**General:**
The SSVent-FS is a combined rectangular single stage weather louver with an integrated closing damper.
The louver is produced in customer specified sizes, but it is recommended to use standard heights for best performance.

**Applications:**
For ship and offshore/rig applications.
The SSVent-FS is used where weather tight closing is not needed, primarily for exhaust, but also for supply if some ingress of rain is acceptable.
The damper is mainly used as shut off damper, but can also be used as a regulating damper for air volume control.

**Design**
The damper is operated by regulating arm from the outside, and the leaver is on right side (seen from outside) as standard.
The louver is intended for flange mounting to bulkhead and is penetrating the bulkhead.

**Execution:**
The frame and weather louver is as standard in mild steel, hot dip galvanized. All movable parts like damper blades, bolts, shafts, hinges, regulating arm are in stainless steel execution.

**Cut out**
\[ W_{\text{cut out}} = W_{\text{louver}} + 50 \], \[ H_{\text{cut out}} = H_{\text{louver}} + 20 \text{ to } +50 \].
Radius on cut out max : 50mm for (20+50 cut out), max70mm for 50x50mm cut out.

**Actuator**
As standard manual regulating from outside, but when access from outside is difficult the louver can be delivered with a electric or pneumatic actuator. See section for dampers for more info on actuators.

**Optional material execution.**
- Frame and louver in sea water resistant aluminium (damper blades and movable parts in stainless steel).
- Complete louver in stainless steel (aisi 304) or aisi 316 execution.
WEATHER LOUVER  
with closing damper  
SSVent-FS  
(BxH)

**Options**
- With wire mesh (12x12x1 aisi316) in front or back side of louver.
- With sand filter in front
- With filter
- Painted (after galvanization).
- Electric or pneumatic closing damper.
- With regulating arm from operated from inside, or extended arm for outside operation

**Special designs:**
- With flange on specified placement of frame (louver partly penetrating bulkhead)
- With complete louver on outside of bulkhead.

**Performance**
- Supply: max recommended face velocity 5,5 m/s
- Exhaust: max recommended face velocity 6-6,5 m/s

**Calculation of face velocity:**
Face velocity \( [\text{m/s}] = \frac{\text{air flow} [\text{m}^3/\text{s}]}{WxH [\text{m}^2]} \)

![Graph showing pressure drop vs. face velocity](image-url)
NYBORG SHUTABLE BLADE DAMPER

SSVent
B x H FS

NYBORG BLADE DAMPER SSVent B x H FS, made of hot dipped galv. St.37. Damper blades and shafts in AISI 316L.

<table>
<thead>
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<th>B</th>
<th>H</th>
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<tr>
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WEATHER LOUVER

General
The SR-F is a rectangular single stage weather louver which is produced in customer specified sizes. The function is to protect the ventilation duct from rain and light sea spray.

Applications
The louver is primarily used as exhaust louver where weather tight closing is not needed, but it can also be used for supply where some ingress of water is acceptable.

Models:
- SR-F with flange for bolting to bulkhead
- SR-G without flange for welding to bulkhead

Design:
For the SRL-F the louver can be both penetrating bulkhead or be mounted entirely on the outside. For best performance as exhaust louver the latter is recommended.

Execution:
The frame and blades are made in mild steel, hot dip galvanized.

Cut out
\[ W_{\text{cut out}} = W_{\text{louver}} + 20, \quad H_{\text{cut out}} = H_{\text{louver}} + 20. \]
If the louver is mounted on outside of the bulkhead no radius on cut out will conflict with louver. If the louver is penetrating bulkhead radius on cut out should be max 35mm.

Optional execution.
- Sea water resistant aluminium
- Stainless steel (aisi 304) or aisi316,

Options
- With wire mesh (12x12x1 aisi316) in front or back (inside) of louver.
- With sand filter in front
- With filter
- Painted (after galvanization).

Performance:
Recommended max air speed for supply: 5,5 m/s
Recommended max air speed for exhaust 6-6,5m/s

Calculation of face velocity:
Face velocity [m/s] = air flow [m³/s] / WxH [m²]
WEATHER LOUVER
FOR MOUNTING ON OR INSERTION IN BULKHEAD

7 holes, Ø 13

H = 150
B = 12
H + 100

MAX 250

15

B + 100

B x H x F

* Hot Dipped Galv., or Stainless steel.
* Sea Spray Protected Blades.

Date: 16.03.06

Tegn: 4-1110-2

Name: F. Østro

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WEATHER LOUVER
with weather tight closing

SRL-F & SRL-G
BxH

General:
The SRL-F is a rectangular, single stage weather louver with a weather tight hatch. The louver is made in customer specified sizes. The louver is to prevent ingress of rain into the ventilation system.

Applications
The louver is designed for use for marine vessels, or for rig applications.
The SRL is used primarily for exhaust, but can be used for supply where some ingress of water is acceptable.

Models:
SRL-F: With flange for bolting to bulkhead.
SRL-G: Without flange for welding to bulkhead.

Design
The louver is available in all sizes.(tailor made) and is delivered either top-, bottom- or side (left- or right hinged.)
The hinges are equipped with greasing nipples for lubrication
The Max recommended size of the louver is approx 3-3.5 m². For bigger louvers the hatch should be divided in two pieces.

Execution
The frame, profiles and hatch are executed in mild steel, hot dip galvanized. All bolts and nuts are in stainless steel execution. The louver achieves a weather tight closing by a neoprene gasket.

Cut out:
\[ W_{\text{cut out}} = W_{\text{louver}}, \quad H_{\text{cut out}} = H_{\text{louver}}. \]
As the louver is mounted on outside of bulkhead no radius on cut out will conflict with the louver.

Optional execution.
- Sea water resistant aluminium
- Frame and hatch in stainless steel (aisi 304) or aisi316,
- Frame and profiles in steel, hot dip galvanized, hatch in aluminium

Options
- With wire mesh (12x12x1 aisi316) in front or back (inside) of louver.
- With sand filter in front
- With filter
- With locking arm for keeping louver in open position at specified angle (e.g. 30deg)
- With locking bolt for locking hatch to bulkhead (must be welding to bulkhead) (for 90 or 180 deg opening)
- Painted (after galvanization).

Special designs:
- Folded hatch (e.g. where space for hatch is limited(f.eks. pga gangveier)
- Divided hatch (e.g. one louver with one bottom- and one top hinged hatch).
- Louver with hatch for 270 deg opening.
- Without lamellas/profiles (only frame and hatch).
Weather Louvre, c/w Hinged Cover

* Hot Dipped Galv., or Stainless steel.
* Sea Spray Protected Blades.
* Heavy Duty Neoprene Gasket.
* Hinges and Screw Joints in Stainless Design.
* Top- bottom- or Sidehinged Cover.
* B x H, Measurement for Cutting Torch on Bulkhead.
Weather Louvre, c/w Hinged Cover

- Hot Dipped Galvanized.
- Sea Spray Protected Blades.
- Heavy Duty Neoprene Gasket.
- Hinges and Screw Joints in Stainless Design.
- Top- or Sidehinged Cover.
- B x H, Measurement for Cutting Torch on Bulkhead.