

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Hydrostatic Level Gauge Indicator**with type designation(s)
HS-A-H, HS-B-H

Issued to

Nantong Haishi Marine Machine Co., Ltd
TONGZHOU CITY JIANGSU, Chinais found to comply with
DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems**Application :****Liquid level gauging of tanks. Refer to certificate.****Product approved by this certificate is accepted for installation on all vessels classed by DNV GL.****Max. working press.: 2 bar**Issued at **Hamburg** on **2017-06-02**This Certificate is valid until **2022-06-01**.DNV GL local station: **Nantong CMC**Approval Engineer: **Hagen Markus**for **DNV GL**

Olaf Drews
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

Flat level gauge with self-closing isolating valve consisting of the following main components:

Component	Material specification
Upper and lower self-closing valve	HPb59-1
Body	Q235A
Flat glass	Borosilicate according to specification 250*34*22
Flat glass gasket material	NBR or Silicon rubber

Application/Limitation

The level gauge is type approved for tank liquid level indication.

M.A.W.P	2.0 bar
Temperature range	NBR: 0°C up to 100°C Silicon rubber: 0°C up to +120°C
Media	Fresh water, Flammable fluids with a flashpoint > 60°C

For selection of the level gauges for the corresponding application and media as well as installation the instructions of the manufacturer are to be observed. Refer to drawing HS-A-H and HS-B-H.

The level gauge indicator is not approved for the use on fuel tanks and oil tanks on passenger ships

Test carried out

Pressure test

Type Approval documentation

Marking of product

Each device shall bear at least legible and durable marking on the body or on a type plate fixed securely to the body as follows:

- Manufacturer's Mark, Type, DNV GL Type Approval Certificate number

Job Id: **262.1-024886-1**
Certificate No: **TAP00000W9**

Periodical assessment

For retention of the type approval certificate periodical assessments shall be carried out at production places by DNVGL surveyor.
The objective of the periodical assessment is to verify that the design and production conditions for the type approval have not been altered.

Main scope of the assessment:

- verification of the production and quality control system
- review of quality control documentation of recent deliveries
- review of drawings in production to verify any design changes which may have an impact on data specified in the type approval certificate, performance and range of application
- verification of the product marking

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

End of certificate