DNV·GL

Certificate No:
TAA000025G

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Pressure Transmitter

with type designation(s)
VEGADIF 85

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	**D**
Humidity	**B**
Vibration	**A**
EMC	**B**
Enclosure	**C / D (depending on the order code 'k')**

Issued at **Hamburg** on **2019-01-21**
This Certificate is valid until **2024-01-20**.
DNV GL local station: **Augsburg**

for **DNV GL**

Approval Engineer: **Dariusz Lesniewski**

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.

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Product description

Differential pressure transmitter with metallic pressure diaphragm

VEGADIF 85
DF85 a b c d e f g h i j k l m n

a	**Scope**: A, I, C or others
b	**Approval**: M, N, O, Q
c	**Process fitting / Material / Lateral ventilation** D NPT1/4-18, IEC61518, UNF7/16-20 / 316L / without E NPT1/4-18, IEC61518, UNF7/16-20 / 316L / with F NPT1/4-18, IEC61518, UNF7/16-20 / Alloy C276 (2.4819) / without H NPT1/4-18, IEC61518, UNF7/16-20 / Alloy C276 (2.4819) / with 2 NPT1/4-18, M10 / 316L / without 4 NPT1/4-18, IEC61518, UNF7/16-20 upright / 316L / without 5 NPT1/4-18, IEC61518, UNF7/16-20 upright / 316L / with W prepared for chemical seal assembling / 316L / with
d	**Diaphragm / Material** 1 316L 2 Alloy C276 (2.4819)
e	**Sealing Material** A FKM (ERIKS 514531) H Copper sealing Z EPDM (ERIKS 55914)
f	**Measuring Range / PN: 1-digit alphanumeric code** for pressure range: 10mbar (1kPa) / 40bar (4000kPa) up to 16bar (1600kPa) / 400bar (40000kPa) resp. 0,15psi / 600psi up to 240psi / 5800psi
g	**Accuracy class: M** 0.065%, **S** 0.10%
h	**Electronics** Z Two-wire 4...20mA H Two-wire 4...20mA/HART® A Two-wire 4...20mA/HART® with SIL – Qualification P Two-wire Profibus PA
i	**Supplementary Electronics**: **X** without **, Z** additional current output
j	**Housing** A Aluminum D Aluminum double chamber, V Stainless steel (precision casting) 316L W Stainless steel double chamber (precision casting)
k	**Housing Version/Protection**: I, D*, N*, M*, A, S (*Enclosure location class: D)
l	**Cable Entry/Connection:** M, S, T, K, U, V, L, O, D, 6, N, J, 8, P, C, B, I, F, G, H, W, 1, 2, Q, Z

m	**Indicating and adjustment module plicscom:** X without display/adjustment module A with display/adjustment module PLICSCOM F without display/adjustment module; lid with inspection window B laterally mounted; with display/adjustment module PLICSCOM K with display/adjustment module PLICSCOM; with Bluetooth; magnetic pen operation L laterally mounted; with display/adjustment module PLICSCOM; with Bluetooth; magnetic pen operation
n	**Certificate**: **M** yes (e.g. FDA; EN 10204-3.1; NACE), **X** no

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.

Application/Limitation
For the PLICSCOM-module reference is made to the type approval certificate no. TAA000019V.

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to DNV GL Rules and Ex-Certification / Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

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
- 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