



Certificate number: 32672/D0 BV

File number: AP 4383

Product code: 4443H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Valmet Flow Control Oy

Vantaa - FINLAND

for the type of product

STAND ALONE PROCESS CONTROLLERS

Neles ND9000H series intelligent valve controller

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.

EC Code: 41SB

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 06 Mar 2031

For Bureau Veritas Marine & Offshore,

At BV TURKU (ABO), on 06 Mar 2026,

Miika KOKKO

This certificate was created electronically and is valid without signature



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 4 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

- Product model or type designation:
Neles **ND9000H** series intelligent valve controller.
- Product description:
ND9000H operates on every type of valve and integrates smoothly into all major control system.
ND9000H communicates via HART communication protocol over 4...20mA current loop. The valve position is controlled via 4...20mA signal and the operating power for the **ND9000H** is also taken from the same control signal.

1.1 - Technical specifications:

Designation	Characteristics
Action	Double or single acting
Standard temperature range	-40°C to +85°C
Material	Full stainless steel enclosure
Pneumatic ports	1/4 NPT
Supply pressure	1.4–8 bar / 20–115 psi
Supply power	Loop powered, 4–20 mA
Voltage	max 30 V DC
Ex approvals	Ex d IIC T6...T4 Gb Ex tb IIIC T80 °C...T105°C Db Ex ia IIC T6...T4 Ga Ex ta IIIC T90°C...T120°C Da or Ex ib IIC T6...T4 Gb Ex tb IIIC T90°...T120°C Db Ex nA IIC T6...T4 Gc or Ex ic IIC T6...T4 Gc Ex tc IIIC T90°...T120°C Dc
Enclosure	ND9100: Anodized aluminum alloy and polymer composite ND9200: Anodised aluminum alloy and tempered glass ND9300: Stainless steel ND9400: Stainless steel housing with a plastic cover

1.2 - Software revision:

ND9000 digital valve positioner software revision 2.04 and later

2. DOCUMENTS AND DRAWINGS:

Neles:

- Installation, Maintenance and Operating Instructions "Intelligent Valve Controller", Rev. 4.0.
- ND9000 Firmware Test Descriptions.doc - Version 1.3, dated 18.01.2007.
- ND9000 Revision log book, dated 5.8.2024
- Drawing Valve Controller, ND93_/100, A F37671, dated 08.11.2013
- Data sheet NELES ND9000 Intelligent Valve Controller No.: 7 ND9021 EN , dated 4/2025
- Technical Specification No.: CB058_EN_page21, dated 12/2023

Espotel:

- Drawing ND9000/Hart-CB Power, ND9000/Hart-CB Hart Interface, ND9000/Hart-CB DAC Option, ND9000/Hart-CB Interface N°00809, Version M, dated 11.11.2022.
- Drawing Hart-CB version I layout with Exi-marking N°690086, dated 16.09.2022.
- Drawing ND9000 Hart-CB PCP layout (Top Silk + Bottom Silk) N° 690086 version I, dated 16.09.2022.
- Drawing ND9000 CPU Environment, ND9000 VENA Electronics, ND9000 Pressure/Setpoint Electronics, ND9000 Power Prestage N°000811, Version G, dated 04.03.2022.
- Drawing Bottom Silk / Component Locator, VC 690085G, dated 22.04.2022.
- Drawing Top Silk / Component Locator, VC 690085G, dated 22.04.2022.
- Drawing ND9000 VC version G layout with Exi-marking ratio 1:1, dated 22.04.2022.

Neles:

- Product type marking nomenclature N° D F34976 G, dated 14-05-2020.

- Drawing Flameproof enclosure assembly ND9300, 0 F37973 C, dated 23.08.2021.

Espotel:

- ND9000 Hart-Version Ex i Safety Documentation - Version T, dated 18.11.2022.
- Circuit Diagram Schema, ND2000 LUI, 000863C, dated 08.10.02.
- LUI PCB specification and PCB drawings, No. 690089C.

sira:

- Certificate of Conformity N° IECEX SIR 11.0001X issue 16, dated 2024-03-22.

IECEX

- Certificate of Conformity IECEX EESF 19.0019X issue 3, dated 2022-12-12.

3. TEST REPORTS:**Nemko:**

- EMC test report N°224271, dated 1.11.2012.
- Immunity test report N°188949, dated 12.10.2011.

VTT:

- Environmental test report N°VTT-S-06765-12, dated October 18, 2012.
- Needle flame test report IEC 60695-11-5 N°VTT-S-6172-12, dated October 2, 2012.
- Tightness test for IP66 N°VTT-S_00572-09, dated February 9, 2009.
- Needle-flame test IEC 60695-11-5 No.: VTT-S-5941-15, dated 15 Dec 2015

sira:

- Test report - Variation to IECEX SIR11.0001X and Sira 11ATEX1006X, Report N° Sira R80197523A dated 22 mar 2024.

SGS:

- EMC Test Report No. 300446-2, dated 02-10-2020.

4. APPLICATION / LIMITATION:

- 4.1 - Bureau Veritas Rules for the Classification of Steel Ships.
- 4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.3 - BUREAU VERITAS Environmental Category: **EC Code: 41SB .**
- 4.4 - The equipment fulfils the EMC requirements for installation in the bridge and deck zone.
- 4.5 - The electrical safety type equipment may be used in areas considered as dangerous due to presence of flammable or explosive gases or vapours corresponding to the groups and to the temperature class depending of ambient temperature as defined in IEC Classification.
- 4.6 - The machinery protection based on data processing techniques is to be duplicated by another and different system.
- 4.7 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev 9.
- 4.8 - In accordance with IACS UR E22 and as applicable to programmable devices for computer based systems of Category II or III, for each ship application:
 - Ship specific documentation is to be submitted including software documentation and categorization of the computer based system.
 - Inspection and testing before installation onboard is to be performed under the surveillance of the Society.
- 4.9 - This certificate is valid for version 2.04 and later releases, provided that alterations of functionality remain in line with the Rules in force.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The above products are to be supplied by **Valmet Flow Control Oy** in compliance with the type described in this certificate.
- 5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
- 5.3 - **Valmet Flow Control Oy** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.
- 5.4 - For information, **Valmet Flow Control Oy** has declared to Bureau Veritas the following production site :

Valmet Flow Control Oy
Vanha Porvoontie 229
01380 Vantaa
FINLAND

6. MARKING OF PRODUCT:

- Maker's name or trade mark,
- Equipment type number or model identification under which it was type-tested,
- Serial number.
- Ex marking, as relevant

7. OTHERS:

7.1 - It is **Valmet Flow Control Oy**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate No. 32672/C0 BV issued by the Society.

***** END OF CERTIFICATE *****