



**Operation manual and installation
instructions**

Hatches

(Escape Hatches and Ventilation

Hatches)

1 Introduction

This Manual applies to the following Vetus Hatches type:

- Magnus
- Altus
- FGH(F)

For drawings see pages 13-14.

2 Operation

Locking/unlocking:

All Vetus hatches are fitted with one or more unique locking handle. With this ergonomically designed handle the last 10 degrees of turning the handle will lock the hatch. With a slider you lock the handle. See drawing 1.

1. Handle closed and locked,
2. Handle closed and not locked,
3. Slide open: not locked
4. Slide closed: locked

Opening:

Turn the handle(s) quarter of a turn and push the hatch open. The handles can also be opened from the outside if unlocked, not for FGHF deck hatches. Magnus hatches are fitted with friction hinges and will stay open to any position. Altus and FGH(F) hatches are fitted with telescopic friction stay(s) which can be tightened to hold the hatch open in any position.

For Altus and FGH(F) hatches make sure the friction stays are loosened and free to move before opening or closing the hatch, or damage may be done to the hatch.

The FGHF escape hatches can be opened from the outside with a winch handle. Open the hatch from outside only in case of emergency. If there is no winch handle on the boat, the hatch can not be used as an escape hatch.

The FGHF deck hatches can not be opened from the outside.

Ventilation:

All Magnus, Altus and FGH(F) hatches can be closed, and locked in either the ventilation position or fully closed position. See drawing 2. For hatches with four or more handles, only use the handles opposite the hinge when in ventilation position.

Closing:

Ensure that the handles are in the 'open' position. Pull the hatch closed, turn the handles a quarter of a turn and lock them. See Drawing 1 (1).

For Altus and FGH(F) hatches make sure the friction stays are loosened and free to move, or damage may be done to the hatch.

Magnus hatches are fitted with a positive rubber seal to ensure maximum water tightness. Initial closing of the hatch after installation may require assistance from the outside of vessel. Once the hatch has been closed for the first time the seal will set and allow trouble free operation of the hatch.

3 Safety

Escape hatch handles must be unlocked when sailing. See Drawing 1 (3).

4 Fitting

N.B.: The highest permitted design category or the highest permitted area of use is stated on every hatch.

When fitting the hatch, take the following into account:

- The hatch must open outward.
- Fit the hatch on a completely flat surface! The hatch will never be watertight when closed if fitted on a curved surface!
- First, fill out the curved surface with a close-fitting wood frame.
- It is not possible to check that the hatch is watertight until it has been completely built into the ship.
- When the hatch has not been fitted in the ship, the opening and closing of the hatch can damage the aluminium frame and/or hinges when the hinges have been adjusted very tight!
- Even when the hatch has been built in, the hinges should not be adjusted too tightly; this could damage the frame and/or hinge, so that a good seal can no longer be guaranteed.
- Draw the hole to be cut out using the hatch deck frame.
All Vetus hatches are manufactured with a corner cutout radius of 43 mm (1 11/16").
The FGH(F) hatch is recessed into the deck so that the top of the acrylic window will lie level with the deck.
Take the dimensions given in diagram 8 into account when determining the dimensions of the part recessed into the deck.
At least 1 water outlet must be made at the lowest point of the recessed part of the deck.
- Cut the hole in the ship by sawing for polyester, aluminium or wood, or by acetylene cutting for steel. Remove all burrs carefully and smooth the edges.



WARNING!

Dust released when cutting and sanding glass-fibre reinforced polyester is hazardous to lungs and eyes. So always wear a dust mask and goggles when working with this material. Ventilate the working area well.

- Position the hatch over the cut hole and mark the fixing holes for the frame, see Drawing 4. Drill the holes and remove any burrs.
- Removal of friction stay mount will allow hatch (only Magnus and Altus) to open fully for installation. See figure 3.
- Apply a sufficient amount of sealant to ensure a good seal, see Drawing 5. Position the hatch on deck.

- Fixing the frame to the deck - deck material:
- Magnus hatches are fitting with a transport screw fixing the hinge to the deck frame. This must be removed prior to fitting to the vessel and replaced with positive fixing to the deck. See drawing 6(1).
- Glass-fibre reinforced polyester; use self-tapping panel screws, 4.2 mm (#8) diameter.
- Steel; use M5 ($\frac{3}{16}$ ", Nr. 10) nuts and screws. Tighten screws evenly until sealant just starting to be squeezed out from between the hatch and the deck.
- Clean of excess sealant and allow to set.
- Fully tighten all mounting screws once sealant has set.

5 Maintenance

- Clean the anodized or powder-coated aluminium profiles regularly; 2 to 4 times a year, depending on how dirty they get.
- Only use neutral cleaning agents. DO NOT use alkaline, acidic or abrasive agents for cleaning the window frames or to remove adhesive residues from the glass.
- After cleaning, apply a thin coat of transparent wax for protection.
- Protect the sealing rubbers with talcum powder.

Magnus Hatches

Re-adjusting the hinges:

Adjust the hinges, with a 10 mm socket, if the hatch will not remain in the open position, see Drawing 7.

6 Technical Data

Magnus:

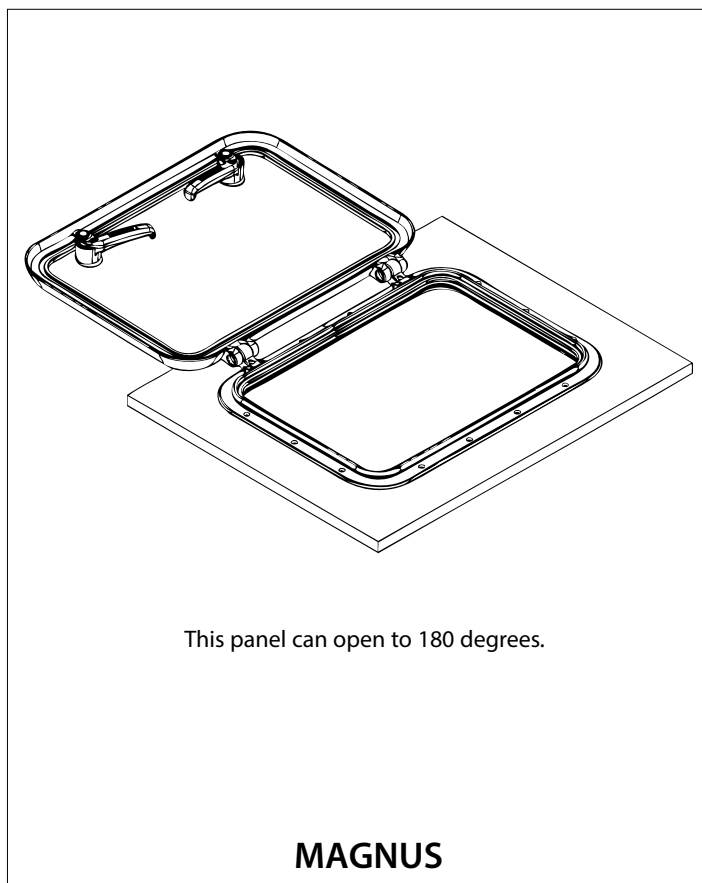
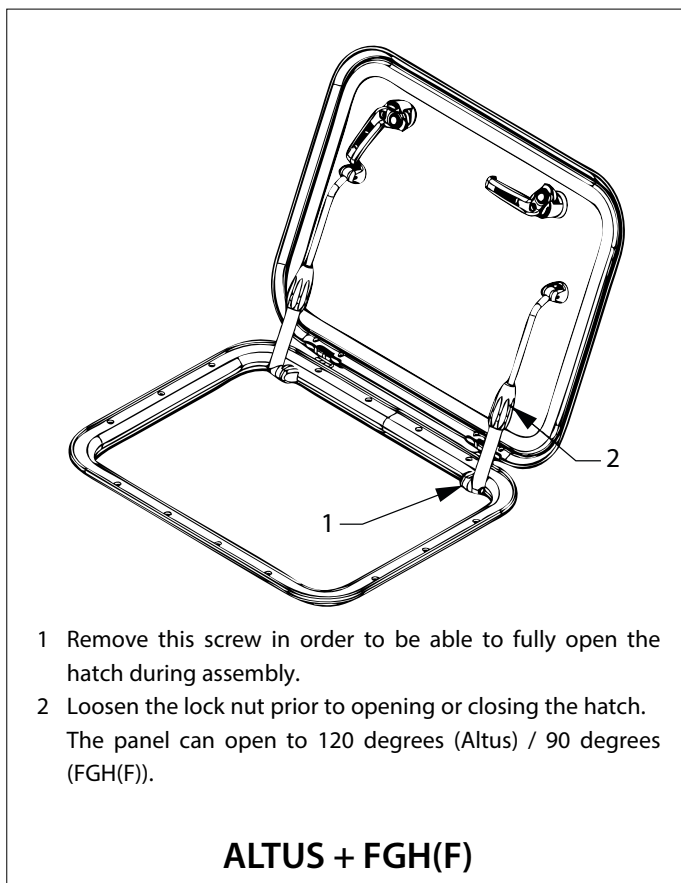
Deck frame, hatch frame: Aluminium (6060) Window: PMMA 10 mm
Magnus hatches can be opened to a maximum of 200 degrees.

Altus:

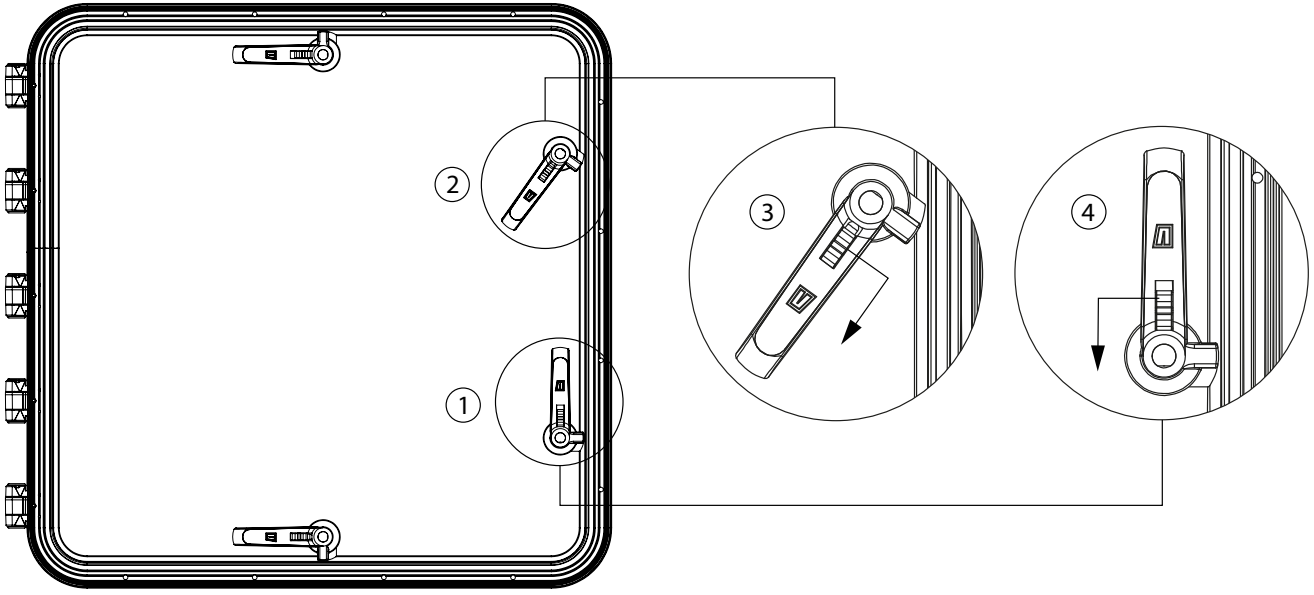
Deck frame, hatch frame: Aluminium (6060) Window: PMMA 10 mm
Altus hatches can be opened to a maximum of 120 degrees

FGH(F):

Deck frame, hatch frame: Aluminium (6060) Window: PMMA 12 mm
FGH(F)-hatches can be opened to a maximum of 90 degrees

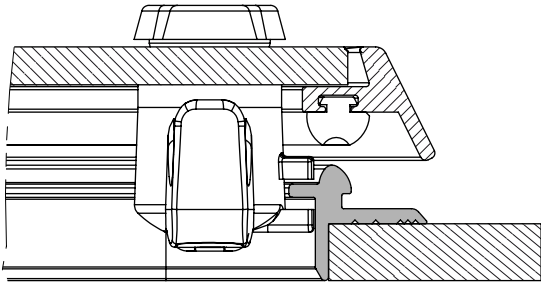


1

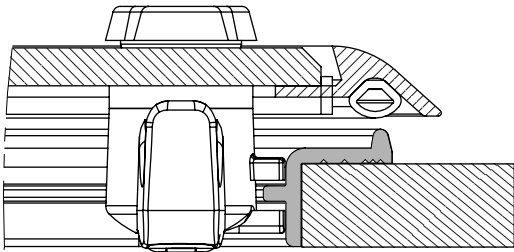


2

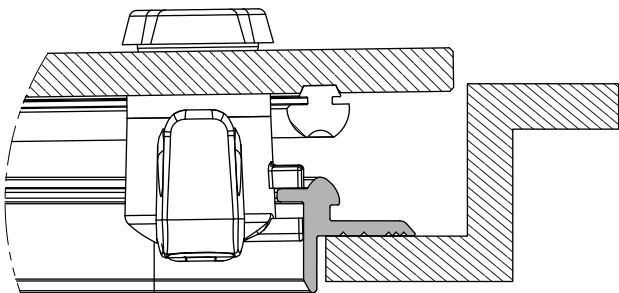
Ventilation position



MAGNUS

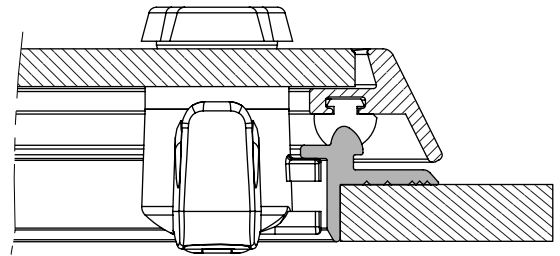


ALTUS

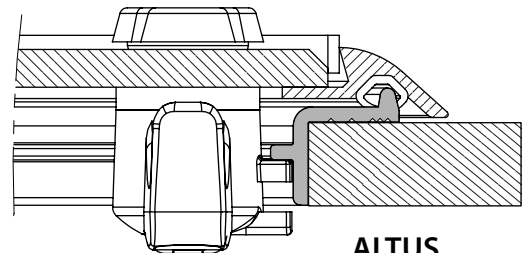


FGH(F)

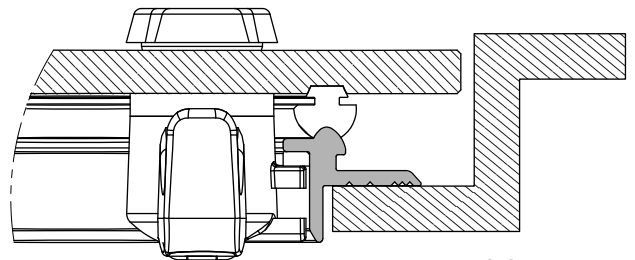
Closed



MAGNUS

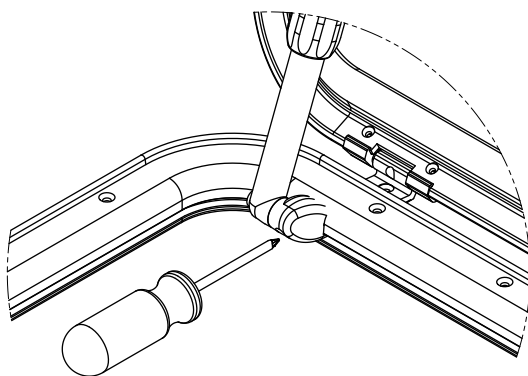


ALTUS

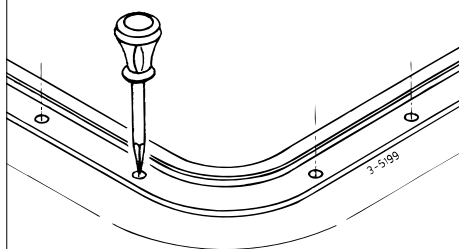


FGH(F)

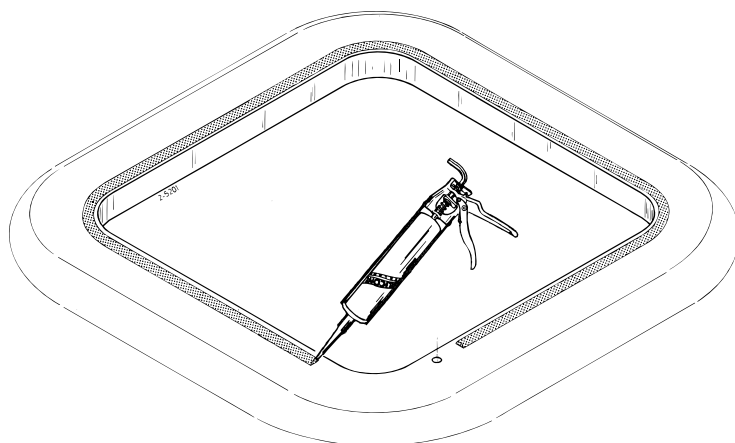
3



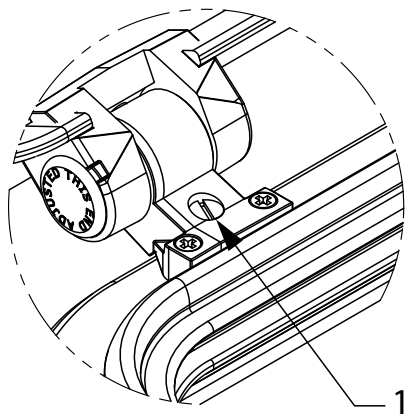
4



5



6



7

