

NYBORG – MAWENT

HEATING LOUVERS

1. APPLICATION

The **louver** is primarily used as intake louver in low temperature conditions. It is designed to deal with issue of ice accumulation. Typically used in: engine rooms, accommodation rooms, cargo hold etc.

2. CONSTRUCTION

Guide of Nyborg-Mawent silencers:

DRS-He-F/ DRS-He-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-He-F** is heating louver with flange. **DRS-He-G** is heating louver without flange. It must be welded into bulkhead.

DRSL-He-F/ DRSL-He-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-He-F** is heating louver with flange. This louver includes hinged watertight door (opening left, right, top, bottom to be selected) equipped with heavy duty neoprene gasket. The maximum recommended size of the louver with hatch is approx. 3-3,5 m², for bigger sizes the hatch should be divided in two pieces. **DRSL-He-G** is heating louver without flange. It must be welded into bulkhead.

Drilling of flanges in the silencer to be selected:

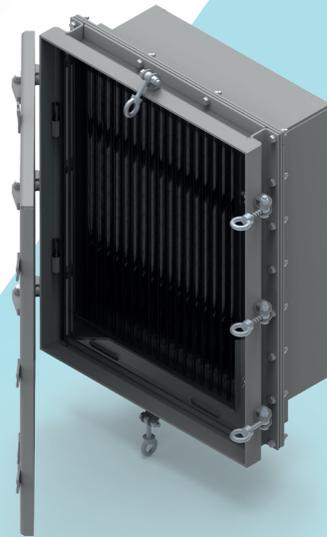
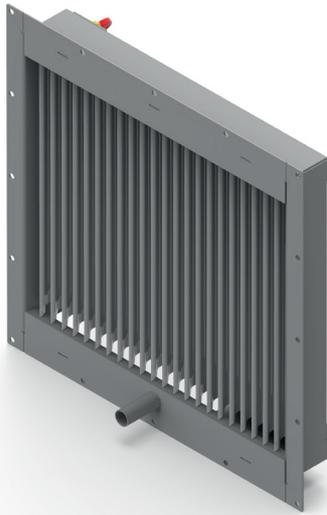
- Nyborg-Mawent standard,
- according to ISO 15138.

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 factory prior to production.

Options, optional accessories:

- wire mesh made (standard 12x12) of HDG steel, stainless steel AISI 304/316L,
- counter flange,
- sand filter in front for easy removal/ cleaning (filter class G2 or G3),
- filter behind louver (for dust/soot) (G3 or G4),
- 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 factory),
- draining to the outdoor side, indoor side or bottom,
- special shape design (e.g. equipped with hatch).



3. SURFACE TREATMENT

DRS-He-F, DRS-He-G, DRSL-He-F, DRSL-He-G:

Standard treatment is sea water resistant aluminium alloy of DRS.

Casing and door made of hot dip galvanized steel.

Optional treatment:

- DRS: stainless steel including AISI 304/316L - acid treated,
- Frame/Door: carbon steel painted, stainless steel including AISI 304/316L or aluminium alloy - acid treated.

4. OPERATING CONDITIONS / PERFORMANCE

Recommended face air velocity is:

Supply: $v = 4,5$ m/s.

5. SIZES / DIMENSIONS

Louvers are made in customer's dimensions (BxH) 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.

6. HEATING LOUVER

Heating louver is typically used when expected air temperature is close or below 0°C.

They are equipped with cable of power from 10 W/m up to 90 W/m.

Heating cable has Ex execution.

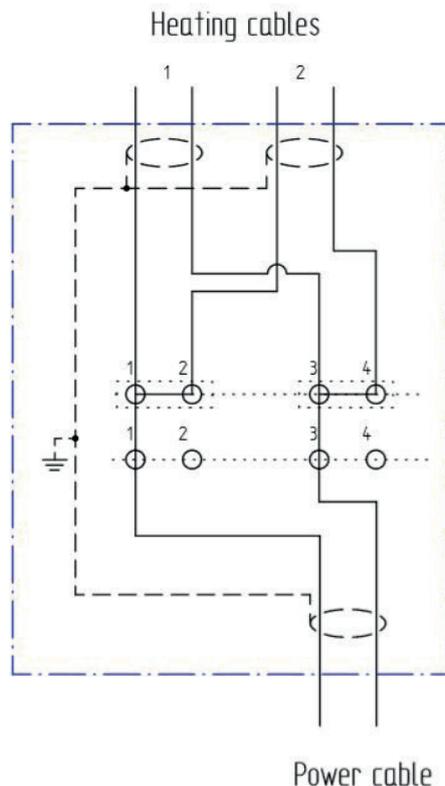
Quantity of cables depends on size of louver and requested power.

Normally power is defined in reference to 1 m².

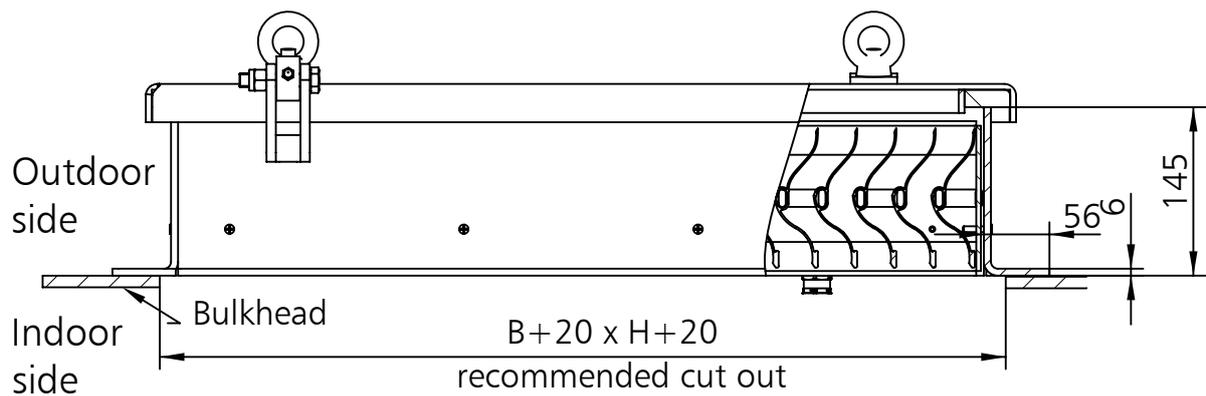
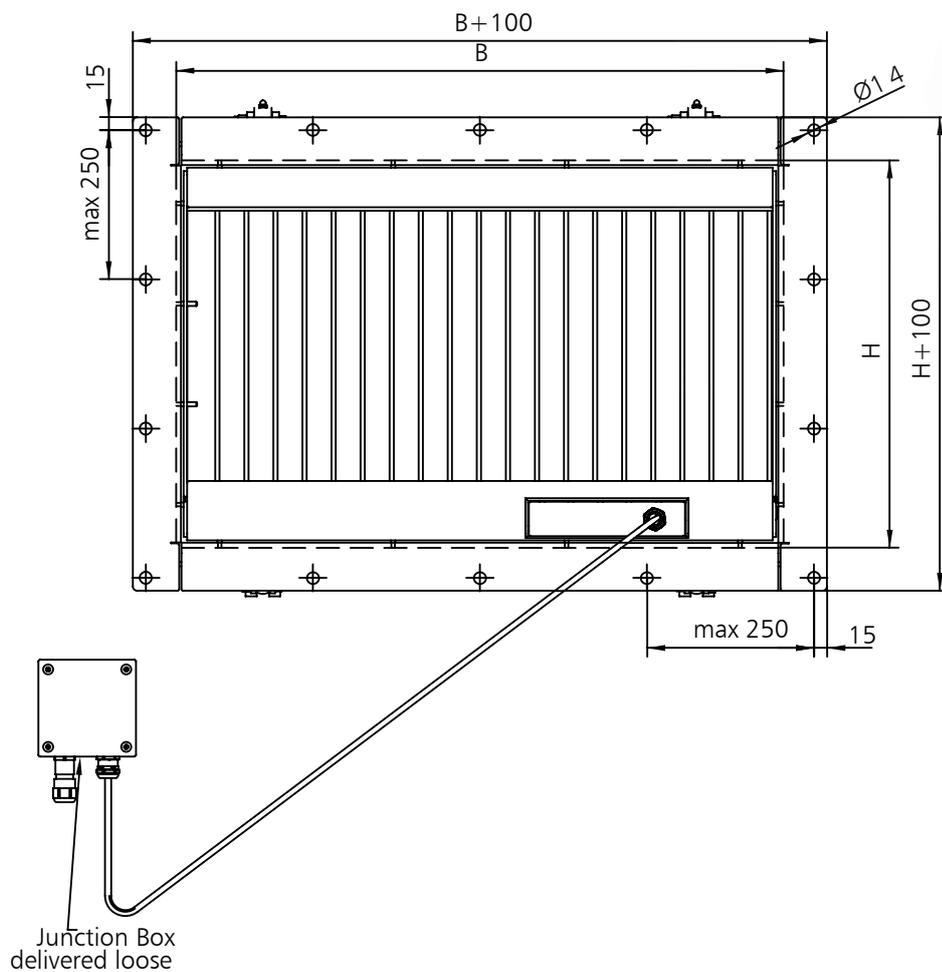
Terminal boxes are to be finally mounted by the customer nearby the louver.

They can be made of stainless steel AISI 316L, GRP or Aluminium.

The example of connection is shown below (two circuits):



DRSL-He-F



6. MARKING

An example of marking for louver, size

- **DRSL-He-G 600x500 (BxH)** open to the top, frame and door made of aluminium alloy.

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

