DNV·GL

Certificate No:
TAA000010K

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Flow Transmitter

with type designation(s)
Controller transmitter 1500, 2500, 1700, 2700, 3350 and 3700, Flow Meters CMF200, CMF300, CMF350, CMF400, CMFHC2, CMFHC3 and CMFHC4, Flow Meters F025, F050, F100, F200 and F300

Issued to
Micro Motion, Inc.
Boulder CO, United States

is found to comply with
DNV GL rules for classification – Ships

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Location classes:

Type	Temperature	Humidity	Vibration	EMC	Enclosure
Controller transmitter 1500, 2500, 1700, 2700, 3350 and 3700	**D**	**B**	**A**	**A**	**C**
Flow Meters CMF200, CMF300, CMF350, CMF400, CMFHC2, CMFHC3 and CMFHC4	**D**	**B**	**A**	**A**	**C**
Flow Meters F025, F050, F100, F200 and F300	**D**	**B**	**A**	**A**	**C**

This Certificate is valid until **2022-01-16**.

Issued at **Hamburg** on **2017-01-17**

for **DNV GL**

DNV GL local station: **San Francisco**

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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Job Id:
Certificate No: **TAA000010K**

Product description

The Type Approval covers the following units:
Frequency input discrete controller/transmitters, models 1500/2500, 1700/2700, 3350 and 3700.
Coriolis flow meters, models CMF200, CMF300, CMF350, CMF400, CMFHC2, CMFHC3 and CMFHC4.
Coriolis flow meters, models F025, F050, F100, F200 and F300.

Application/Limitation

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 Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the 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 Guidance DNVGL-CG-0339, November 2016.

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 at least every second year and at renewal of this certificate.

END OF CERTIFICATE