

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Gauge Glass Level Indicator

with type designation(s)

Flat Type Glass Level Gauge, Magnetic Float Type Level Gauge, Self Powered Content Gauge

Issued to

Taizhou Huatai Ship Instrument co., LTD.
Jiangsu, China

is found to comply with

DNV rules for classification – Ships Pt.4 Ch.6 Piping systems

Application :

Products approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Type:	Temperature range:	Max. working press.:	Design:
Flat Type Glass Level Gauge	-25°C up to +70°C	0.2 Mpa / 2 bar	ULB-3A/F-C; ULB-3B/F-C;
Magnetic Float Type Level Gauge	-25°C up to +180°C	1.0 Mpa / 10 bar	UHZ-511Z-C; UHZ-512Z-C; UHZ-515Z-C
Self Powered Content Gauge	-25°C up to +70°C	1.0 Mpa / 10 bar	HB-SPCG-150-C

Issued at **Hamburg** on **2022-02-18**

This Certificate is valid until **2027-02-17**.

for **DNV**

DNV local station: **Nantong**

Approval Engineer: **Christian Kaemmer**

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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.

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

Flat Type Glass Level Gauge:

Model: ULB-3A/F-C; ULB-3B/F-C

The float level gauge allows to see the level of liquids in tanks.

It penetrates the tank and is installed on the side of the tank. The level is indicated by a borosilicate glass cylinder incorporated in a frame.

Magnetic Float Type Level Gauge:

Model: UHZ-511Z-C; UHZ-512Z-C; UHZ-515Z-C.

The magnetic level gauge allows to see the level of liquids in tanks. The level is indicated by non-contact magnetic flaps stimulated by a bulb in a level tube.

Self-powered content gauge:

Model: HB-SPCG-150-C

Application/Limitation

The level gauges are type approved for application for water, lubricating oil, flammable-liquid and fuel-oil of flash point over 65°C for tanks above double bottom.

The level gauges are type approved for application in pipe class I, II and III-piping systems as listed in DNV Ship Rules Pt. 4, Ch. 6.

The level gauge is not to be used on fuel-and oil tanks on passenger ships. For the use on tanks containing flammable liquids the magnetic level gauge is to be provided with self-closing valves or remotely operated quick closing valves at each end and is to be protected against mechanical damage.

Type Approval documentation

Tests carried out

Marking of product

For traceability to this type approval, each level gauge is to be marked with:

- manufacturer's name or trademark
- Type
- Nominal pressure

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment to verify that the conditions for the Type Approval are complied with. Refer to the Class Programme DNV-CP-0338, Sec.4.

To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>