



Certificate No:
TAA0000313

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Measurement Converter

with type designation(s)
VEGAMET 341, VEGAMET 342

Issued to

VEGA Grieshaber KG
Schiltach, Germany

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

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

Temperature	B
Humidity	B
Vibration	A
EMC	B
Enclosure	A

Issued at **Hamburg** on **2021-08-24**

This Certificate is valid until **2026-08-23**.

for **DNV**

DNV local station: **Augsburg**

Approval Engineer: **Dariusz Lesniewski**

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Joannis Papanuskas
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.



Form code: TA 251

Revision: 2021-03

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Product description

Built-in controller and display instrument for level sensors VEGAMET 341 / 342

Main technical data:

Operating voltage: AC 100...230V 50/60 Hz, DC 24...65V

Sensor input (active/passive): 1 x 4...20mA (VEGAMET 341)

2 x 4...20mA (VEGAMET 342)

Current output: 1 x 0/4...20mA (VEGAMET 341)

2 x 0/4...20mA (VEGAMET 342)

Relay output: 3 x operating relay, one can be configured as fail-to-safe

Integrated LC-display for data visualization

Status indication LEDs: operation, relay, fault-signal

Turn/push button for menu adjustment

Front panel mounting

Degree of protection: IP40 (Front), IP20 (Instrument)

HW Version: 1-0-0

SW Version: 1.12.0

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Product certificate

If specified in the Rules, ref. Pt.4 Ch.9 Sec.1, the control and monitoring system in which the above listed hardware is used shall be delivered with a product certificate. For each such delivery the certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program. After certification the clause for software control will be put into force.

Type Approval documentation

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, December 2019.

Marking of product

Manufacturer name: VEGA Grieshaber KG
Model name: VEGAMET 341 or VEGAMET 342
Serial number: s/n 12345678 (as example)
Power supply ratings: 24...65V DC, 100...230V 50/60Hz AC
4W, 13VA or 5W, 15VA
in 4...20mA
out 4...20mA
relay contacts 250V AC, 1A, 250VA

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

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