



Certificate No:
TAP00002NV

TYPE APPROVAL CERTIFICATE

This is to certify:

That the **15 ppm bilge alarm**

with type designation(s)
JOWA 15 ppm Bilge Alarm

Issued to

Jowa AB
Kållerød, Västra Götalands Län, Sweden

is found to comply with

IMO Resolution MEPC.107(49) – Revised Guidelines and Specifications for Pollution Prevention Equipment for Machinery Space Bilges of Ships

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2023-03-08**

This Certificate is valid until **2023-06-20**.

for **DNV**

DNV local unit: **Sweden CMC**

Approval Engineer: **Wenjun Wu**

Dag Sæle-Nilsen
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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

The equipment is intended for installation onboard ships for bilge water monitoring/ alarm – max.15 ppm at discharge Overboard.

The 15ppm Bilge Alarm is designed and tested to meet the requirements of the IMO Resolution MEPC.107(49).

Application/Limitation

The equipment is not permitted to be installed in spaces subject to explosion hazards.

Type examination documentation

Dwg. No.	Title	Date/Rev.
86-0000-03-01	P&I Diagram	2007-09-18
86-0000-01-01	GA Drawing	2006-06-14
86-7001-02-01	Component Layout	2007-09-17
86-7001-02-02	Circuit Diagram	2007-09-17
86-7001-02-03	Penetrations	2007-09-17
	Operating Instruction and Technical Manual – JOWA 15ppm Bilge Alarm	

Tests carried out

- TEi-Testing Services, LLC, Plumbing Laboratory, USA, Report of Test P00770, JOWA AB, dated 01 Oct. 2007, Testing of 15ppm Bilge Alarm according IMO Resolution MEPC.107(49), Part 2, and USCG CFR Title 46, Part 162, Subpart 162.050.
- TEi-Testing Services, LLC, Plumbing Laboratory, USA, Summation Certificate TS-P00770, JOWA AB, dated 01 Oct. 2007, Summation Test Data and Results of Test Report TEi-TS-P00700.
- SP Swedish National Testing and Research Institute, Report No. P703499, dated 2007-08-06, Environmental tests of bilge alarm.

Marking of product

For traceability to this EC Type-Examination, each unit to be marked with:

- Manufacturer's name and trademark
- Type designation
- Serial No.
- Mark of Conformity

Periodical assessment

For retention of the Type Approval, DNV surveyor shall perform periodical assessments to verify that the conditions of the TA are not altered since the certificate was issued. The scope of periodical assessment includes:

- Review of the TA documentation and verification that the documentation is still used as basis for the production
- Review of possible changes in design, material and performance of the product.
- Verification of the company's production and quality systems ensuring continued consistent production of the type approved products to the required quality.
- Verification that the product marking for identification and traceability to the TA Certificate is not altered.

Copy of type approval certificate

A copy of this Type Approval Certificate shall be carried on board a vessel fitted with this 15 ppm bilge alarm, for inspection on board the ship. A reference to the test protocol and a copy of the test results should be available for inspection onboard the vessel.

Revision history

Rev.	Date of issuance	Description
-	2023-03-08	Initial certificate based on MEDB000042V rev.1

APPENDIX – SUMMARY OF TEST RESULTS

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