DNV-GL

EU RO MUTUAL RECOGNITION TYPE APPROVAL CERTIFICATE

Certificate No: MRP000004
Revision No:

This Certificate is issued to

Saldus Welding SIA Saldus novads, Latvia

for

Air Pipe Automatic Closing Device

with type designation(s)

Hide Type

The product is found to comply with

EU RO Mutual Recognition Technical Requirements for Air Pipe Automatic Closing Device

Intended service

For the water tank or oil tank except cargo tank extending above the freeboard or superstructure decks", as per Reg.20 of ICLL.

Sizes DN40, 50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500, 600

This Certificate is valid until 2023-03-20.

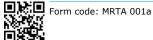
Issued at **Høvik** on **2018-05-22** DNV GL local station: **Ulsteinvik**Approval Engineer: **Adel Samiei**

for **DNV GL**

Marianne Spæren Marveng Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Job Id: **262.4-000090-2** Certificate No: **MRP0000004**

Revision No: 1

Product description

Air Vent Heads type Hide with plastic ABS float (up to 300 mm sizes) and 1.4462 duplex stainless steel float (350 mm up to 600 mm sizes)

Material of body: Al 5083/H111, 1.4462 duplex stainless steel, Galvanized Carbon steel

Manufactured by

Saldus Welding SIA, Saldus novads, Latvia

Application/Limitation

The certificate covers design assessment of air vent heads. Installation and other additional requirements related to installation are out of scope of this certificate.

The air vent heads are not considered as devices to prevent the passage of flame into cargo tanks. They shall not be installed on cargo tanks of oil or chemical tankers (flash point<60°C).

For the galvanised steel air pipe heads, the zinc coating shall be applied by the hot method and the thickness shall be 70 to 100 microns.

Flag national authorities may have their own requirements for the products to be installed aboard ships flying their flag. Both the requirements of national authorities and those of the classification Rules must be complied with.

Results of flow characteristics test and discharge/reverse tests:

Size	80% of Blocking velocity for each size obtained from discharge/Reverse tests		Resistance coefficient (average values)	
	Without screen	With screen	Without screen	With screen
DN40	21.60 m/s	22.56 m/s	3.01	3.84
DN50	18.40 m/s	20.64 m/s	2.44	3.56
DN65	15.68 m/s	15.68 m/s	3.40	4.75
DN80	20.80 m/s	24.56 m/s	3.81	6.43
DN100	16.80 m/s	16.80 m/s	4.03	5.86
DN125	19.20 m/s	19.76 m/s	3.72	5.15
DN150	17.36 m/s	17.20 m/s	4.93	6.93
DN200	16.64 m/s	18.40 m/s	5.56	7.18
DN250	17.52 m/s	16.72 m/s	5.77	8.32
DN300	17.20 m/s	17.20 m/s	7.66	9.63
DN350	23.44 m/s	23.44 m/s	8.05	10.37
DN400	26.56 m/s	26.56 m/s	8.90	11.37
DN450	22.80 m/s	22.80 m/s	9.75	12.37
DN500	21.04 m/s	21.04 m/s	10.60	13.37
DN600	26.72 m/s	26.72 m/s	12.30	15.37

The air vent heads covered by this certificate may be delivered with a heating element. The heating element and its functionality are not a part of approval scope.

Type Approval documentation

Test Carried out

Flow charcteristics test, impact test on float, compression loading test on float, tightness test, discharge/reverse test

Marking of product

Each air pipe automatic closing device covered by this certificate shall be marked before shipment for identification of approved equipment. In addition, and as a minimum, the following items to be marked at the suitable place:

- Manufacturer's name or logo Manufacturer's name;

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- Type designation;
- Nominal Diameter;
- Resistance coefficient;

Periodical assessment

The manufacturer shall apply annually for periodical assessment to DNVGL. A survey will be carried out to confirm that the production under the MR TAC and the quality assurance scheme are being satisfactory maintained.

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