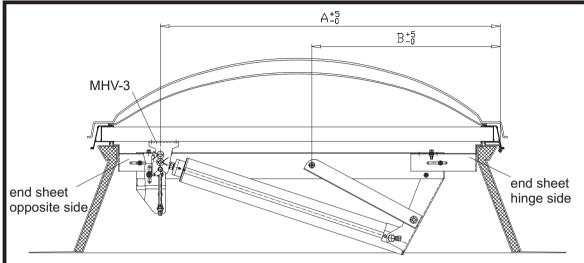


Assembly instructions for opening system type BF

GRASL

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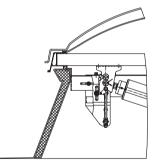


Control dimensions (referred to the pivotal point of the flap):

Construction size	Dimension A	Dimension B
BF1	750	232
BF2	950	526
BF3	1250	675
BF4	1550	727
BF5	1900	953
BF6	2250	1365

Warning: No lower deviations from the dimensions are permissible!!

without ventilation



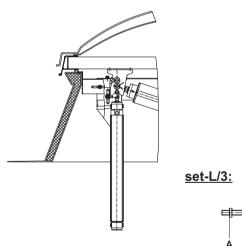
EVB-3:



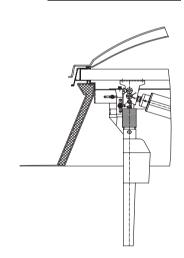
The adjustable locking bolt (EVB-3) must be adjusted in a way to ensure that it is positioned as vertically as possible (see drawing):

- Loosen both nuts (A).
- Mount hexagon head bolt (B) in the lower bore of the console (see above drawing).
- Hook bolt (C) in the opening of MHV-3.
- Fasten nuts (A).

with pneumatic ventilation



with electric ventilation



The position of the console must be selected in a manner to ensure that it corresponds as closely as possible to the installation dimension of the drive (electromotor approx. 110mm; pneumatic cylinder approx. 70mm). Screw ventilation extension set (set-L/3) in the ventilation drive. Hook ventilation drive in the assembly console and MHV-3. Adjust installation dimension to ensure that ventilator frame closes tightly. Fasten nut (A) to secure bolt (B) against twisting.



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Assembly instructions:

The fitting is preassembled and adjusted in our factory as far as this is possible. Therefore, the adjustment of neither the end metal sheets nor the cylinder may be changed. Adjustment is only required for adjustable locking bolt EVB-3 and for the eyebolt.

- 1. Install top crosshead centrically in the ventilator frame.
- **2.** Hook the preassembled fitting centrically underneath top crosshead in the top collar and fasten it.
- 3. Hook eye bolt of the cylinder in the lower bolt of the mechanical hook locking (MHV-3). Ensure that the eye bolt is adjusted in a manner to ensure that the cylinder, when completely retracted, hangs loosely at MHV-3!
- **4.** Check that the cylinder is completely retracted when the flap is closed. Otherwise, readjustment of the eye bolt is required.
- **5.** Please refer to separate descriptions on front page for adjustment of the locking bolt (EVB-3).
- **6.** Manually open and close the flap while checking the following: angle of aperture, smooth mechanical running of the fitting, locking mechanism, and tightness of ventilator frame.

Important notes:

- Top collar and ventilator frame must be sufficiently stable to prevent any elastic or plastic deformation during opening, closing or, in an opened position.
- A sufficient number of hinges must be mounted (in particular in the area of the fitting) to prevent any elastic or plastic deformation during opening, closing, or in an opened position. We recommend the use our central hinge made of 2mm stainless sheet metal, 350mm wide.
- Should the adjustment of the fitting fail to correspond to the inner width of the shroud, it is possible to adjust the length of the fitting adjusting the end sheets on the opposite side.
- The adjustment of the end sheets on the hinge side may never be changed as this would change the fitting geometry, which may destroy the fitting.
- The position of the locating piece at the cylinder may never be changed as this interrupts the supply to the cylinder.
- When closing the flap of an alarm or ventilation box out of the RWA-position, it may occur that the hook locking does not lock correctly. The locking of the flap must therefore manually be checked after closing.