



# NYBORG – MAWENT

## LOUVERS

# 1. APPLICATION

**Mist eliminator louvers** are designed and prepared for use in marine as well as off-shore conditions. The main purpose is operation at inlets of HVAC systems. Typical examples are intake for accommodation, cargo hold etc.

# 2. CONSTRUCTION

**Guide of Nyborg-Mawent louvers marking:**

**DRS-F/DRS-G** is a droplet separator (mist eliminator) louver which is used for air intakes for separation of water droplets, moisture and some salt spray from the air stream. The louver is also called weathertight as it can eliminate almost 100% of water (however it is not watertight). **DRS-F** is a louver with flange. **DRS-G** is a louver without flange, it must be welded into bulkhead.

**DRSL-F/DRSL-G** is a droplet separator (mist eliminator) louver which is used for air intakes for separation of water droplets, moisture and some salt spray from the air stream. The louver is also called weathertight as it can eliminate almost 100% of water (however it is not watertight). **DRSL-F** is a louver with flange. **DRSL-G** is a louver without flange, it must be welded into bulkhead. This louver includes hinged watertight door (opening left, right, top, bottom to be selected) equipped with heavy duty neoprene gasket. The maximal recommended size of the louver with hatch is approx. 3-3,5 m<sup>2</sup>, for bigger sizes the hatch should be divided in two pieces.

**DRS-FiZi-F** is a two stage mist eliminator louver with the filter behind as the 2nd stage. The filter is a cloth from roll that is fastened to the frame. **DRS-FiZi-F** with access to filter from inside (back side of louver). **DRS-FiZi-F** is a louver with flange.

**DRS-FiZO-F** is a two stage mist eliminator louvers with the filter behind as the 2nd stage. The filter is cloth from roll that is fastened to the frame. **DRS-FiZO-F** with hinged louver for access to filter from outside (front). **DRS-FiZO-F** is a louver with flange.

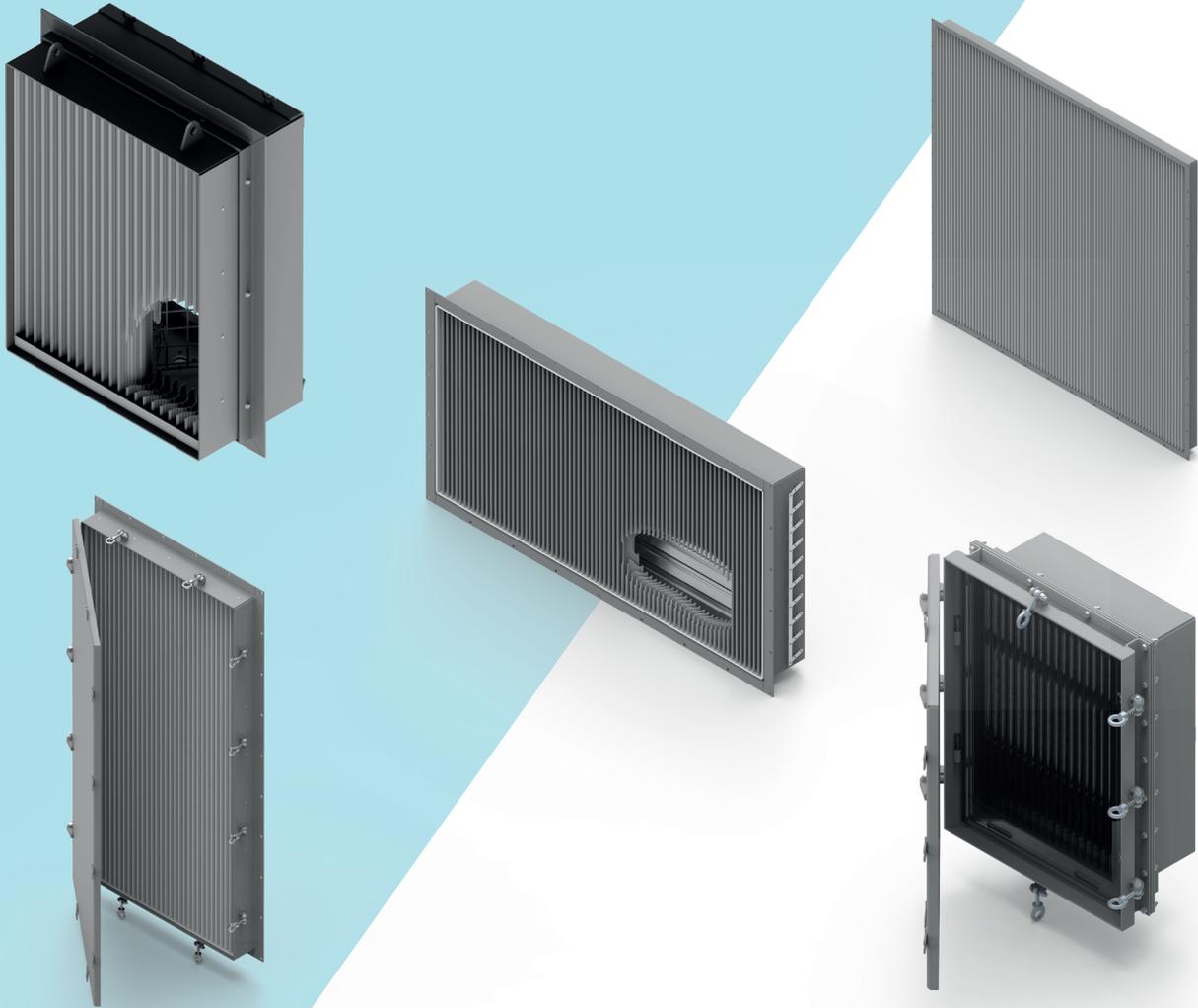
**SSVent-FS/DRS-F** is a droplet separator (mist eliminator) louver which is used for air intakes for separation of water droplets, moisture and some salt spray from the air stream. The louver is also called weathertight as it can eliminate almost 100% of water (however it is not watertight). The damper is primarily intended as a shut off damper, but can also be used as an air volume control or regulating damper. Throttle blades and blades' rotation shafts are made of **AISI 304/316L**. The position of throttle's blades can be controlled manually, automatically, electrically or with compressed air. **SSVent-FS/DRS-F** is a louver with flange.

### Drilling of flanges to be selected:

- Nyborg-Mawent standard,
- according to ISO 15138.

Special drilling is available on request.

For anti-spark execution earthing bolt is added as well as selection of materials is considered. This execution must be agreed with the factory prior to production.



### Optional accessories:

- wire mesh made (standard 12x12) of HDG steel, stainless steel AISI 304/316L,
- counter flange,
- sand filter in front, bolted to the flange, for easy removal/ cleaning,
- filter behind the louver (for dust/soot),
- locking items to be welded to the bulkhead/deck to keep louver in open position (delivered loose),
- locking arm to keep louver in open position normally up to 45° (value to be agreed with the factory),
- draining to the outdoor side, indoor side or bottom,
- special shape design (e.g. triangular, equipped with hatch).

## 3. SURFACE TREATMENT

### DRS-F/DRS-G

**Standard treatment** is sea water resistant aluminium alloy of DRS. Casing made of sea water resistant aluminium alloy.

#### Optional treatment:

- DRS: stainless steel including AISI 304/316L - acid treated,
- Casing: carbon steel painted, stainless steel including AISI 304/316L - acid treated, hot dip galvanized steel.

### DRSL-F/DRSL-G

**Standard treatment** is sea water resistant aluminium alloy of DRSL.

The casing is made of hot dip galvanized steel.

#### Optional treatment:

- DRSL: stainless steel including AISI 304/316L - acid treated,
- Casing: carbon steel painted, stainless steel including AISI 304/316L - acid treated, aluminium alloy.

### DRS-FiZi-F, DRS-FiZO-F

**Standard treatment** for louver frame made of sea water resistant aluminium alloy . Mist eliminator made of aluminium alloy. Filter frame made of stainless steel including AISI 304/316L.

#### Optional treatment:

- DRS: stainless steel including AISI 304/316L - acid treated,
- Louver frame: stainless steel including AISI 304/316L - acid treated.

### SSVent-FS/DRS-F:

**Standard treatment** is sea water resistant aluminium alloy of DRS. Casing made of hot dip galvanized steel. Blades and rotation shafts are made of AISI 304/316L.

#### Optional treatment:

- DRS: stainless steel including AISI 304/316L - acid treated,
- Casing: carbon steel painted, stainless steel including AISI 304/316L - acid treated.

## 4. OPERATING CONDITIONS

Recommended face air velocity is: Supply:  $v = 4,5 \text{ m/s}$

## 5. SIZES

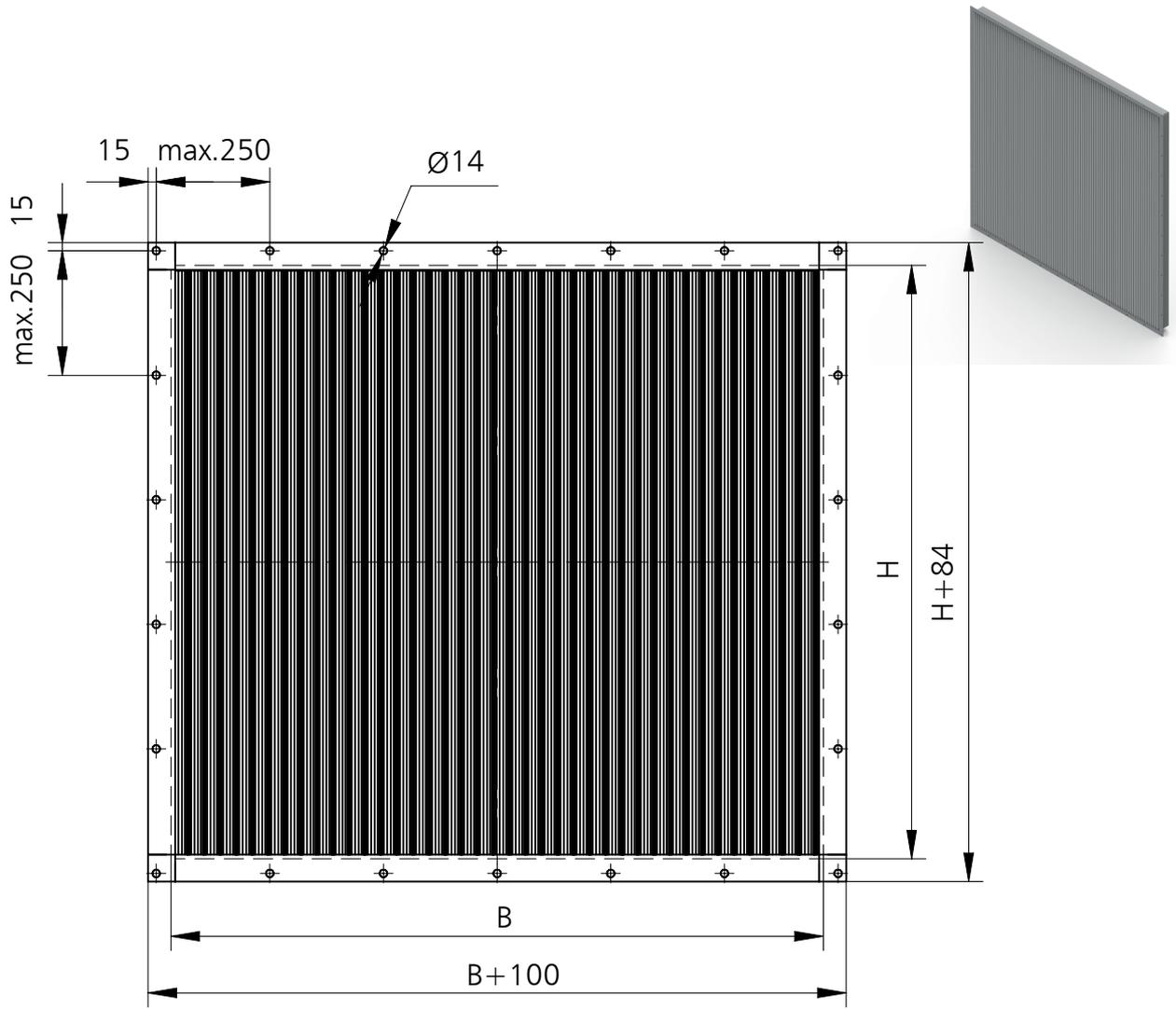
Louvers are made in customer's dimensions according to sample drawings presented in this catalogue. However each size will be considered by the factory and produced with a proper reinforcement.

**Notice that** nominal dimensions BxH are external dimensions of louver casing.

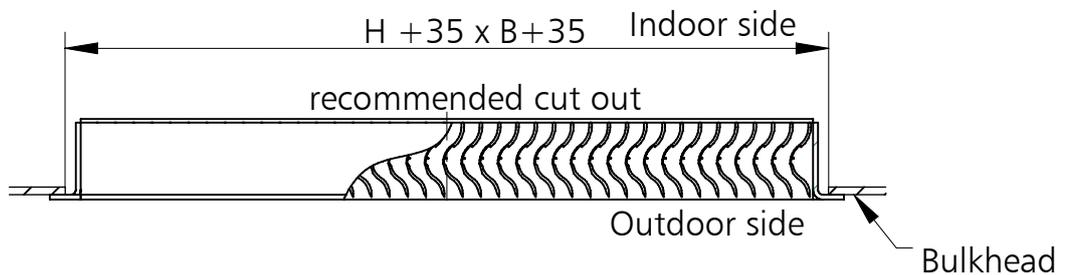
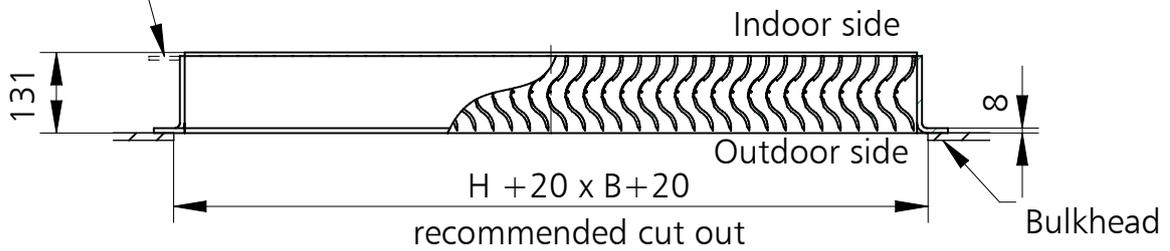
**Notice if** louver penetrates bulkhead, radius of cut out must be considered as conflict may occur.

**Notice that** installation of DRS louver shall be considered due to expected wind direction.

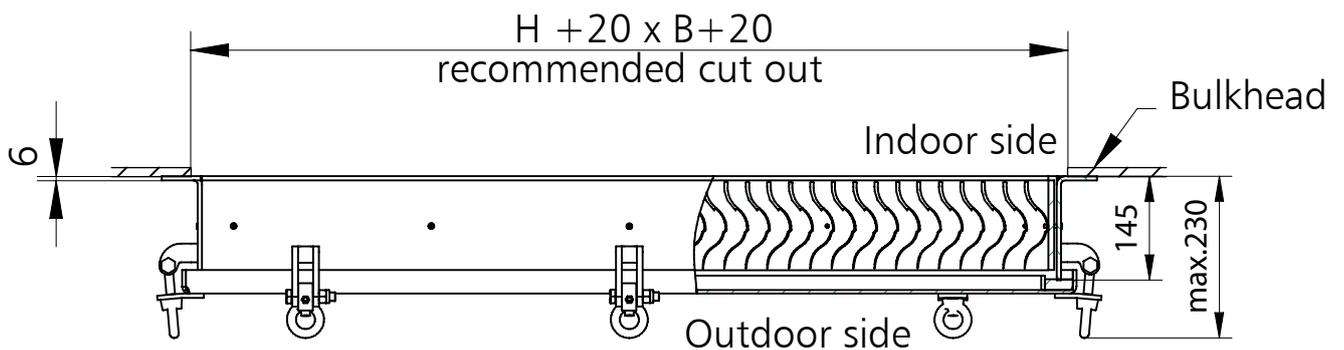
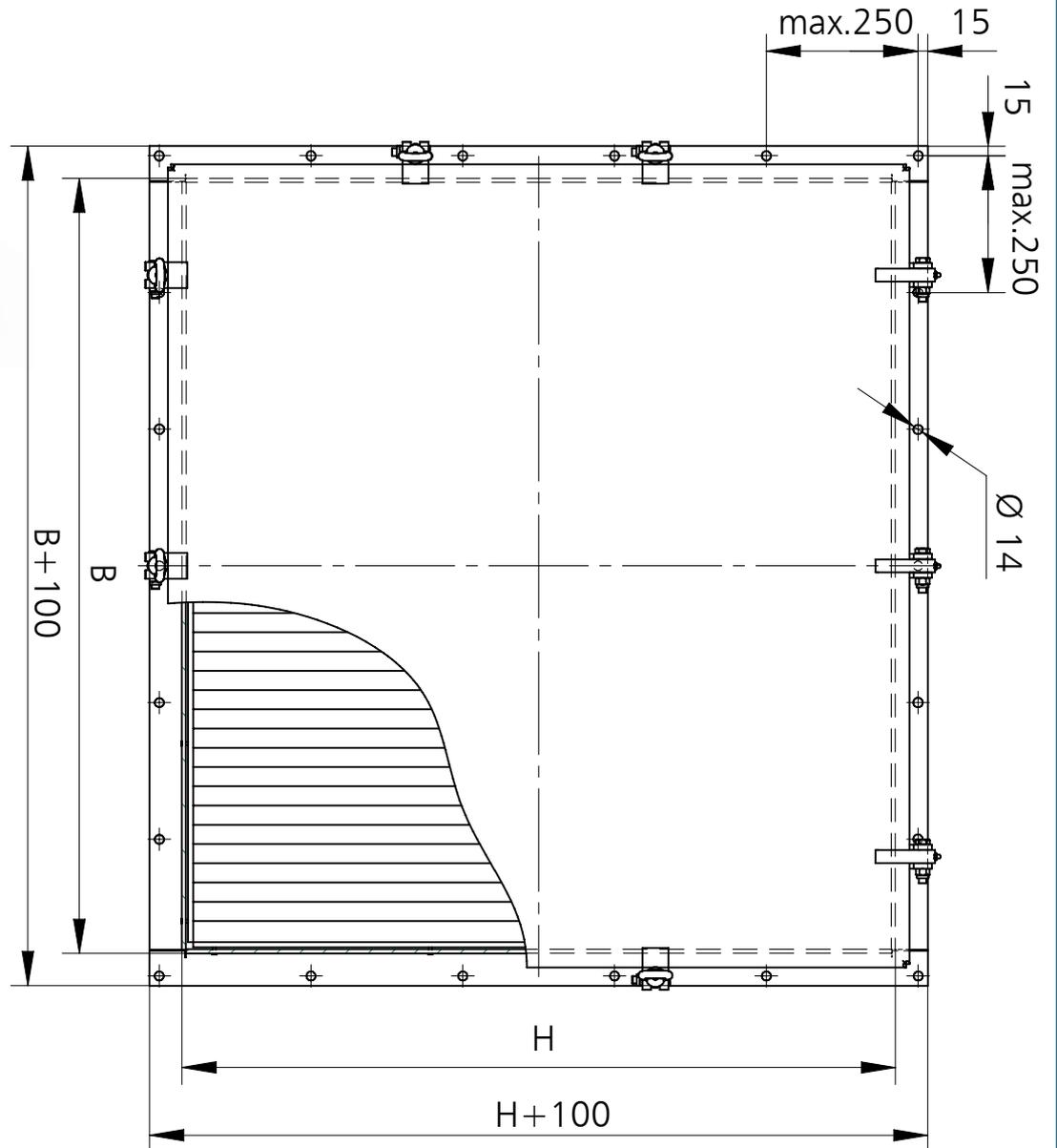
# DRS-F dimensions



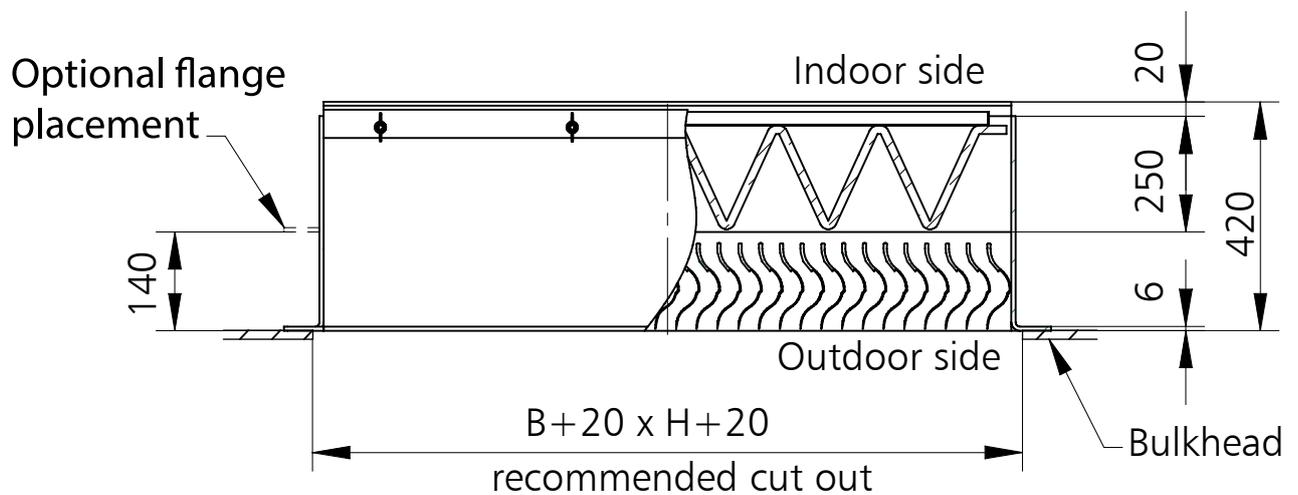
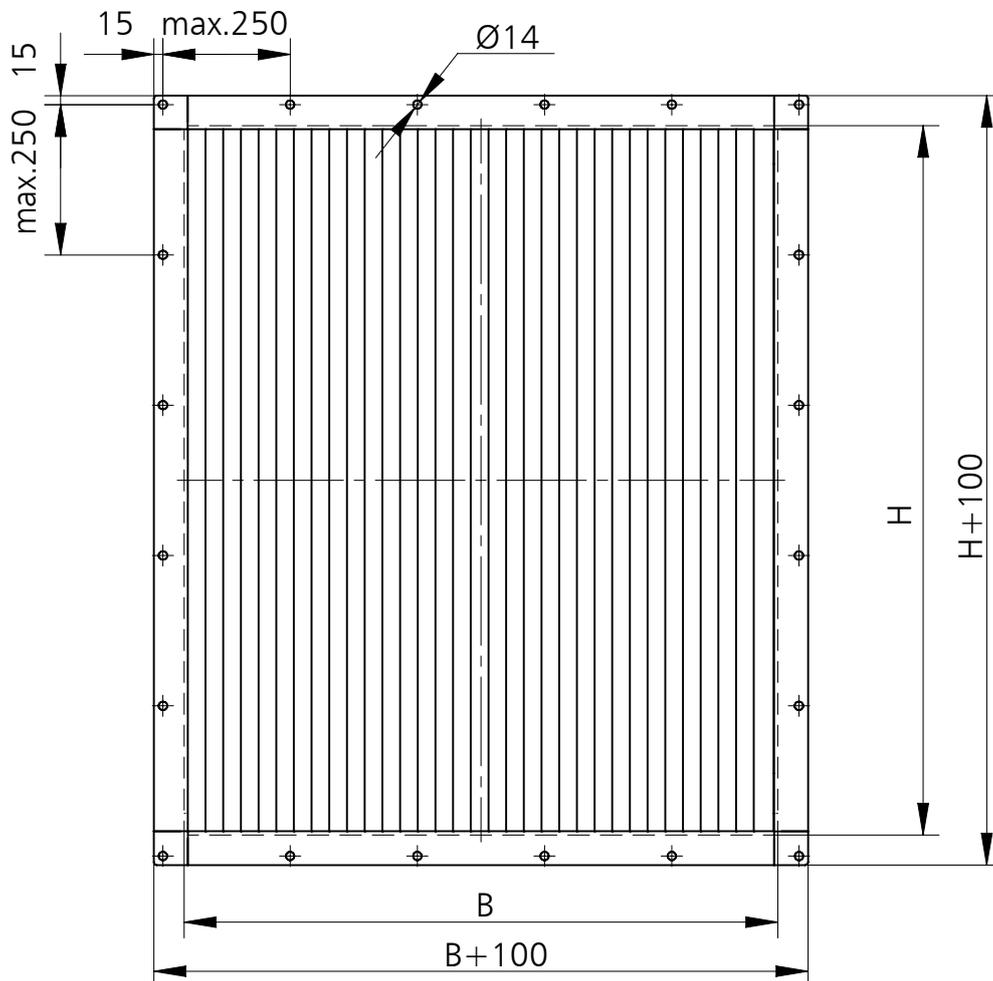
Optional flange placement



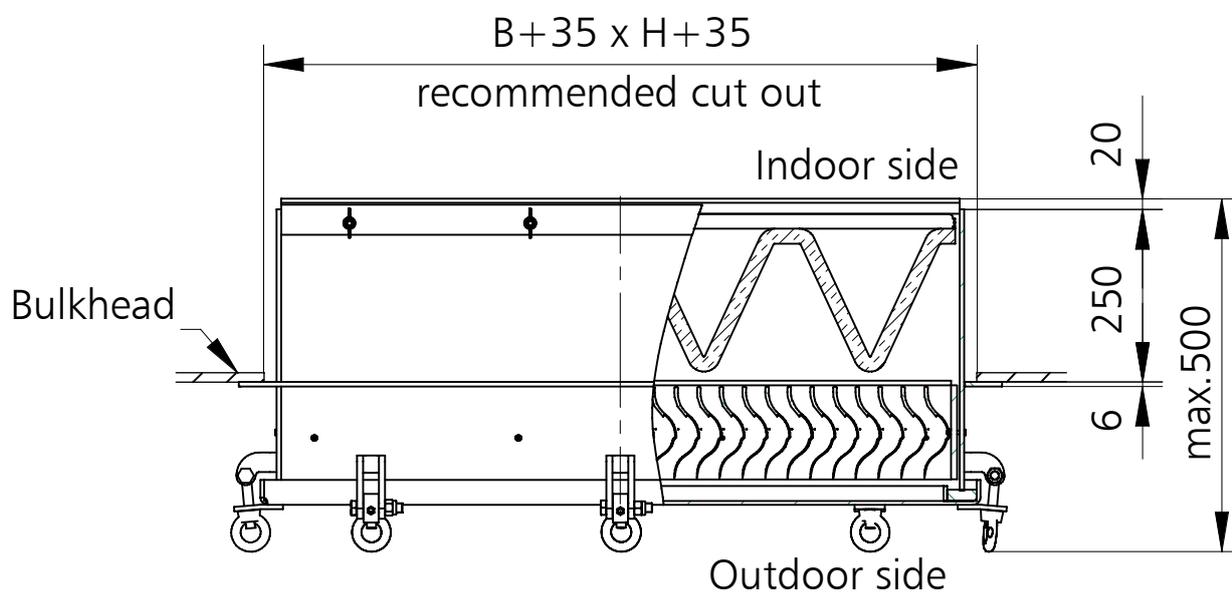
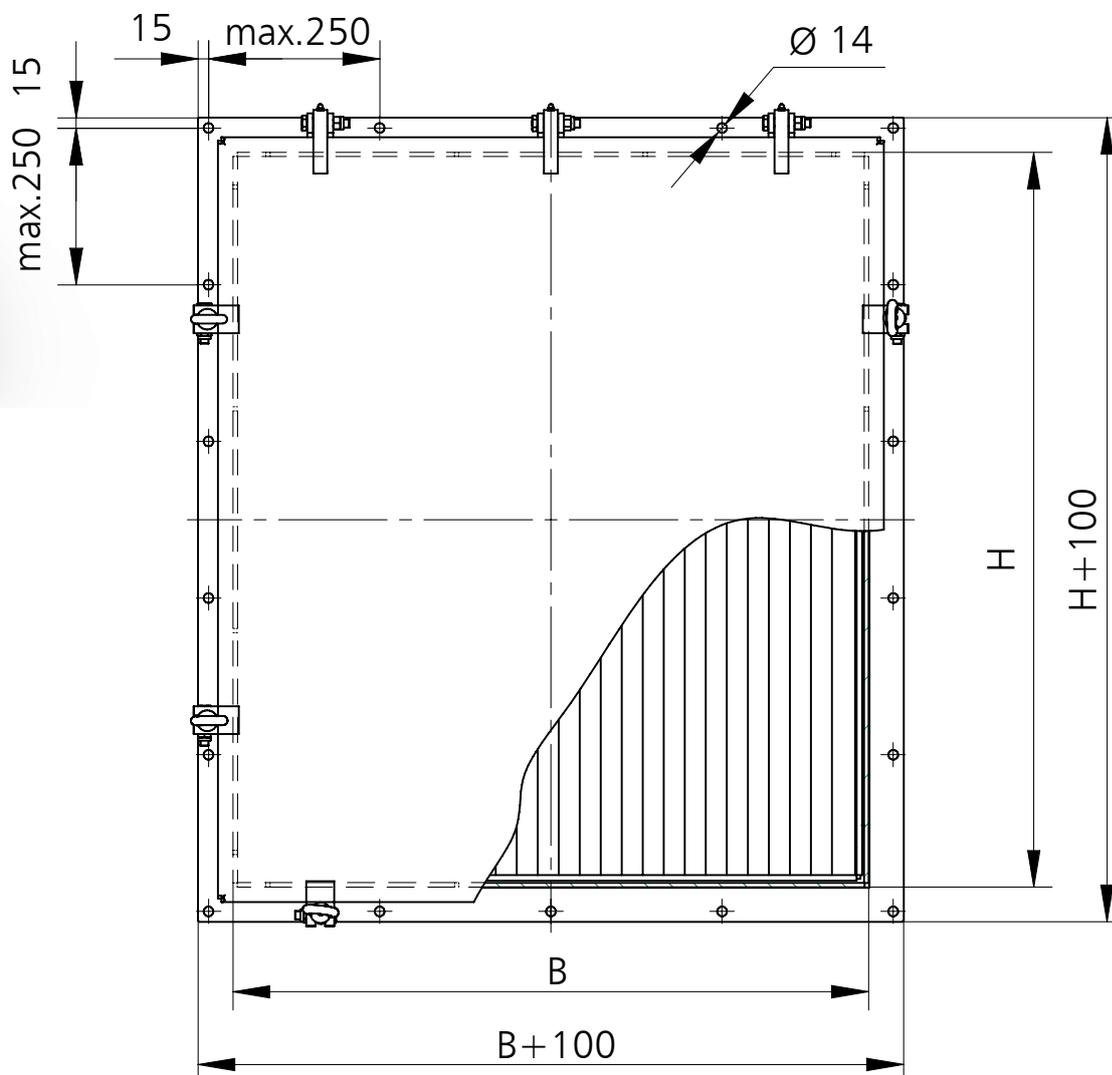
# DRSL-F dimensions



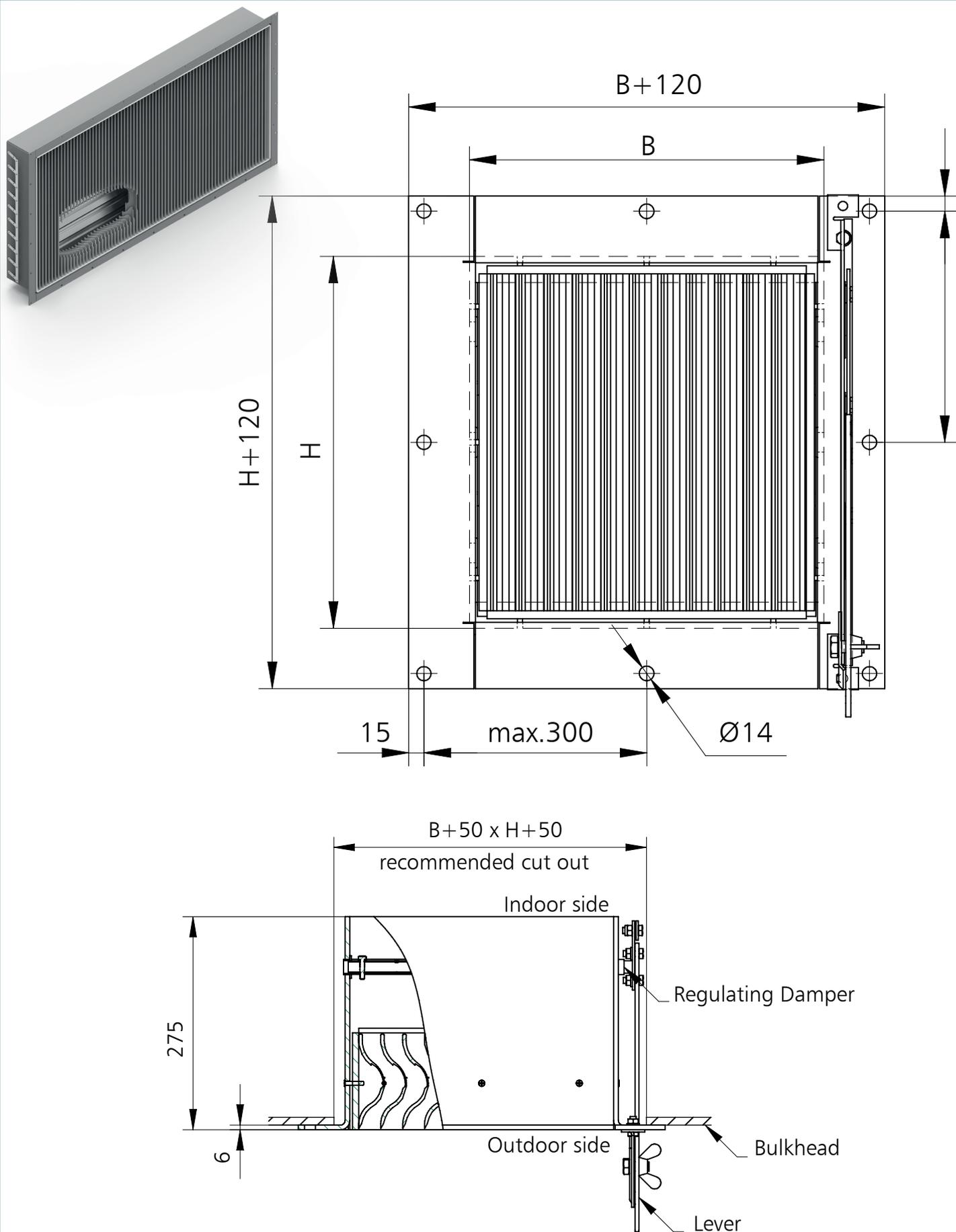
# DRS-Fizi-F dimensions



# DRSL-Fizo-F dimensions



# SSVent/DRS-G dimensions



# 6. MARKING

An example of marking for louver, size

- **DRSL-F** or **DRSL-G 500x600 (BxH)** open to the top, casing made of hot dip galvanized carbon steel, drilling acc. to Nyborg-Mawent.

**Nyborg-Mawent S.A.**

Ciepła Street 6, 82-200 Malbork, POLAND

T +48 55 646 63 00

F +48 55 646 63 09

office@nyborg-mawent.com

www.nyborg-mawent.com

