

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Level Transmitter**with type designation(s)
VEGACAL 62, 63, 64, 65, 66

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 GL.****Location classes:**

Temperature	B
Humidity	B
Vibration	A
EMC	B
Enclosure	C, D

Issued at **Hamburg** on **2019-08-19**This Certificate is valid until **2024-08-18**.DNV GL local station: **Augsburg**for **DNV GL**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.



Product description

Capacitive Sensor for Continuous Level Measurement, series VEGACAL
Applicable for level measuring in liquids (62, 63, 64, 66) or in solids (62, 65, 66)
Level measuring for conductive liquids, for non-conductive liquids or for solids

Sensing element: rod, rode-tube or cable - fully or partly insulated
Rod length: up to 6m with fixing after each 0.5 meter
Rode-tube: tube length - up to 6m with fixing after each 1 meter
 rode length - up to 6m with fixing after each 0.5 meter
Cable length: up to 33m
Process fitting: thread or flange
Process pressure: max. 64bar
Housing: Plastic, stainless steel or aluminium
Electronics: 2-wire, 4..20mA/HART, Profibus PA
Power supply: 230V AC
Degree of protection: IP 66/67/68
Ex-proof protection: according to the manufacturer's specification

Type designation/variants VEGACAL 62, 63, 64, 65, 66:

CL62.aM **b c d e f g**
CL63.aM **b c d e f g**
CL64.aM **b c d e f g**
CL65.aM **b c d e f g**
CL66.aM **b c d e f g**

a = Approval

b = Version / Temperature range

J with concentric tube 316L / -50...200 °C
for CL63

E PE-Insulation / -40...80 °C

F PTFE-Insulation / -50...150 °C

G PTFE-Insulation / -50...200 °C

H PE-Insulation and concentric tube 316L / -40...80 °C

I PTFE-Insulation and concentric tube 316L / -40...150 °C

J PTFE-Insulation and concentric tube 316L / -40...200 °C

for CL64

R FEP-Insulation / -50...150 °C

for CL65

K cable Ø 6 mm / 316L with gravity weight / -50...150 °C

U cable Ø 6 mm / 316L with screening tube and gravity weight / -50...150 °C

L cable Ø 6 mm / 316L with gravity weight / -50...200 °C

V cable Ø 6 mm / 316L with screening tube and gravity weight / -50...200 °C

for CL66

N PTFE-Insulated steel cable Ø 8 mm / with gravity weight / -50...150 °C

c = Process connection thread, others

d = Electronics

H 4...20mA /HART

X for connection to a signal conditioning instrument

P Profibus PA (only in connection with metal housing)

e = Housing / Protection

K Plastic / IP66, IP67

A Aluminium / IP66, IP68 (0.2bar)

D Aluminium double chamber / IP66, IP68 (0.2bar)

V Stainless steel / IP66, IP68 (0.2bar)

B External plastic housing with cable outlet / IP66, IP67

W Stainless steel double chamber / IP66, IP68 (0.2bar)

f = Cable entry / Cable gland / Plug connection

- B** M20x1,5 / without / plug connector M12x1, assignment B
 - M** M20x1.5 / without / with
 - N** 1/2 NPT / without / with
 - C** M20x1.5 / without / plug connector M12x1, assignment A
 - I** M20x1.5 / acc. DIN 43650
 - H** M20x1.5 / Harting HAN 8D straight
 - W** M20x1.5 / Harting HAN 8D bent
 - F** M20x1.5 / without plug connector Harting HAN 7D straight
 - G** M20x1.5 / without plug connector Harting HAN 7D bent
 - Z** 1/2" NPT / 7/8" NPT
- g** = Display and adjustment module PLICSCOM (DNVGL certificate no. TAA000019V)
- A** mounted
 - F** without, lid with inspection window
 - K** mounted with, with bluetooth, magnetic pen operation
 - L** laterally mounted with bluetooth, magnetic pen operation

Place of production

VEGA Grieshaber KG
Am Hohenstein 113
77761 Schiltach, GERMANY

VEGA Americas, Inc.
4241 Allendorf Drive
Cincinnati, OH 45209, USA

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, 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 GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Type Approval documentation

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016.

Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number
- power supply ratings

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



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- 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