



TYPE APPROVAL CERTIFICATE

Certificate no.:
TAP00001UJ
Revision No:
1

This is to certify:

that the Magnetic Liquid Level Indicator

with type designation(s)
Seetru Seemag (G35)

issued to
SEETRU LTD.
BRISTOL, United Kingdom

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

Application:

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

Design: See Certificate

Issued at **Høvik** on **2024-02-29**

for **DNV**

This Certificate is valid until **2028-12-31**.
DNV local unit: **UK & Ireland CMC & VMC**

Approval Engineer: **Mohsen Mohebbi**

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

Direct reading magnetic gauge with liquid level indicated by a high visibility ring might be provided with Remote reading transmitter, High/low level alarm and/or computer interface, Trace heating, Level switching.

Material:

Item	Material	Item	Material
Flange:	SS316	Drain Plug:	SS316
Level Indicator:	Nylon	Collar	SS316
Float:	SS316	By-Pass Tube	SS316
Follower:	Nylon	Guard Tube:	Polycarbonate

Application/Limitation

Pressure: 18 barg
 Maximum liquid temperature: 180°C

The gauge can be used on all ships in engine rooms and machinery space environment on tanks containing fluids with flashpoint above 60°C.

Pressure transmitter fitted to gauge is to carry a DNV type approval, the transmitter is not to be used on ships with class notation "Passenger Ships".

Each level gauge fitted to a tank containing flammable liquids is to be equipped with self closing valves at the connection points to the tank and shall be protected against mechanical damage.

In passenger ships, no oil level indicating devices requiring penetrations below the top of the tank are permitted.

Stainless steel grade 316 is not seawater resistant materials and products covered by this certificate shall not be used in seawater applications.

Product certificate is not required for the DNV classed vessels.

Type Approval documentation

The approval is based on the following documentation:

Drawings:

- G353218 1/5 issue 5 "Magnetic Liquid Level Indicator Gauge" Marine Version, dated 05.12.2012.
- G353218 2/5 issue 4 "Magnetic Liquid Level Indicator Gauge with remote reading", dated 05.12.12.
- G353218 3/5 issue 6 "Magnetic Liquid Level Indicator Gauge with trace heating", dated 08.11.2018.
- G353218 4/5 issue 4 "Magnetic Liquid Level Indicator Gauge with level switching", dated 05.12.2012.
- G353218 5/5 issue 1 "Magnetic Liquid Level Indicator Alternative collars", dated 05.12.12
- Manufacturer's leaflet "Liquid Level Gauges Magnetic Liquid Level Indicator
- Seemag ® Model Robust construction with all-round clear viewing"

Production Test

Hydraulic/Leakage test to 1.5 times the maximum allowable pressure to be performed accordingly.

Marking of product

For traceability to this type approval the product is to be marked with:

- Manufacturer's name or trade mark
- Type designation

Periodical assessment

For retention of the Type Approval, a DNV 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 DNV-CP-0338.