

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Vent Head for Tank**with type designation(s)
CBM1105-82

Issued to

Jingjiang Aowei Marine Valve Fty
JINGJIANG, Jiangsu, China

is found to comply with

DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems
DNVGL-OS-D101 – Marine and machinery systems and equipment, Edition January 2018
DNV GL class programme DNVGL-CP-0187 – Type approval – Air vent heads**Application :****Product(s) approved by this certificate is/are accepted for installation on vessels classed by DNV GL.****Sizes: DN50/65/80/100/125/150/200/250/300**Issued at **Høvik** on **2019-05-14**This Certificate is valid until **2023-06-30**.for **DNV GL**DNV GL local station: **Jiangyin**Approval Engineer: **Adel Samiei**

Zeinab Sharifi
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.



Product description

Air vent head with metallic float disc with screen with type designation: CBM1105-82

Materials:

Body & Cover: QT400-18 / Ball float: 0Cr26NiMo2 / Seal packing: NBR / Screen: H62 / Bolts: 0Cr26NiMo2

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 oil tanks (flash point < 60°C).

The body and side cover shall be hot dip galvanized and the inner chamber should be coated with epoxy aluminium paint.

Maximal air velocities (80% of air flow and air velocity at blocking condition) resulted from Discharge/reverse tests are as follows:

Size	80% of blocking velocity (m/s)	Dynamic coefficient ζ at $\Delta P = 250$ mbar
DN50	44.32	11.07
DN65	24.75	8.70
DN80	17.69	5.95
DN100	10.46	7.99
DN125	10.10	8.10
DN150	32.75	9.89
DN200	15.03	11.57
DN250	17.86	8.16
DN300	19.67	6.16

Product certificate is not required for air vent heads installed in ship class vessels.

Type Approval documentation

Tests carried out

Hydraulic test for determination of flow characteristics, Tightness test, Discharge/reverse test, Impact test on the Metallic float

Marking of product

For traceability to this type approval the products are to be marked:

- Manufacturer's name or trade mark
- Type designation
- Size

Periodical assessment

For retention of the Type Approval, a DNV GL Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNVGL-CP-0338.