Certificate no.:
TAA00003MD

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Flow Sensor

with type designation(s)
M3...M, PR1M

issued to
Eletta Flow AB
Segeltorp, Stockholms Län, Sweden

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:

Type	Temperature	Humidity	Vibration	EMC	Enclosure
M3...M	D	B	B	B	C
PR1M	D	B	B	n/a	B

Issued at **Hamburg** on **2025-06-02**

This Certificate is valid until **2030-06-01**.
DNV local unit: **Finland CMC**

Approval Engineer: **Dariusz Lesniewski**

for **DNV**

This document has been digitally signed and will therefore not have handwritten signature

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

PR1M-SS paddle flow switch:
Wetted material: SS 316
Sealing Material: FPM
Cover material: stainless steel
Max. pressure: 25 bar
Protection class: IP 65
Process connection: 25 mm thread (1¨ BSP or NPT) (through pipe wall)
Pipe Sizes: DN50–DN250
Switch: Microswitch SPDT 1-pole 2-way
Rating nominal 250 VAC / 8 A
Degree of protection: IP65

M3…M-SS series differential pressure flow transmitter:
(models: M310M-SS, M325M-SS, M350M-SS)
Pressure range: 10, 25 or 50 bar
Process connection: M6x14 stainless steel screw (A2), DIN 912
Cover material: stainless steel
Media: water, oil, gas acc. to maker's specification
Wetted material: stainless steel
Power supply: 24 V DC nominal
Output signal: 4-20 mA, RS485 MODBUS
Electrical connection: connector 8-poles, connection cable PUR standard cable 2,5m (3x0,25mm^2)
Software/Firmware: Ver. 5.20-13.17
Degree of protection: IP67

Type Approval documentation

Test report: Intertek no. 2409583STO-201, dated 2025-03-26
Test report: Intertek no. 2011715STO-201, dated 2025-04-06
Test report: DELTA no. 625-20025-10-R0, dated 2025-04-16
Data sheets: 30D1E26 (PR1), 61D1E26 (M3), Switch PR1/part no. 40-91066
Drawings: no. 40-50174 Rev. A, no. 1810M3025 Rev. A
Drawings: no. 03-00197-01 Rev. B, no. 9I104-0 Rev. F
Manuals: 61D2E26 dated 2025-05-26 (M3-series), 30C2E26 (PR1-series)
Design change notice Nr: 9 – Software change M3-series, dated 2013-11-15

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.

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
- 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