

Ship approvals and installation instructions

VEGAMET 624, 625

VEGASCAN 693

DNV-GL - TAA00002T6

LR - LR2003313TA

ABS - 19-HG1876131-PDA

CCS - HB17T00024_02

RINA - ELE218819XG

RMROS - 18.40034.250



Document ID: 30573



VEGA

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Measurement Converter

with type designation(s)
VEGAMET 624, 625, VEGASCAN 693

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	A

Issued at **Hamburg** on **2020-06-05**

This Certificate is valid until **2025-06-04**.

DNV GL local station: **Augsburg**

Approval Engineer: **Dariusz Lesniewski**



for **DNV GL**
Digitally Signed By:
Papanuskas, Joannis

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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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: 2020-02

www.dnvgl.com

Page 1 of 3

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Job Id: **262.1-033352-1**
Certificate No: **TAA00002T6**

Product description

Signal conditioning instrument, series VEGAMET 624 Type MET624...
VEGAMET 625 Type MET625...
VEGASCAN 693 Type SCAN693...

Main characteristics

Power supply	24V DC rated (range 20...250V DC)
Signal inputs	MET624: 1x 4...20mA / HART, 2-wire, sensor power supply MET625: 2x HART, 2-wire, sensor power supply SCAN693: 15x (Ex-version 5x) HART, 2-wire, sensor power supply (shielded cable for HART communication to be used)
Outputs	1x signal fault relay 3x current output 3x operating relay (for MET624/625 only)
Communication interface (optional)	RS232- or Ethernet-Interface
Graphic LC-display	50x25mm with background lighting
Indication LEDs	2x green, 3x yellow, 1x red
Adjustment	by 4x keys in front for menu adjustment by PACTware with VEGA-DTM
Mounting	wall mounting with adapter plate
Degree of protection	IP30 (instrument) / IP20 (plug-in socket)
Software version	V1.xx
Ex-proof protection	as the certificate TÜV 03 ATEX 2269

Application/Limitation

EMC in the range 2 GHz to 6 GHz according to DNVGL-CG-0339, December 2019 has not been verified.
EMC up to 6 GHz must additionally be documented for installation on ships contracted for construction on or after 2022-01-01.

Type Approval documentation

Test reports: paconsult 421-04, 0779-05A
Test reports: EMV Services 04/4080-11; EMV Services 04/4080-10
Test reports: VEGA MET624-1.9-F2-1; VEGA MET624-1.3-F2-1,-2
Test reports: HanseControl 08-L-00709(11)-01, 05-L-00954-01
Certificate: TÜV 03 ATEX 2269
Software documentation
Technical drawings; Circuit diagrams; Product Information 29251-EN-050125
Type approval assessment report issued at Augsburg on 2020-05-26

Tests carried out

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

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:



Job Id: **262.1-033352-1**
 Certificate No: **TAA00002T6**

- 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



Page 1 of 2
Certificate No: LR20033137A
Issue Date: 06/05/2020
Expiry Date: 16/03/2025

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.

Manufacturer	Vega Grieshaber KG
Address	Am Hohenstein 113, Schiltach, 77761, Germany
Type	Transmitters/Transducers
Description	Signal Conditioning Instrument MET 624. a M b MET 625. a M b SCAN 693. a M b a = X without Ex approval C ATEX II (1) G [Ex ia] II C, ATEX II b = R RS 232 - connection E Ethernet - connection X without (for VEGAMET 624/625)
Trade Name	VEGAMET 624/625 and VEGASCAN 693
Application	Marine applications for use in environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 – 2002.

Thorsten Wolff
Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS,
United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

LR20033137A

30573-EN-200616



Page 2 of 2
 Certificate No: LR2003313TA
 Issue Date: 06/05/2020
 Expiry Date: 16/03/2025

Type Approval Certificate

Specified Standard	Manufacturer's specification
Ratings	<p>Power supply: 24 VDC</p> <p>Signal input: MET 624: 1x 4...20mA/HART, 2-wire, sensor power supply MET 625: 2x HART, 2-wire, sensor power supply SCAN 693: 15x (Ex-version 5x) HART, 2-wire, sensor power supply</p> <p>Output: 1x signal fault relay, 3x current output, 3x operating relay (for MET 624/625 only)</p>
Additional Tests	Low temperature (-25°C/16 hours)
Other Conditions	<p>Ratings for application in hazardous areas are to be obtained from certificate No. TÜV 03ATEX 2269.</p> <p>Shielded cables are to be used for HART communication.</p> <p>Equipment has to comply with IACS E10 Rev.7 when intended to be installed on ships contracted for construction on or after 1 January 2022.</p>

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document No. HTS/ETS 39924-20/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

71 Fenchurch Street, London, EC3M 4BS,
 United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Page 2 of 2



Page 1 of 2
 Certificate No: LR20033137A
 Issue Date: 06.05.2020
 Expiry Date: 16.03.2025
 Reference: HTS/ETS 39924-20/TW

LLOYD'S REGISTER TYPE APPROVAL – DESIGN APPRAISAL DOCUMENT
ISSUED BY: HAMBURG TECHNICAL SUPPORT OFFICE (HPC1562054)
ISSUED TO: VEGA GRIESHABER KG
FOR: SIGNAL CONDITIONING INSTRUMENT
TYPES VEGAMET 624/625 AND VEGASCAN 693

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 03 (July 2017) and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Unnumbered	Type Approval Application Checklist	30.03.2020
HPC1562054/39915-20/ TW/KW	Request for Marine Services – Type Approval	06.05.2020
HPC1862096	Production Quality Assessment Form	11.03.2019
HTS/ETS 31560-15 05/20019 (E3)	Marine Design Appraisal Document for Certificate No. 05/20019 (E3)	23.04.2015
28969	LR Type Approval Certificate	23.04.2015
28970	Operating Instructions VEGAMET 624	04.09.2017
29252	Operating Instructions VEGAMET 625	04.09.2017
SW0052	Operating Instructions VEGASCAN 693	04.09.2017
SW0054	Overview of software versions VEGAMET 624	06/2016
	Overview of software versions VEGASCAN 693	06/2016



Thorsten Wolff
 Senior Specialist
 Electrotechnical Systems
 Hamburg Technical Support Office
 Lloyd's Register EMEA
 T +49 (0)40 34970010-267
 E thorsten.wolff@lr.org

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.

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



Page 2 of 2
 Certificate No: LR2003313TA
 Issue Date: 06.05.2020
 Expiry Date: 16.03.2025
 Reference: HTS/ETS 39924-20/TW

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 Lloyd's Register Type Approval System Procedure.

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.





CERTIFICATE NUMBER 19-HG1876131-PDA
EFFECTIVE DATE 15-Aug-2019
EXPIRATION DATE 14-Aug-2024
ABS TECHNICAL OFFICE
Hamburg Engineering Department

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

VEGA GRIESHABER KG

located at

AM HOHENSTEIN 113, D-77761 SCHILTACH, GERMANY

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Level Gauge, Transmitter for Level Gauging Unit

Model VEGAMET MET 624, MET 625
VEGASCAN SCAN 693

This Product Design Assessment (PDA) Certificate remains valid until 14-Aug-2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping

Efstratios Maliatsos
Engineer / Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

Certificate of Product Design Assessment Rev.3

Page 1 of 1

VEGA GRIESHABER KG
 ZERTIFIKATSWESSEN
 AM HOHENSTEIN 113
 D-77761 SCHILTACH
 Germany
 Telephone: 49-7-836-50-0
 Fax: 49-7-836-50-8278
 Email: a.reinberger@vega.com
 Web: www.vega.com

Tier: 3 - Type Approved, unit certification not required

Product: Level Gauge, Transmitter for Level Gauging Unit
Model: VEGAMET MET 624, MET 625
 VEGASCAN SCAN 693

Intended Service:
 Signal conditioning for level measurement units for liquids and other substances on ACC, ACCU and ABCU classed vessels.

Description:
 Graphic LC-Display with background lighting, indication LEDs and adjustment keys.

Rating:
 See attached document.

Service Restriction:
 1. Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
 2. For certified-safe type versions:
 - Intrinsically safe electric systems for power supply/output wiring shielded conductors are to be utilized.
 - ATEX certified equipment is not to be installed in hazardous areas on U.S. vessels unless it can be proved to have been tested to the applicable IEC 60079 series standards by an independent laboratory accepted by the U.S. coast Guard. USCG notice 01-12 (February 7, 2012)

Comments:
 - Each particular application and installation is to be specifically approved.
 - The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:
 Drawing No. ABS Declaration of Conformity 14-1246304_PDA, Declaration of Conformity, Revision: -, Pages: -
 Drawing No. SB1215, Electric Diagram VEGASCAN 693, Revision: -, Pages: -
 Drawing No. SB1242, Electric Diagram VEGASCAN 693, Revision: -, Pages: -
 Drawing No. 29252-EN-081212 Operating Instructions/Manual - VEGASCAN 693, Revision: -, Pages: -
 Drawing No. 33584, Certificate TUV 03 ATEX 2269, Revision: -, Pages: -
 Drawing No. VEGASCAN 693, Copies of other Class Societies Certificates, Revision: -, Pages: -
 Drawing No. SB1214, Electric Diagram VEGASCAN 693, Revision: -, Pages: -
 Drawing No. EGAMET 624_625_VEGASCAN 693, Model Breakdown, Revision: -, Pages: -
 Drawing No. 29651, IECEx Certificate No. TUN 04.0013, Revision: -, Pages: -
 Drawing No. 34104, Safety Instructions VEGAMET 624, 625.KF, VEGASCAN 693.KF, Revision: -, Pages: -
 Drawing No. SB1211, Electric Diagram VEGASCAN 693, Revision: -, Pages: -
 Drawing No. 08-L-00711-01R, Test Reports - EMC(EMV), Hansecontrol, Revision: -, Pages: -(Testing Laboratory: Hansecontrol, Sample No:08-HW-00730-01, Date: 23.05.2008)
 Drawing No. 08-L-00709-01R, Test Reports - EMC(EMV), Hansecontrol, Revision: -, Pages: -(Testing Laboratory: Hansecontrol, Sample No:08-HW-00729-01, Date: 23.05.2008)
 Drawing No. 08-2091-BE, Test Reports - EMC(EMV), Test Reports - Climatic Strains, VEGASCAN 693 (VEGA Grieshaber KG), Revision: -, Pages: -(Testing Laboratory: Paconsult, Sample No:08-2091, Date: 16 July 2008)

Terms of Validity:
 This Product Design Assessment (PDA) Certificate 19-HG1876131-PDA, dated 15/Aug/2019 remains valid until 14/Aug/2024 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence

VEGA GRIESHABER KG
 ZERTIFIKATSWESSEN
 AM HOHENSTEIN 113
 D-77761 SCHILTACH
 Germany
 Telephone: 49-7-836-50-0
 Fax: 49-7-836-50-8278
 Email: a.reinberger@vega.com
 Web: www.vega.com

Tier: 3 - Type Approved, unit certification not required

or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:

The Rules applicable to this assessment are:
 2019 Steel Vessel Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-9-8/Table 1
 2019 Marine Vessel Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-9-8/Table 1

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA



中国船级社
CHINA CLASSIFICATION SOCIETY

证书格式号/Form: T01.02-
QD000148

型式认可证书

CERTIFICATE OF TYPE APPROVAL

证书编号/Certificate No. HB17100024_02

兹证明本证书所述制造厂生产的下列产品能够满足下面列明认可标准的要求。

This is to certify that the following products produced by the manufacturer stated in the certificate can meet the requirements of the approval standards listed below.

认可产品/ Product Approved

信号指示、调整装置

SIGNAL CONDITIONING INSTRUMENT

压力变送器

PRESSURE TRANSDUCER

制造厂/Manufacturer

VEGA Grieshaber KG

Am Hohenstein 113, D-77761 Schiltach, Germany

附加标志/Notations

无/Nil.

认可标准/Approval Standard

1. 中国船级社《钢质海船入级规范》(2015)及其修改通报第4篇第1章

Chapter 1, Part Four of China Classification Society Rules for the Classification of Sea-going Steel Ships 2015 and its Amendments

2. 中国船级社《钢质海船入级规范》(2015)及其修改通报第7篇第2章

Chapter 2, Part Seven of China Classification Society Rules for the Classification of Sea-going Steel Ships 2015 and its Amendments

证书有效期至/ This Certificate is valid until

2021年7月16日 / Jul. 16, 2021

发证机构

中国船级社汉堡分社

签发日期

2017年9月12日

Issued by

CCS Hamburg Branch

Date

Sep. 12, 2017

本证书依据中国船级社《钢质海船入级规范》及其修改通报签发。关于证书的所有规定见本证书背面所附说明。当本证书包含多个附件时，所有附件作为一个整体，必须同时使用。每一页证书均由本社盖章方为有效。证书复印件无效。任何单位和个人不得复制或篡改本证书的部分内容。本证书不表示本社对产品品质的检验，有关各方对证书的真实性有任何疑问时，可向本社检验机构咨询。
This Certificate is issued pursuant to the Rules for Classification of Sea-going Steel Ships and related amendments of the Society. Refer to the back of the certificate for detailed requirements of the certificate. When the certificate contains of more than one page, all pages of the certificate are taken as a whole and are used simultaneously. No certificate page is valid without bearing the stamp of the Society and no copied form of the certificate is regarded as valid. Any part of the certificate is not to be extracted or abridged by any unit or individual in any form. This approval certificate does not constitute the inspection of the Society about the quality of the unit/batch product. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its office.

CCS
中国船级社



HB83862059

Nº 16671806

中国船级社总部/CCS Headquarters 北京市东直门南大街9号船检大厦

北京 100007 电话/Tel: +86 (10) 58112200 传真/Fax: +86 (10) 58112811

US: New York, 9 Broad Street, New York, NY 10007, China

本地检验机构/US Local Office: 中国船级社汉堡分社

CCS Hamburg Branch

电话/Tel: 0049-40-3000850 传真/Fax: 0049-40-30008018

第1页共4页 / Page 1 of 4

证书编号/Certificate No. HB17T00024_02

产品明细/ Product Description

压力变送器/PRESSURE TRANSDUCER

产品型号/Type

; Signal conditioning instrument

VEGA MET624

VEGA MET625

VEGA SCAN693

额定电压/Working Voltage

; DC 24(range: DC 20...250) V

外壳防护等级/Degree of Protection of Enclosure

; IP30(instrument),
IP20(plug-in socket)**批准的图纸和设计计算书/ Approved Drawings and Design Calculations**

图纸批准号/ Drawings Approval No. : HB17A00018

产品认可试验报告/ Approval Test Report

试验报告编号/Test Report No.	:	MET624-1.3-F2-1
试验报告日期/Test Report Date	:	2003-10-22
试验单位/ Laboratory	:	VEGA Grieshaber KG
试验单位地址/ Test Address	:	Am Hohenstein 113, D-77761 Schiltach, Germany
试验报告编号/Test Report No.	:	MET624-1.3-F2-2
试验报告日期/Test Report Date	:	2003-10-22
试验单位/ Laboratory	:	VEGA Grieshaber KG
试验单位地址/ Test Address	:	Am Hohenstein 113, D-77761 Schiltach, Germany
试验报告编号/Test Report No.	:	MET624-1.9-F2-1
试验报告日期/Test Report Date	:	2003-11-13
试验单位/ Laboratory	:	VEGA Grieshaber KG
试验单位地址/ Test Address	:	Am Hohenstein 113, D-77761 Schiltach, Germany
试验报告编号/Test Report No.	:	04/4080-10
试验报告日期/Test Report Date	:	2004-09-27
试验单位/ Laboratory	:	EMV Services GmbH _Co. KG
试验单位地址/ Test Address	:	Harburger Schlossstrasse 6-12, D-21079 Hamburg, Germany
试验报告编号/Test Report No.	:	04/4080-11
试验报告日期/Test Report Date	:	2004-09-09
试验单位/ Laboratory	:	EMV Services GmbH _Co. KG
试验单位地址/ Test Address	:	Harburger Schlossstrasse 6-12, D-21079 Hamburg, Germany
试验报告编号/Test Report No.	:	421-04
试验报告日期/Test Report Date	:	2004-11-01
试验单位/ Laboratory	:	Paconsult GmbH
试验单位地址/ Test Address	:	Ulmernau 6-10, D-22087 Hamburg, Germany
试验报告编号/Test Report No.	:	0779-05A
试验报告日期/Test Report Date	:	2005-06-29
试验单位/ Laboratory	:	Paconsult GmbH
试验单位地址/ Test Address	:	Ulmernau 6-10, D-22087 Hamburg, Germany
试验报告编号/Test Report No.	:	05-L-00954-01
试验报告日期/Test Report Date	:	2005-07-13
试验单位/ Laboratory	:	Pruefinstitut HANSECONTROL GmbH
试验单位地址/ Test Address	:	Bannwarthstr. 5, D-22179 Hamburg, Germany
试验报告编号/Test Report No.	:	05-L-00955-01
试验报告日期/Test Report Date	:	2005-07-14

Nº 17023753

证书编号/Certificate No. HB17T00024_02

第 2 页 共 4 页 / Page 2 of 4



证书编号/Certificate No. HB17T00024_02

试验单位/ Laboratory	:	Pruefinstitut HANSECONTROL GmbH
试验单位地址/ Test Address	:	Bennwarthstr. 5, D-22179 Hamburg, Germany
试验报告编号/Test Report No.	:	08-L-00709-01
试验报告日期/Test Report Date	:	2008-07-03
试验单位/ Laboratory	:	Pruefinstitut HANSECONTROL GmbH
试验单位地址/ Test Address	:	Wandsbeker Str. 13 e-f, D-22179 Hamburg, Germany
试验报告编号/Test Report No.	:	08-L-00711-01
试验报告日期/Test Report Date	:	2008-07-04
试验单位/ Laboratory	:	Pruefinstitut HANSECONTROL GmbH
试验单位地址/ Test Address	:	Wandsbeker Str. 13 e-f, D-22179 Hamburg, Germany
试验报告编号/Test Report No.	:	08-2091
试验报告日期/Test Report Date	:	2008-07-29
试验单位/ Laboratory	:	Paconsult GmbH
试验单位地址/ Test Address	:	Ulmensau 6-10, D-22087 Hamburg, Germany

产品适用范围/ Application of the Product

船舶与海上设施/Ships and Offshore Installations

认可保持条件/ Maintenance Requirements of Approval

1. 型式认可后, 如果产品及其重要零部件的设计, 所用材料或制造方法有所改变, 且影响到产品的主要特性、特征; 或产品的性能指标有所更改, 且超过认可的范围, 则有关图纸和文件应经检验机构审批, 并在检验机构认为必要时, 经本社检验人员见证有关试验和进行检查, 其结果应能证实仍符合认可条件。
After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or property indexes of the product are changed and exceed the scope of approval, related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval conditions.
2. 工厂的质量管理体系应保持有效运行, 并且与认可时一致。如果质量管理体系发生改变, 应经原体系认证机构审核并获本社批准。
The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.
3. 认可证书有效期内, 如果出现可能导致本社取消认可的情况, 工厂应及时采取有效的纠正措施。
Within the validity of the approval certificate, if cases occur that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.
4. 在认可证书有效期内, 本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核, 以验证产品的生产是否符合经本社批准的图纸和文件。工厂应予以配合。
Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.
5. 如果属于获得型式认可B 模式证书, 且无需颁发船用产品证书/等效证明文件的情况, 证书获得者应按本社每年一次的定期审核, 定期审核日为认可证书期满之日对应的每一周年日, 检查工作可在周年日的前后三个月内进行。
If belong to the situation of the product has type approval mode B certificate, and marine product certificate/equivalent document is not necessary, those who have obtained the certificate should be subject to periodical audit every year. The periodical audit should be carried out within 3 months before and after the anniversary date which corresponds to the date of expiry of the relevant.

认可后的产品检验方式/ Method of Product Inspection after Approval

按照规范只认可不进行产品检验的产品/The product approved only in term of the rules:
认可后的产品检验由制造厂按本社批准的产品检验计划进行检验, 经检验合格后由制造厂签发合格证明, 并连同该产品的本社认可证书复印件一并交付用户, 制造厂对产品符合公约、法规、本社规范和本社认可的标准规定负责。
After approval, product inspection should be carried out by the Manufacturer in accordance with the product inspection scheme approved by the Society. Upon satisfactory inspection, and the Quality Certificate issued by the Manufacturer should be provided to the purchaser together with the copy of the approval certificate issued by the Society. The manufacturer should take responsibility for the product being in compliance with the convention, statutory regulation, the Society rules and the standard accepted by the Society.

对于原材料和零部件的检验要求/ Inspection Requirements for Materials and Components

Nº 17023754

证书编号/Certificate No. HB17T00024_02

第 3 页 共 4 页 / Page 3 of 4



CCS
中国船级社

证书编号/Certificate No. HB17T00024_02

产品如下原材料和零部件应由本社认可的制造厂生产/The following materials and components of the product should be manufactured by the factory approved by the Society:无/Nil.

产品如下原材料和零部件应经本社检验/The following materials and components of the product should be inspected by the Society:无/Nil.

产品如下原材料和零部件的制造厂清单, 经本社批准方可变更/The list of manufacturer for the following materials and components of the product should not be changed without the Society's approval:无/Nil.

责任声明/Statement of Responsibility

本社的认可不影响、替代与本社授权或检验无关的各方对上述工厂的认可和发证, 并且不对与本社授权或检验无关的各方负责, 不承担其未经应允而承认、接受本社认可所导致的法律和经济责任。

The approval of the Society does not affect and replace any approval and certification of the manufacturer by any parties that bear no relation with this Society's authorization or survey and therefore takes no responsibility for these parties. The Society does not undertake any legal and economic liabilities arising from accepting this Society's certificate without prior permission from this Society.

其他/Others

1. 本证书由原型式认可证书 (No. HB13T00018_03) 换新并替代原证书。

This certificate is renewed from and supersedes the previous Type Approval Certificate No. HB13T00018_03.

2. The Ex-Proof parameters of the approved products originate from Ex-Certificate received from manufacturer (Issuing Body: TÜEV NORD CERT GmbH & Co. KG/CSA Group, Ex-Certificate No.: TÜEV 03 ATEX 2269/1855542/IECEx TUN 04.0013, Standards for Ex-Proof: EN 60079-0:2006; EN 60079-11:2007; EN 60079-26:2004; EN 61241-11:2006; IEC60097-0:2004, IEC 60097-11:2006, IEC 61241-11:2005), not approved by CCS.

This Type Approval Certification will be invalid if the approved products do not hold valid Ex-Certificate.

本社已审核了产品厂无石棉声明, 但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society. However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.



*****本证书正文完/ End of Text*****

注: 本证书含有附页, 共1页

Note: The certificate is attached with 1 additional page(s)

Nº 17023755

证书编号/Certificate No. HB17T00024_02

第 4 页 共 4 页 / Page 4 of 4

CCS

Signal conditioning instrument VEGAMET 624/625 and VEGASCAN 693

MET 624aMb

MET 625aMb

SCAN 693aMb

a = Approval

X without EX approval

C with EX approval ATEX II (I) GD, [Ex ia] IIC

b = Connection

R RS232 – Connection

E Ethernet – Connection

Power supply: 24V DC rated (range 20...250V DC)

Signal input(s):

MET 624: 1x 4...20mA / HART, 2-wire, sensor power supply

MET 625: 2x HART, 2-wire, sensor power supply

SCAN 693: 15x (Ex-version 5x) HART, 2-wire, sensor power supply (shielded cable for HART communication to be used)

Outputs: 1x signal fault relay, 3x current output, 3x operating relay (for MET 624/625 only)

Communication interface (optional): RS232- or Ethernet-Interface

Graphic LC-display: 50x25mm with background lighting

Indication LEDs: 2x green, 3x yellow, 1x red

Adjustment: by 4x keys in front for menu adjustment by pactware® with VEGA-DTM

Mounting: wall mounting with adapter plate






TYPE APPROVAL CERTIFICATE
No. ELE218819XG

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>	Indicating and signal conditioning instrument
<i>Type</i>	VEGAMET 624; VEGAMET 625; VEGASCAN 693
<i>Applicant</i>	VEGA Grieshaber KG
	77757 Schiltach, Postfach 1142
	GERMANY
<i>Manufacturer</i>	VEGA Grieshaber KG
<i>Place of manufacture</i>	77757 Schiltach, Postfach 1142
	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 **July 10, 2019**. This Certificate is valid until **July 9, 2024**


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. ELE218819XG

Enclosure - Page 1 of 1

VEGAMET 624

VEGAMET 625

VEGASCAN 693

Description:

MET 624 a M b
MET 625 a M b
SCAN 693 a M b

a= X without connection
C ATEX II (1) G [Ex ia] IIC, ATEX II (1) D [Ex iaD]
(further Ex Approvals may be provided by the manufacturer)

b= X without connection
R RS 232 connection
E Ethernet connection

Power supply: 24Vdc rated (range 20 to 250Vdc)

Signal inputs:

MET 624: 1 x 4...20mA / HART, 2-wire, sensor power supply
MET 625: 2 x HART, 2-wire, sensor power supply
SCAN 693: 15 x (Ex-version 5x) HART, 2-wire, sensor power supply
(shielded cable for HART communication to be used)

Outputs:

MET 624 and MET 625: 3 x current output; 3 x operating relay
MET 624 and MET 625 and SCAN 693: 1x signal fault relay

Communication interfaces: (optional) RS232 or Ethernet

Graphic LC-display: 50x25mm with background lighting

Indication LEDs: 2x green, 3x yellow, 1x red

Adjustment: by 4x keys in front for menu adjustment by pactware® with VEGA-DTM

Mounting: wall mounting with adapter plate

Degree of protection: IP 30 (instrument) / IP20 (plug-in socket)

Reference documents:

Operating instructions: doc. n° 28969- EN- 041021, doc. n° 28970- EN- 041021, doc. n° 29252-EN-08-1212

Test Reports:

PANACONSULT Report n° 421-04 (01/11/2004)
EMV SERVICES Report n° EMV - 04/4080-10 (27/09/2004)
VEGA Report n° MET624-1.3-F2-1/2, MET624-1.9-F2-1
PACONSULT Report n° 08-2091 (29 July 2008)
HANSECONTROL Report n° 08-L-00709-01 (3 July 2008), 08-L-00711-01 (4 July 2008)

HAMBURG July 10, 2019

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



[Handwritten signature]

РОССИЙСКИЙ МОРСКОЙ РЕГИСТР СУДОХОДСТВА
RUSSIAN MARITIME REGISTER OF SHIPPING

Стр. 1 / 2
 Page.

6.8.3



СВИДЕТЕЛЬСТВО О ТИПОВОМ ОДОБРЕНИИ
TYPE APPROVAL CERTIFICATE

Изготовитель
 Manufacturer

VEGA Grieshaber KG
(DE143 030 199)

Адрес
 Address

Am Hohenstein 113, 77761 Schiltach, Germany.

Изделие*
 Product*

Устройства формирования сигналов типа VEGAMET/VEGASCAN: MET624, MET625, SCAN693.

Signal conditioning instruments of types VEGAMET/VEGASCAN: MET624, MET625, SCAN693.

Код номенклатуры
 Code of nomenclature

15110101

На основании освидетельствования и проведенных испытаний удостоверяется, что вышеупомянутое(ые) изделие(я) удовлетворяет(ют) требованиям Российского морского регистра судоходства.

This is to certify that on the basis of the survey and tests carried out the above mentioned item(s) complies(ly) with the requirements of Russian Maritime Register of Shipping.

Часть XV Автоматизация "Правил классификации и постройки морских судов" (2018); Раздел 12 Части IV "Правил технического наблюдения за постройкой судов и изготовлением материалов и изделий для судов" (2018)

Part XV Automation of "Rules for the Classification and construction of Sea-Going Ships" (2018); Section 12 of part IV of the "Rules for technical supervision during construction of ships and manufacture of materials and products for ships" (2018)

Настоящее Свидетельство о типовом одобрении действительно до **08.10.2023**
 This Type Approval Certificate is valid until

Настоящее Свидетельство о типовом одобрении теряет силу в случаях, установленных в Правилах технического наблюдения за постройкой судов и изготовлением материалов и изделий для судов.

This Type Approval Certificate becomes invalid in cases stipulated in Rules for the Technical Supervision during Construction of Ships and Manufacture of Materials and Products.

Дата выдачи
 Date of issue

08.10.2018

№ **18.40034.250**

Российский морской регистр судоходства
 Russian Maritime Register of Shipping



Подпись
 signature

Морозов В.В. / V.Morozov

(фамилия, инициалы)
 name

*Дополнительную информацию см. на обороте.
 Additional information see overleaf.

30573-EN-200616

Технические данные

Technical data

Макс. потребляемая мощность, Вт: 7,5(12 VA);

Напряжение питания, В: 20...253 V DC/AC;

Рабочая температура, °C: от минус 20 до плюс 60

Выходной сигнал: токовый выход: 3х0/4...20мА ; релейный выход: 3 рабочих реле;

1 реле сигнала неисправности (MET624/625); 1 реле сигнала неисправности (SCAN693);

Входной сигнал: вход датчика: 4...20мА/HART (MET624); 2 х датчика HART(MET625);

15 (5 при Ex) х датчиков HART (SCAN693);

Маркировка взрывозащиты: ATEX: II (1) G [Ex ia] IIC, II (1) D [Ex ia D];

Степень защиты: IP30

Max. power consumption,W: 7,5(12 VA);

Supply voltage, V: 20 ...250 V DC/AC;

Operating temperature, °C: from -20 to +60;

Output signal: current output: 3x0/4...20 mA; relay output: 3 x operating relay +

1x fault signal relay (MET624/625); 1 fault signal relay (SCAN693);

Input: sensor input: 4...20 mA/HART (MET624); 2 x sensor HART(MET625); 15 (5 by Ex) x sensor HART (SCAN 693);

Explosion protection: ATEX: II (1) G [Ex ia] IIC, II (1) D [Ex ia D];

Degree of protection: IP30

Техническая документация и дата ее одобрения Российским морским регистром судоходства

Technical documentation and the date of its approval by Russian Maritime Register of Shipping

Техническая документация одобрена письмом № 250-A-3085-274980 от 08.10.2018.

Technical documentation was approved by RS letter No. 250-A-3085-274980 of 08.10.2018.

Образец изделия испытан под техническим наблюдением Российского морского регистра судоходства.

Product's specimen has been tested under the technical supervision of Russian Maritime Register of Shipping.

Акт № 18.60066.250

от 08.10.2018

Report No.

of

Область применения и ограничения

Application and limitations

Устройства формирования сигналов типа VEGAMET/VEGASCAN: MET624, MET625, SCAN693 предназначены для

использования на морских судах, плавучих сооружениях, стационарных платформах.

Signal conditioning instruments of types VEGAMET/VEGASCAN: MET624, MET625, SCAN693 are intended for using on sea-going ships, floating constructions and fixed offshore platforms.

Вид документа, выдаваемого на изделие

Type of document issued for product

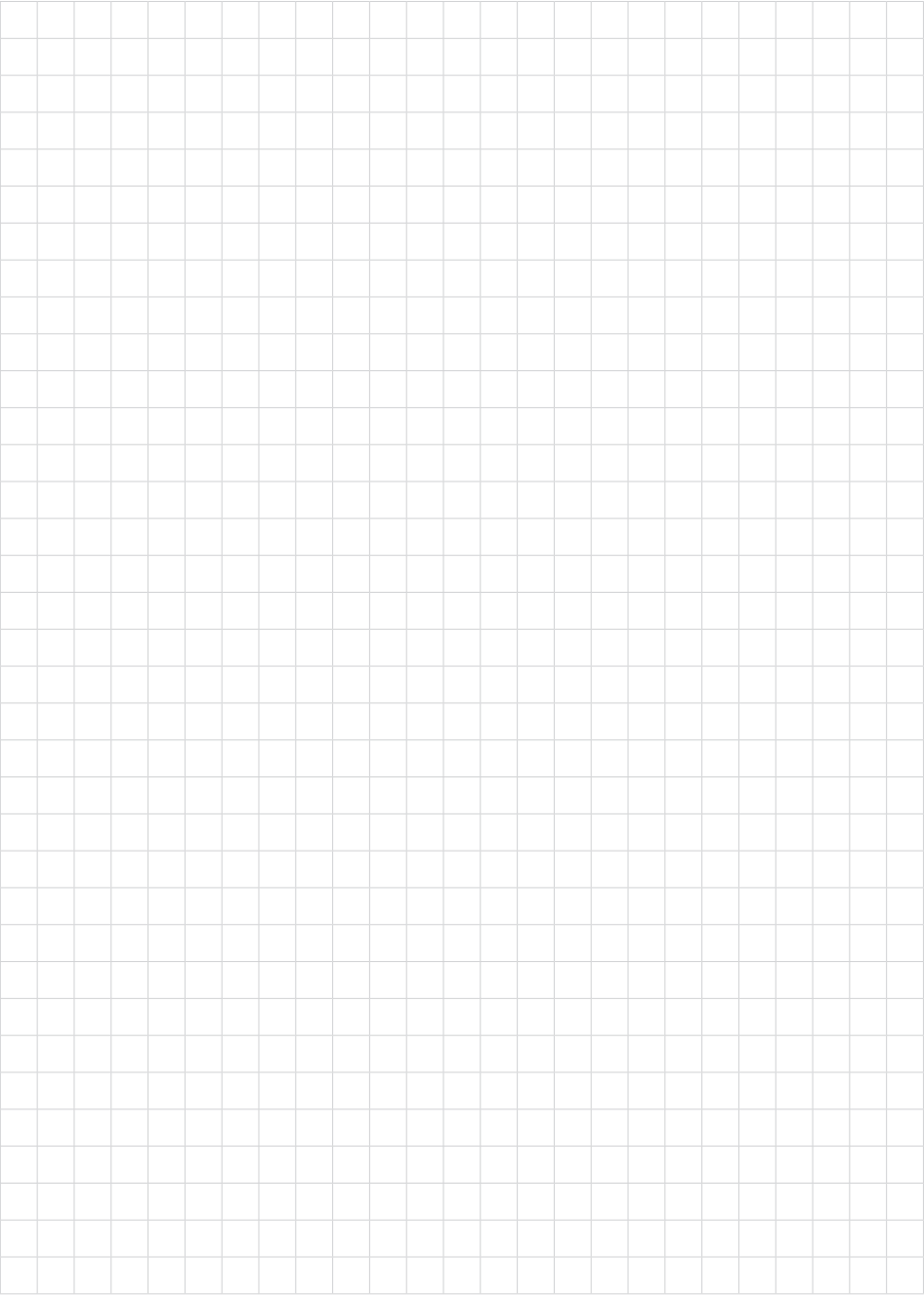
Изделие должно поставляться с копией настоящего Свидетельства о типовом одобрении.

The product shall be delivered with a copy of this Type Approval Certificate.



06/2015

18.40034.250



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

© VEGA Grieshaber KG, Schiltach/Germany 2020

30573-EN-200616

VEGA Grieshaber KG
Am Hohenstein 113
77761 Schiltach
Germany

Phone +49 7836 50-0
Fax +49 7836 50-201
E-mail: info.de@vega.com
www.vega.com