



CERTIFICATE NUMBER 21-2085825-PDA
EFFECTIVE DATE 08-March-2021
EXPIRATION DATE 07-March-2026
ABS TECHNICAL OFFICE Singapore Engineering Services

CERTIFICATE OF Product Design Assessment

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

GOLDEN MOUNTAIN ENTERPRISE CO., LTD.

located at

**NO.9, LANE 133, XING-HUA ST., CHIEN-CHEN DISTRICT,
, KAOHSIUNG, Taiwan, R.O.C.-80673**

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 Float Level Controller/Float Level Gauge/Flat Plate Glass Gauge

Model Flow Switch: FS20R, FS20X, FS25R, FS25X, FS30R and FS40R; Flow Meter: BR250S, BF300 and JA series; Level Switch: LXT207; Level Gauge: R series, T series and B series; Level Sensor: ELT series.

This Product Design Assessment (PDA) Certificate remains valid until 07-March-2026 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

Vibin Chandrabose, Senior Engineer

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

GOLDEN MOUNTAIN ENTERPRISE CO.

NO.9, LANE 133, XING-HUA ST.

CHIEN-CHEN DISTRICT

KAOHSIUNG TAIWAN

Taiwan 80673

Telephone: +886-7-8135500

Fax: +886-7-8225588

Email: info@new-flow.com

Web: www.new-flow.com

Tier: 3 - Type Approved, unit certification not required

Product: Float Level Controller/Float Level Gauge/Flat Plate Glass Gauge
Model: Flow Switch: FS20R, FS20X, FS25R, FS25X, FS30R and FS40R;
Flow Meter: BR250S, BF300 and JA series;
Level Switch: LXT207;
Level Gauge: R series, T series and B series;
Level Sensor: ELT series.

Endorsements:

Intended Service:

Control or alarm for liquid indication in tanks on Ships and Offshore Facilities.

Description:

Metal Tube Flow Meter, Roots Type Positive Displacement Flow Meter, Flow Switch, Horizontal Magnetic Level Switch Explosion Proof, Liquid Level Gauge and Electrode Level Switch.

Rating:

Max. Pressure:

- Model BR250S and BF300: 40 kg/cm² (standard) option up to 100 kg/cm²;
- Model JA series: 10 kg/cm²;
- Model FS25R and FS25X: 1500 psi (st. steel);

Pressure Limit:

- Model FS20: 7.0 MPa (70 kg/cm²);
- Model FS30R and FS40R: 10 kg/cm² or 15 kg/cm² (material depend);
- Model LXT207: 3.0 MPa (30 kg/cm²) option up to 4.5 MPa;
- Model ELT series: 10 kg/cm².

Ex Rating:

- Model BF300, BR250S and Model LXT207: EX d IIB+H2 T6
- Model FS20X and FS25X: Ex db IIC T6 Gb, Ex tb IIIC Db
- Model JAT Series: Ex db IIC T6 Gb, Ex tb IIIC Db
- Model T Series Illuminator Type Case Housing: Ex d IIB+H2 Gb, Ex tb IIIC Db

Temperature:

- Model BR250S and BF300: -50 Deg. C to 200 Deg. C option up to 400 Deg. C on request;
- Model JA series 100 Deg. C (usual model), only JAH type up to 200 Deg. C;
- Model FS20: -20 to 150 Deg. C;
- Model FS30R and FS40R: -30 to 120 Deg. C;
- Model LXT207: -20 to 150 Deg. C, -20 to 200 Deg. C or -20 to 350 Deg. C (suffix number depend);
- Model FS25: -30 to 120 Deg. C;
- Model R series, T series and B series: 2 Deg. C. to 280 Deg. C. (standard and jacket type); -10 Deg. C to 90 Deg. C (illuminator type);
- Model ELT series: -20 Deg. C~120 Deg. C or 0 Deg. C~60 Deg. C (insulation material depend).

Service Restriction:

1. Unit Certification is not required. If the manufacturer or purchaser requests an ABS Certificate for compliance with a specification or standard; the specification or standard, including inspection standards and tolerances, must be clearly defined the conformity criteria.
2. 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

GOLDEN MOUNTAIN ENTERPRISE CO.

NO.9, LANE 133, XING-HUA ST.

CHIEN-CHEN DISTRICT

KAOHSIUNG TAIWAN

Taiwan 80673

Telephone: +886-7-8135500

Fax: +886-7-8225588

Email: info@new-flow.com

Web: www.new-flow.com

Tier: 3 - Type Approved, unit certification not required

Guard. USCG notice 01-12 (February 7, 2012).

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. Level sensing devices installed on tanks at locations where they are subjected to a static head of liquid are to be fitted with valves or arranged such that they may be removed without emptying the tank.
3. The level gauge is to be capable of withstanding the hydrostatic pressure at the location of installation, including that due to overfilling.
4. Level switches, where fitted on fuel oil or lubricating oil tank installation, they are to be encased in steel, or equivalent, such that no release of fuel oil or lubricating oil is possible in the event of their damage due to fire.

Notes/Drawing/Documentation:

Drawing No.: 1b, Flow Meter, Flow Switch, Level Switch, Level Gauge, Level Sensor Catalogue, Revision: -, Pages: 34

Drawing No.: 2b, IECEx SIR 16.0112U, Revision: -, Pages: 4

Drawing No.: 3b, SIRA 14ATEX1107U, Revision: -, Pages: 3

Drawing No.: 4b, IECEx UL 13.0039U, Revision: -, Pages: 11

Drawing No.: 5b, CML 17ATEX1296X, Revision: -, Pages: 3

Drawing No.: 6b, Ex Table, Revision: -, Pages: 1

Drawing No.: 2015-00091, Explosion Proof Certificate for LXT207, Revision: -, Pages: 2

Drawing No.: 2015-00151, Explosion Proof Certificate for BF300, Revision: -, Pages: 3

Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 07/Mar/2026 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.

STANDARDS

ABS Rules:

Rules for Conditions of Classification (2021) – 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

Rules for Building and Classing Marine Vessels: 4-1-1/Table 3, 4-6-2/9.11.3, 4-6-4/13.5.6(b), 4-6-4/13.5.6(d), 4-6-4/15.3.4(b), 4-6-4/15.3.4(d), 4-8-3/Table 2

Rules for Conditions of Classification (2021) – 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: 4-2-3/3.7, 4-3-3/Table 1

National:

NA

International:

NA

GOLDEN MOUNTAIN ENTERPRISE CO.

NO.9, LANE 133, XING-HUA ST.

CHIEN-CHEN DISTRICT

KAOHSIUNG TAIWAN

Taiwan 80673

Telephone: +886-7-8135500

Fax: +886-7-8225588

Email: info@new-flow.com

Web: www.new-flow.com

Tier: 3 - Type Approved, unit certification not required

Government:

NA

EUMED:

NA

OTHERS:

NA