

# Anti Syphon Device

### Introduction

- ASDH: Air vent without valve and with air vent pipe, connection 13 32 mm ( $\frac{1}{2}$ " 1 $\frac{1}{4}$ ")
- ASDV: Air vent with valve without air vent pipe, connection 13 - 32 mm (1/2" - 11/4")
- ASD38H: Air vent without valve and with air vent pipe, connection 38 mm (1½")
- ASD38V: Air vent with valve without air vent pipe, connection 38 mm (1½")

#### Installation examples

The air vents can be used in a number of different situations. The air vents in the drawings are labelled as follows:  $\mathbf{A} = \text{Air vent without}$  valve;  $\mathbf{B} = \text{Air vent with}$  valve

#### Drawing 1 - Exhaust system

The air vents can be used in the cooling water pipe of a water injected exhaust system, with the water injection point 'C' below or less than 15 cm (6") above the waterline.

## Drawing 2 - Waste water tank

An air vent ASD38H or ASD38V can be used in the drainage pipe between pump and hull penetrator if the waste water tank is positioned below the waterline and the hull penetrator is also below the waterline. NB. Direct discharge to the surface water is not permitted everywhere.

#### Drawing 3 - Toilet

The air vents can be used in the drainage pipe if the toilet is positioned below the waterline. NB. Direct discharge to the surface water is not permitted everywhere.

#### Installation

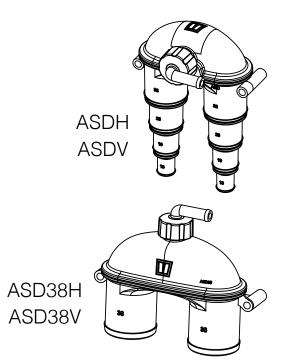
Install the air vent at least 40 cm (16") but not more than 2 metres (3' 8") above the waterline. In a sailing ship the air vent must also be positioned as far as possible midships. This prevents the air vent from being less than the required 40 cm (16") above the waterline when the ship is sailing at an angle.

A supporting bracket including fixing materials is available for the air vents. MBSET01 for the ASD38H and the ASD38V; MBSET02 for the ASDH and the ASDV

An air vent pipe **must** be connected to the air vents **without** a valve. An air vent pipe **can** be connected to the air vent **with** a valve. Any leakage water can be discharged through this.

The air vent pipe must be fitted sloping downwards to the hull penetrator. The connection for the air vent pipe (hose pillar) can be rotated through 360°. The hull outlet must be at least 15 cm (6") above the waterline. For sailing ships this must also be the case when the ship is sailing at an angle.

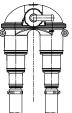
If installation example 1 is followed a small quantity of water will flow out of the hull outlet continuously when the engine is running when an air vent without valve is used.

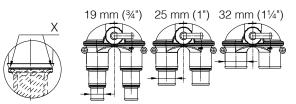


## Air vents ASDH and ASDV

cleaned up to remove any burrs (X).

A hose with diameter 13 mm (½") can be connected directly to the connections on the bend. If a hose with a greater diameter has to be connected then a part must be sawn off. After sawing off, the connection must be well

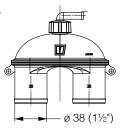




Use a stainless steel clamp for fitting all hose connections.

## Air vents ASD38H and ASD38V

A hose with diameter 38 mm (1½") can be connected directly to the connections on the bend. Use a stainless steel clamp for fitting all hose connections.



## Air vent pipe

Drill a hole with diameter 10 mm (%")in the ship's hull for the hull outlet and fit this using a sealing kit. Fit the air vent pipe to the hull outlet and to the air vent using the hose clamps supplied.



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## **Anti Syphon Device**

#### Maintenance

The air vent pipe for air vents without a valve must be checked regularly for blockages. We recommend that the valve is replaced regularly for air vents with a valve.

A set consisting of 4 valves and a nozzle brush is available. Vetus art. code: ASDVS

### Replacing the valve

Unscrew the cap nut anticlockwise. Make sure that the hose pillar does not turn at the same time. Remove the valve from the housing.



Clean the valve housing and the hose pillar where the valve is fitted using clean water and a small brush. Also

clean the screw thread of the cap nut and the housing.

Spray the valve with Teflon spray and fit it in the housing. Do

not use any silicone oil, engine oil or grease!

Fit the cap nut and hose pillar back on the air vent. Make sure that the hose pillar does not turn at the same time.

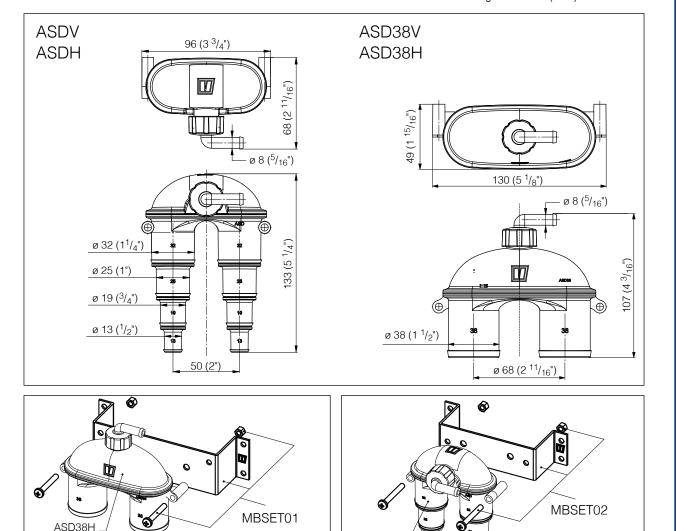
If no new valve is available we advise cleaning the old valve very carefully to prevent damage to the sealing surface and then replacing it.

Check the working of the valve (reduce pressure at the connection for the air vent pipe) and the sealing of the hose pillar with cap nut before taking the air vent into service again.

#### **Technical details**

Material - bend: - air vent valve: - hull outlet: Sensitivity: Hose:

plastic (PP) plastic (VMQ) plastic 8 cm (3<sup>3</sup>/<sub>16</sub>") water column 8 x 14 mm (<sup>5</sup>/<sub>16</sub>" x <sup>9</sup>/<sub>16</sub>"), length 4 metres (13 ft)



ASDH

ASDV

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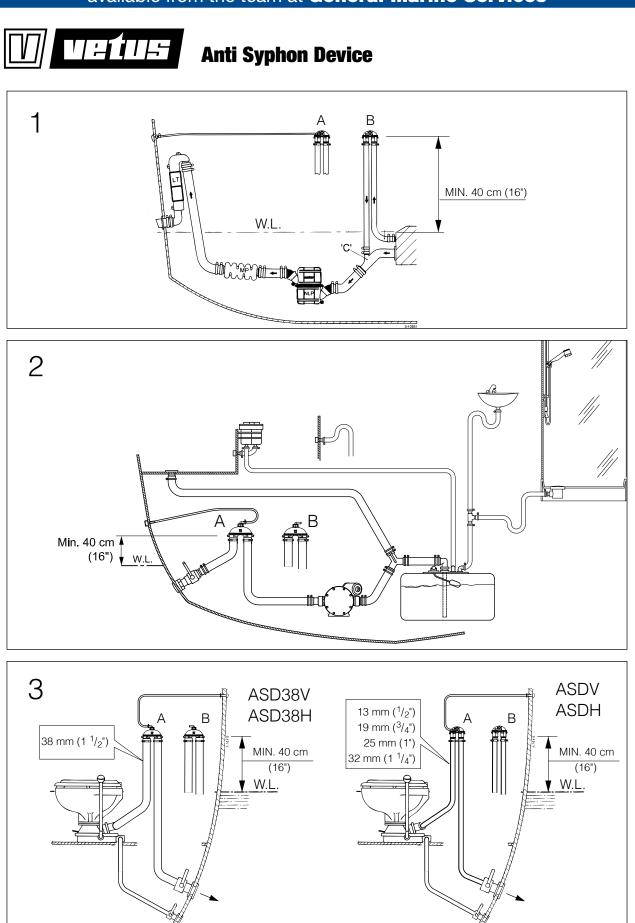
ASD38V

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## available from the team at General Marine Services





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