

Ship approvals and installation instructions

PLICSCOM

DNV - TAA000019V

RINA - ELE098518XG

ClassNK - TA18214M

LR - 19/20054



Document ID: 57493



VEGA



TYPE APPROVAL CERTIFICATE

Certificate No:
TAA000019V
Revision No:
2

This is to certify:

That the display and adjustment module

with type designation(s)

PLICSCOM.X B/W

PLICSCOM(*)X B/W

Issued to

VEGA Grieshaber KG

Schiltach, Germany

is found to comply with

DNV 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.

Location classes:

Temperature **D**

Humidity **B**

Vibration **A**

EMC **B**

Enclosure **A**

Issued at **Hamburg** on **2022-05-04**

This Certificate is valid until **2027-07-11**.

DNV local station: **Augsburg**

for DNV

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.

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

www.dnv.com

Page 1 of 2



Job Id: 262.1-024897-2
 Certificate No: TAA000019V
 Revision No: 2

Product description

Display and adjustment module PLICSCOM.X B/W or PLICSCOM(*)X B/W

- B with lighting
- W with Bluetooth, magnetic pen operation
- (*) 1 or 2-digit alphanumeric for specific customers

Place of manufacture

VEGA Grieshaber KG
 Am Hohenstein 113
 77761 Schiltach
 GERMANY

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

Application/Limitation

Use for measured value indication, adjustment and diagnostic for instruments of VEGA plics® family, mounted in the respective sensor housing.

Radio licenses for wireless Bluetooth communication for use in countries of EU, EFTA, USA and Canada.

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.

Type Approval documentation

Tests carried out

Applicable tests according to class guideline DNV-CG-0339, August 2021

Marking of product

The products to be marked with:

Manufacturer name	VEGA
Model name	PLICSCOM.x B/W
Serial number	xxxxxxxx
Hardware version	HW 1.12.0
FCC/IC approvals	FCC ID: P14BL600 IC: 1931B-BL600
Ex approvals	TÜV15ATEX 161127 U IECEX TUN 16.0002 U

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

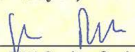


TYPE APPROVAL CERTIFICATE No. ELE098518XG

This is to certify that the product below is found to be in compliance with the applicable requirement of the RINA type approval system.

<i>Description</i>	Alarm, monitoring and control system
<i>Type</i>	PLICSCOM 3 series
<i>Applicant</i>	VEGA GRIESHABER KG AM HOHENSTEIN 113 77761 Schiltach GERMANY
<i>Manufacturer</i>	VEGA GRIESHABER KG
<i>Place of manufacture</i>	AM HOHENSTEIN 113 77761 Schiltach GERMANY
<i>Reference standards</i>	Rules for the Classification of Ships- Part C - Machinery, Systems and fire protection - Ch.3 ; Sect. 6, Tab.1

Issued in **Hamburg** on **May 15, 2018**. This Certificate is valid until **May 14, 2023**


RINA Services S.p.A.
Giuseppe Russo

This certificate consists of this page and 1 enclosure



RINA Services S.p.A.
Via Corsica, 12 - 16128 Genova
Tel +39 010 53851
Fax +39 010 5351000



TYPE APPROVAL CERTIFICATE

No. ELE098518XG

Enclosure - Page 1 of 1

PLICSCOM 3 series
Product description:

The PLICSCOM 3 series are indicating/adjustment modules consists of a display with full dot matrix as well as four keys for adjustment. The instrument is optionally equipped with Bluetooth functionality.

The pluggable display and adjustment module PLICSCOM is used for measured value indication, adjustment, and diagnostics for the following instruments of the VEGA plics ® family:

- VEGABAR series
- VEGACAL series
- VEGADIF series
- VEGADIS series
- VEGAFLEX series
- VEGAPULS series
- VEGASON series

Order code:

PLICSCOM.X B/W or PLICSCOM(*)X B/W

B - with lightning

W - with Bluetooth, magnetic pen operation

(*) 1 or 2-digit alphanumeric for specific customers

Technical data:

Power supply: - directly via the respective sensor or the external display and adjustment unit.

Hardware version: 1.1x.x

Software version: 1.1x.x

Documents:

Operating instruction: - 36433-EN-180221 dated 21.02.2018

Drawings: - GE3626-02; GE3627-02; GE3628;

52134-DE-PLICSCOM-TUN-15-ATEX-161127-U;

52136-EN-IEC-Ex-PLICSCOM-IECEX-TUN-16.0002-U;

Test reports:

Hansecontrol Zertifizierungsgesellschaft mbH: - 1701-0012401R01 dated 09.05.2017;

- 1701-0012401R02 dated 09.05.2017;

Paconsult GmbH: - 17-9023 dated 02 June 2017;

Remarks:

- The products fulfill EC-Code: 3a1/41.

Hamburg May 15, 2018



Handwritten signature

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NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA18214M

This is to certify that the undernoted product(s) has/have been approved in accordance with the requirements specified in Chapter 1, Part 7 of "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use" and the relevant Society's Rules.

This certificate is issued to

Manufacturer:	VEGA Grieshaber KG
Place of Manufacturing:	Am Hohenstein 113, 77761 Schiltach, Germany
Product description:	Display and adjustment module
Model:	PLICSCOM 3

Approval No.:	18A010
Valid until:	20 May 2023

This certificate is subject to the conditions specified in the attached sheet(s).

Issued at Tokyo on 21 May 2018.



T. Shimada
General Manager
Machinery Department

Note: The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

(NIPPON KAIJI KYOKAI

Attached sheet -1/2 to the Certificate No. TA18214M

Specification & documents:

1. Product description:

Display and adjustment module PLICSCOM.X B/W or PLICSCOM(*).X B/W

B: with lighting

W: with Bluetooth, magnetic pen operation

(*): 1 or 2-digit alphanumeric for specific customers

2. Particulars:

Power supply: 24VDC

Hardware version: HW 1.12.0

Ex approvals: TÜV15ATEX 161127 U

IECEx TUN 16.0002 U

3. Documentation and Test Reports:

Drawings: SB1503-1-02-0, GE3627-02, GE3626-02, SB1497-1-00-0, GE3628

Operating Instructions: 36433-EN-180221

Test Report:

Paconsult test report No. 17-9023 (02 June 2017)

Paconsult test report No. 08-2268-Revision 1 (25 February 2009)

Hansecontrol test report No. 1701-0012401R01 (09.05.2017)

Hansecontrol test report No. 1701-0012401R02 (09.05.2017)

VEGA test report (04.04.2017)

- To be continued -

NIPPON KAIJI KYOKAI

Attached sheet -2/2 to the Certificate No. TA18214M

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		X
Power supply fluctuation test	Electric	X
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		X
Pressure test (Pneumatic and Hydraulic)		--
Dry heat test (Temperature 70°C × 16 hours)		X
Damp heat test		X
Vibration test (Acceleration ±0.7g × 1.5 hours)		X
Inclination test		--
Cold test (Temperature -40°C × 16 hours)		X
Salt mist test Note (1)		X
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test		X
Conducted low frequency immunity test		X
Conducted high frequency immunity test		X
Burst / Fast transient immunity test		X
Surge immunity test		X
Radiated emission test		X
Conducted emission test		X
Flame retardant test		--

Note (1) The salt mist test is carried out with a level sensor "VEGAPULS 62".

2. Approval condition:

Nil

- The End -





Lloyd's
Register

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER	VEGA Grieshaber KG Am Hohenstein 113 77761 Schiltach Germany
DESCRIPTION	Indication and operating module PLICSCOM
TYPE	PLICSCOM.X B/W PLICSCOM(*)X B/W B with lightning W with Bluetooth, magnetic pen operation (*) 1 or 2-digit alphanumeric for specific customers
APPLICATION	Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 – 2018.
ADDITIONAL TESTS	Low temperature (-40°C / 16 hrs)
STANDARD	Manufacturer's specification
RATINGS	Power supply via suitable VEGA device
OTHER CONDITIONS	Ratings for application in hazardous areas are to be obtained from the applicable Ex Certificates.

Certificate No.	19/20054
Issue Date	30 August 2019
Expiry Date	29 August 2024



Sheet	1 of 2
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Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

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PLACES OF PRODUCTION VEGA Grieshaber KG
Am Hohenstein 113
77761 Schiltach
Germany

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

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HTS/ETS 38698-19 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 19/20054
Issue Date 30 August 2019
Expiry Date 29 August 2024

Sheet 2 of 2



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Hamburg Technical Support Office
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57493-EN-220516



Design Appraisal Document

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20457 Hamburg
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E-mail: hamburg-technical-support@lr.org

Date
30 August 2019

Please quote this reference number on all future communications
HPC1962001/38698-19/TW/EO

**THE LLOYD'S REGISTER'S TYPE APPROVAL SYSTEM, 2017
ISSUED TO: VEGA GRIESHABER KG
FOR: INDICATION AND OPERATING MODULE PLICSCOM
TYPE APPROVAL CERTIFICATE NO. 19/20054**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register's Type Approval System Procedure TA14 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Unnumbered	Application for Type Approval	26.11.2018
HPC1962001/37875-19/TW/KW	Request for Marine Services – Type Approval	25.02.2019
52134-DE-160418	Sicherheitshinweise Anzeige- und Bedienmodul PLICSCOM	18.04.2016
52136-EN-160418	Safety instructions Display and adjustment module PLICSCOM	18.04.2016

TEST REPORTS

IECEx TUN 16.0002U	IECEx Certificate of Conformity	15.04.2016
		Issue No.: 0
TÜV 15 ATEX 161127 U	TÜV Nord Certificate of Conformity	18.03.2016
DE/TUN/ExTR16.0015/00	IECEx Test Report IEC 60079-0	11.03.2016
DE/TUN/ExTR16.0015/00	IECEx Test Report IEC 60079-11	11.03.2016
DE/TUN/ExTR16.0015/00	IECEx Test Report Cover	11.03.2016
17-9023	paconsult test report	02.06.2017
1701-0012401R01	hansecontrol test report	09.05.2017
1701-0012401R02	hansecontrol test report	09.05.2017

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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Document no: HTS/ETS 38698-19
Issue number 0
Page 2 of 2

Date
30 August 2019

Please quote this reference number on all future communications
HPC1962001/38698-19/TW/EO

Appendix

DRAWINGS

GE3618	PLICSCOM 3	19.09.2016
		Revision 01
GE3626-02	Bestückungsplan GE3626-02	12.09.2016
GE3627-02	Layout PLICSCOM 3A	12.09.2016
GE3628	Bestückungsplan + Layout Hall-Sensor-Bedienfeld	14.12.2015
SB1497-1-00-0	Hall-Sensor-Bedienfeld	29.07.2015
SB1503-1-02-0	PLICSCOM3 (2 pages)	30.08.2016



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Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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Part 3

Transmitters/Transducers

Producer/Licence No.	Item Description	Technical Details	Category/Additional Tests	Remarks	Cert. No.
VEGA Grieshaber KG Am Hohenstein 113 77761 Schillach Germany	Indication and operating module PLICSCOM Types PLICSCOM(X)B/W PLICSCOM(P)X)B/W B with lightning W with Busstopch, magnetic pen operation (*) 1 or 2-digit alphanumeric for specific customers	Power supply via suitable VEGA device	ENV1, ENV2, ENV3 (2018) Low temperature (-40°C / 16 hrs)	Expires on: 29 August 2024 Ratings for application in hazardous areas are to be obtained from the applicable Ex Certificates.	19/20054



Printing date:

VEGA

All statements concerning scope of delivery, application, practical use and operating conditions of the sensors and processing systems correspond to the information available at the time of printing.

Subject to change without prior notice

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57493-EN-220516

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