



CERTIFICATE NUMBER	20-RJ1963345-PDA-DUP
EFFECTIVE DATE	23-Mar-2020
EXPIRY DATE	22-Mar-2025
ABS TECHNICAL OFFICE	Rio de Janeiro Engineering - Machinery

CERTIFICATE OF Product Design Assessment

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

F-R TECNOLOGIAS DE FLUJO, S.A. DE C.V.

located at

**AV. MIGUEL DE CERVANTES NO. 111, COMPLEJO INDUSTRIAL
CHIHUAHUA, CHIHUAHUA, Mexico, 31136**

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 Transmitter

Model 4200

This Product Design Assessment (PDA) Certificate remains valid until 22/Mar/2025 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

Roberto B Assumpcao, 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)

F-R TECNOLOGIAS DE FLUJO

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COMPLEJO INDUSTRIAL CHIHUAHUA
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Mexico 31136

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Fax:

Email: rolando.mata@emerson.com

Web: www.micromotion.com

Tier: 3 - Type Approved, unit certification not required

Product: Transmitter

Model: 4200

Intended Service:

Liquid mass flow measurement and data transmission for Marine and Offshore Applications.

Description:

The Model 4200 is a 2-wire Coriolis flow and density transmitter. It is an integral mount apparatus completely encapsulated in a polyurethane-painted cast aluminum enclosure.

The transmitter is integrally mounted to a Coriolis Flow and Density meter and make a connection between the two wire input circuit to a 9-wire connection to the Coriolis meter, delivers multivariable and diagnostic information via HART communications.

The transmitter can be used to host with no barrier, with third-party barrier and with Micro Motion adapter barrier.

Rating:

- Power Supply: 17.8 to 30 VDC (Channel A) and 7 to 30 VDC (Channel B)

- Ambient Temperature: -40°C (-40°F) to 65°C (149°F)

- Degree of Protection: IP66/67

- Available Certification for Hazardous Area Classifications, assessed for (a) Intrinsic Safety "ia", (b) Flameproof "db", (c) Dust Ignition Protected "tb" and (d) Increased Safety type "eb" or "ec" protection methods.

Service Restriction:

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.

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. ATEX certified equipment is not to be installed in hazardous areas on U.S vessels unless it can be prove to have been tested to the applicable IEC 60079 series standards by an independent laboratory accepted by the U.S Coast Guard.

Notes/Drawing/Documentation:

Drawing No. app, PDA Application

Drawing No. PS-002153, Product Data Sheet 4200, Revision: B

Drawing No. CoFC_70183767_EN, CSA Certificate 4200, Revision: 0, Issued February 12, 2019

Drawing No. IECEx_SIR_19.0007X_0, IECEx Certificate 4200, Revision: 0, Issued 2029-04-29

Drawing No. Sira 19ATEX2008X Iss 0, ATEX Certificate 4200, Revision: 0

Terms of Validity:

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

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STANDARDS

ABS Rules:

Rules for Conditions of Classification, Part 1, 2020: 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:
Rules for Building and Classing Marine Vessels, 2020: 4-8-3/1.11.1, 4-8-3/1.17.1, 4-8-3/13, 4-8-4/27.1

Rules for Conditions of Classification, Part 1, 2020 - Offshore Units and Structures: 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

Rules for Building and Classing Mobile Offshore Units, 2020: 4-3-1/11, 4-3-1/15, 4-3-1/17.1, 4-3-3/9.1

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA