DNV·GL

Certificate No:
TAP000023B

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Dial Level Gauge

with type designation(s)
HB-SPCG-150

Issued to
Taixing Thermal Meters Factory Co.,Ltd.
Taixing City, China

is found to comply with
DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems

Application :

Product approved by this certificate is accepted for installation on all vessels classed by DNV GL.
Max. working press.: 0.6 [bar]/0.060 [MPa]

Issued at **Hamburg** on **2020-05-18**
This Certificate is valid until **2025-05-17**.
DNV GL local station: **Jiangyin NB & CMC**

for **DNV GL**

Approval Engineer: **Ana Cristina Do Carmo Insfran**

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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.

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Job Id: **262.1-033810-1**
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Product description

The dial level gauge allows to indicate the level of liquids in tanks. The main components of the dial level gauge are flange connector, transmitter chamber with a diaphragm, capillary connection pipe (jacketed), dial indicator

Application/Limitation

The dial level gauge is approved for use on tanks arranged above double bottom. The installation has to be carried out on tanks sides. However, installation of fuel oil gauges fitted directly on the side of the tanks are not permitted. An isolating shut-off valve has to be installed between tank wall and transmission chamber of the gauge.
The dial level gauge is not to be used on fuel and oil tanks on passenger ships.

Note: The selection of the level gauges for the corresponding application and the right installation are to be in accordance with the instructions of the manufacture.

Media:
Water, fuel oil, lubricating oil and other fluids with a flash point above 60°C.

Temperature range:
Transmission chamber(transmitter): -10°C to +120°C
Gauge (indicator): -40°C to +60°C

Maximal working pressure:
0.6 [bar]/0.060 [MPa]

Materials:
Tube and flange connector: SUS 304 acc. to JIS G4304
Diaphragm: SUS 316 acc. to JIS G4303

Measuring range:
300 up to 5000 [mm]

Type Approval documentation

Marking of product

For traceability to this type approval, each level gauge is to be marked with:
Manufacturer's name, Model, Temperature Range, Pressure Range, Accuracy, Voltage, Number.

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 Type Approval are complied with. Refer to DNVGL-CP-0338, Sec.4.