

# USM 船舶外部放气窗



## 概述

- 外部放气窗起到进气和排气的作用
- 放气窗应能有效防止雨水、雪、树叶、动物及其他物体进入管道系统
- 基于特制的前缘叶型和侧凹槽运行
- 适用于中、高流量
- 格栅和钢丝网部分可以从外部拆下
- 风叶宽度为 70 mm，叶片间距为 50 mm，风叶能够自动张开 50%

## 产品型号选配与配件

- 适用于较大尺寸的模块结构
- 可选配安装于放气窗后方的网筛
- 可选用非标尺寸和法兰钻孔尺寸
- 可配备浩盾船舶防火阀

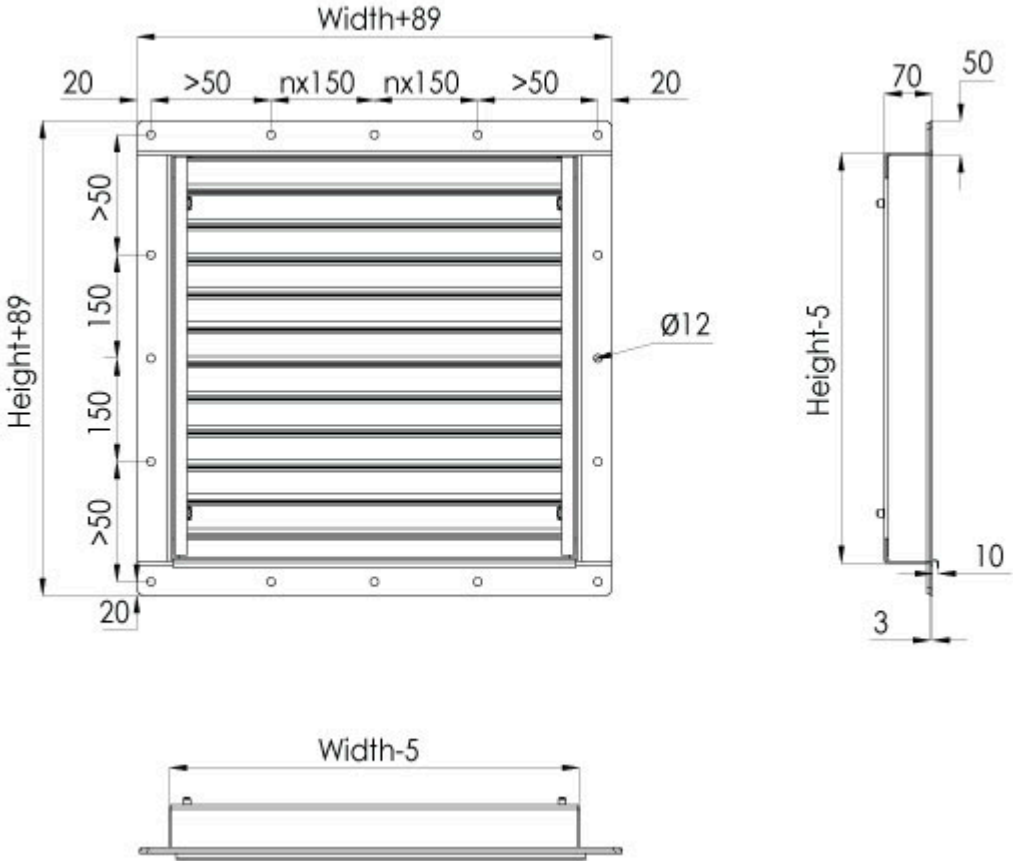
## Specifications

The Halton USM marine external louvre can function as either a primary air intake device or an exhaust air diverter.

These louvres are commonly installed in engine/machine rooms and HVAC equipment rooms to facilitate air control.

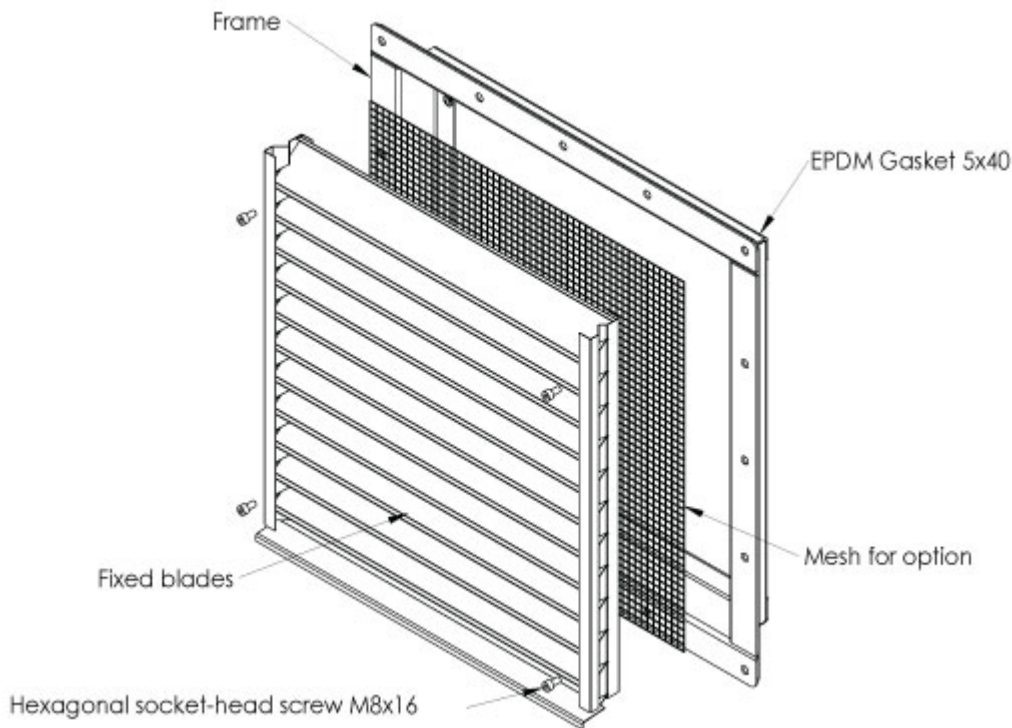
# Dimensions

## General USM drawings



The USM louvres are manufactured for rectangular openings with widths (B) ranging from 150 to 1500 mm and heights (H) from 150 to 2400 mm, with a 1 mm division. Modular construction is available for larger sizes. Special flange configurations are available on request.

## USM construction



## Material and Finishing

PART	MATERIAL	FINISHING	NOTE
Fixed blades	Steel	Painted*	Blade material thickness 1.0 mm
Fixed blades	Stainless steel EN 1.4404 (AISI 316L)		
Fixed blades	Aluminium EN AW 5754/ EN 6060	Painted*	
Frame	Steel	Painted*	Frame material thickness 3.0 mm as standard
Frame	Stainless steel EN 1.4404 (AISI 316L)		
Frame	Aluminium EN AW 5754	Painted*	
Mesh	Stainless steel EN 1.4404 (AISI 316L)		Mesh opening 12.7 mm

\*Painted RAL9010, C3 as standard. C3 average service life 7-15 years. C5 with average service life of 15-25 years available as an option.

## Function



Air is supplied or extracted through the horizontal blades. The design of the grille prevents rainwater from reaching the ductwork. The slot between the frame and the top blade is sealed, ensuring rainwater doesn't enter the ductwork from above. Drops of water are collected in the grooves at the front edge of the blades, and water flows into the side grooves, where it is directed downward.

### Traditional outdoor louvre

Rain falling on the vane flows downwards to the front edge of the vane. Drops formed at the edge fall onto the vane below and, upon contact with the vane surface, break into small droplets and spray that can be easily carried by the airflow through the louvre. Water flowing along the wall onto the louvre can penetrate the slot between the frame and the top vane unless the slot has been closed.

### USM blade construction

The vanes of the USM louver are specifically designed to collect water droplets in grooves at the front edge of the vanes. Once the slot between the frame and the top vane is securely closed, water flowing down the wall will not enter the louver. The top vane guides the water to the side grooves, where it then flows downward alongside the airflow.